

APPENDIX E

Air Quality Calculations and Modeling



Summary	Summarizes total emissions by calendar year for Modified Alternative 1 - Construction Phase (Saipan).
Combustion and Evaporative	Estimates emissions from non-road equipment exhaust and evaporative volatile organic compound emissions.
Fugitive	Estimates particulate emissions from construction activities including earthmoving, vehicle traffic, and windblown dust.
Grading	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
Construction Commuter	Estimates emissions for construction workers commuting to the site.
Haul Truck On-Road	Estimates emissions from hauling construction materials to the project site.

Summary of Air Quality Emissions from Divert EIS - Modified Alternative 1 - Construction Phase (Saipan)

	NO_x (ton)	VOC (ton)	CO (ton)	SO₂ (ton)	PM₁₀ (ton)	PM_{2.5} (ton)	CO₂ (ton)
Construction Combustion/Evaporative	6.39	0.94	2.75	0.41	0.44	0.43	738.47
Construction Fugitive Dust	-	-	-	-	48.52	3.88	-
Construction Commuter	0.49	0.60	6.99	0.01	0.02	0.01	437.30
Haul Truck On-Road	13.36	1.24	7.14	0.04	0.43	0.41	3,464.53
TOTAL	20.24	2.79	16.89	0.46	49.41	4.72	4,640.30

Annual Summary of Air Quality Emissions from Divert EIS - Modified Alternative 1 - Construction Phase (Saipan)*

	Point and Area Sources Combined						
	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO₂ (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)	CO₂ (metric tons)
CY 01	6.75	0.93	5.63	0.15	16.47	1.57	1,403.20
CY 02	6.75	0.93	5.63	0.15	16.47	1.57	1,403.20
CY 03	6.75	0.93	5.63	0.15	16.47	1.57	1,403.20

* Construction duration is estimated to be 36 months and the emissions are assumed to be distributed evenly over the construction period.

Combustion and Evaporative Emissions - Modified Alternative 1 - Construction Phase (Saipan)

Combustion Emissions of VOC, NO_x, SO₂, CO, PM_{2.5}, PM₁₀, and CO₂ due to Construction

Assumptions

When multiple options exist under the general construction activities the most conservative value will be used to quantify air emission.

General Construction Activities	Area Disturbed (ft ²)
Construct Maintenance Facility	6,100 ft ²
Construct Airport/Seaport Fuel Storage (operational, Bulk and at the Port of Saipan)	324,958 ft ²
Construct Fuel Hydrant System	161,172 ft ²
Construct Hazardous Cargo Pad	250,470 ft ²
Construct Parking Apron	502,682 ft ²

Total General Construction Area:	1,245,382 ft ²	28.6 acres
Total Demolition Area:	0 ft ²	0.0 acres
Total Pavement Area:	502,682 ft ²	11.5 acres
Total Disturbed Area:	1,245,382 ft ²	28.6 acres
Construction Duration:	36 months	
1 Yr Project Construction Activity:	240 days/yr	Assume 12 months, 4 weeks per month, 5 days per week.

Emission Factors Used for Construction Equipment

References: Guide to Air Quality Assessment, Sacramento Metropolitan Air Quality Management District (SMAQMD), 2004; and U.S. EPA NONROAD Emissions Model, Version 2005.0.0. Emission factors are taken from the NONROAD model and were provided to HDR by Larry Landman of the Air Quality and Modeling Center (Landman.Larry@epamail.epa.gov) on 12/14/07. Factors provided are for the weighted average US fleet for CY2007. Assumptions regarding the type and number of equipment are from SMAQMD Table 3-1 unless otherwise noted.

Grading

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Bulldozer	1	13.60	0.96	5.50	1.02	0.89	0.87	1456.90
Motor Grader	1	9.69	0.73	3.20	0.80	0.66	0.64	1141.65
Water Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	3	41.64	2.58	15.71	0.83	2.55	2.47	4941.53

Paving

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Paver	1	3.83	0.37	2.06	0.28	0.35	0.34	401.93
Roller	1	4.82	0.44	2.51	0.37	0.43	0.42	536.07
Truck	2	36.71	1.79	14.01	3.27	1.99	1.93	4685.95
Total per 10 acres of activity	4	45.37	2.61	18.58	0.91	2.78	2.69	5623.96

Demolition

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Loader	1	13.45	0.99	5.58	0.95	0.93	0.90	1360.10
Haul Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	2	31.81	1.89	12.58	0.64	1.92	1.87	3703.07

Building Construction

Equipment ^d	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Stationary								
Generator Set	1	2.38	0.32	1.18	0.15	0.23	0.22	213.06
Industrial Saw	1	2.62	0.32	1.97	0.20	0.32	0.31	291.92
Welder	1	1.12	0.38	1.50	0.08	0.23	0.22	112.39
Mobile (non-road)								
Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Forklift	1	5.34	0.56	3.33	0.40	0.55	0.54	572.24
Crane	1	9.57	0.66	2.39	0.65	0.50	0.49	931.93
Total per 10 acres of activity	6	39.40	3.13	17.38	3.12	2.83	2.74	4464.51

Architectural Coatings

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Air Compressor	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77
Total per 10 acres of activity	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77

- The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity, (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.
- The SMAQMD 2004 reference lists emission factors for reactive organic gas (ROG). For the purposes of this worksheet ROG = VOC. The NONROAD model contains emissions factors for total HC and for VOC. The factors used here are the VOC factors.
- The NONROAD emission factors assume that the average fuel burned in nonroad trucks is 1100 ppm sulfur. Trucks that would be used for the Proposed Actions will all be fueled by highway grade diesel fuel which cannot exceed 500 ppm sulfur. These estimates therefore over-estimate SO₂ emissions by more than a factor of two.
- Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

Combustion and Evaporative Emissions - Modified Alternative 1 - Construction Phase (Saipan) - Continued

Project-Specific Combustion and Evaporative Emission Factor Summary

Source	Equipment Multiplier*	Project-Specific Emission Factors (lb/day)						
		NO _x	VOC	CO	SO ₂ **	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	3	124.924	7.731	47.130	2.498	7.637	7.407	14824.579
Paving Equipment	1	45.367	2.606	18.578	0.907	2.776	2.693	5623.957
Demolition Equipment	1	31.808	1.886	12.584	0.636	1.923	1.865	3703.074
Building Construction	1	39.396	3.130	17.382	3.116	2.829	2.744	4464.512
Air Compressor for Architectural Coating	1	3.574	0.373	1.565	0.251	0.309	0.300	359.773
Architectural Coating**			46.893					

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project.

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994

Example: SMAQMD Emission Factor for Grading Equipment NO_x = (Total Grading NO_x per 10 acre)*(Equipment Multiplier)

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days	
Grading:	1,245,382	28.59	6	(from "Grading" worksheet)
Paving:	502,682	11.54	55	
Demolition:	0	0.00	0	
Building Construction:	331,058	7.60	240	
Architectural Coating	331,058	7.60	20	(per SMAQMD "Air Quality of Thresholds of Significance", 1994)

NOTE: The 'Total Days' estimate for paving is calculated by dividing the total number of acres by 0.21 acres/day, which is a factor derived from the 2005 MEANS Heavy Construction Cost Data, 19th Edition, for 'Asphaltic Concrete Pavement, Lots and Driveways - 6" stone base', which provides an estimate of square feet paved per day. There is also an estimate for 'Plain Cement Concrete Pavement', however the estimate for asphalt is used because it is more conservative. The 'Total Days' estimate for demolition is calculated by dividing the total number of acres by 0.02 acres/day, which is a factor also derived from the 2005 MEANS reference. This is calculated by averaging the demolition estimates from 'Building Demolition - Small Buildings, Concrete', assuming a height of 30 feet for a two-story building; from 'Building Footings and Foundations Demolition - 6" Thick, Plain Concrete'; and from 'Demolish, Remove Pavement and Curb - Concrete to 6" thick, rod reinforced'. Paving is double-weighted since projects typically involve more paving demolition. The 'Total Days' estimate for building construction is assumed to be 230 days, unless project-specific data is known.

Project Combustion and Evaporative Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	749.54	46.39	282.78	14.99	45.82	44.44	88,947
Paving	2,495.20	143.31	1,021.81	49.90	152.69	148.10	309,318
Demolition	-	-	-	-	-	-	0
Building Construction	9,455.12	751.15	4,171.75	747.92	678.97	658.60	1,071,483
Architectural Coatings	71.48	945.33	31.31	5.02	6.19	6.00	7,195
Total Emissions (lbs):	12,771.34	1,886.18	5,507.65	817.84	883.66	857.15	1,476,943

Results: Project Annual Combustion and Evaporative Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Total Project Combustion and Evaporative Emissions (lbs)	12,771.34	1,886.18	5,507.65	817.84	883.66	857.15	1,476,943
Total Project Combustion and Evaporative Emissions (tons)	6.39	0.94	2.75	0.41	0.44	0.43	738.47

Construction Fugitive Dust Emissions - Proposed Action [Modified Alternative 1 - Construction Phase (Saipan)]

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19	ton PM ₁₀ /acre-month	MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42	ton PM ₁₀ /acre-month	MRI 1996; EPA 2001; EPA 2006
PM_{2.5} Emissions			
PM _{2.5} Multiplier	0.10	(10% of PM ₁₀ emissions assumed to be PM _{2.5})	EPA 2001; EPA 2006
Control Efficiency	0.50	(assume 50% control efficiency for PM ₁₀ and PM _{2.5} emissions)	EPA 2001; EPA 2006

Project Assumptions

New Roadway Construction (0.42 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	11.5 acres

General Construction Activities (0.19 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	17.1 acres

	Project Emissions (tons/year)			
	PM ₁₀ uncontrolled	PM ₁₀ controlled	PM _{2.5} uncontrolled	PM _{2.5} controlled
New Roadway Construction	58.16	29.08	5.82	2.91
General Construction Activities	38.87	19.44	1.94	0.97
Total	97.04	48.52	7.76	3.88

Construction Fugitive Dust Emission Factors

General Construction Activities Emission Factor

0.19 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM₁₀/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM₁₀/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions From Construction Operations, calculated the 0.19 ton PM₁₀/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM₁₀/acre-month) and 75% of the average emission factor (0.11 ton PM₁₀/acre-month). The 0.19 ton PM₁₀/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM₁₀/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particulate (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District as well as the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM₁₀/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM₁₀/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM_{2.5} Multiplier

0.10

PM_{2.5} emissions are estimated by applying a particle size multiplier of 0.10 to PM₁₀ emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM₁₀ and PM_{2.5}

0.50

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas (EPA 2006). Wetting controls will be applied during project construction.

References:

- EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.
- EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.
- MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Grading Schedule - Proposed Action [Modified Alternative 1 - Construction Phase (Saipan)]

Estimate of time required to grade a specified area.

Input Parameters

Construction area: 28.6 acres/yr (from Combustion Worksheet)
 Qty Equipment: 9.0 (calculated based on 3 pieces of equipment for every 10 acres)

Assumptions

Terrain is mostly flat.
 An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.
 200 hp bulldozers are used for site clearing.
 300 hp bulldozers are used for stripping, excavation, and backfill.
 Vibratory drum rollers are used for compacting.
 Stripping, Excavation, Backfill and Compaction require an average of two passes each.
 Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 19th Ed., R. S. Means, 2005.

Means Line No.	Operation	Description	Output	Units	Acres per equip-day	equip-days per acre	Acres/yr (project-specific)	Equip-days per year
2230 200 0550	Site Clearing	Dozer & rake, medium brush	8	acre/day	8	0.13	28.59	3.57
2230 500 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	28.59	13.98
2315 432 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	14.30	14.41
2315 120 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	14.30	5.91
2315 310 5020	Compaction	Vibrating roller, 6 " lifts, 3 passes	2,300	cu. yd/day	2.85	0.35	28.59	10.03
TOTAL								47.91

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 47.91
 Qty Equipment: 9.00
 Grading days/yr: 5.32

Construction/Staff Commuter Emissions - Modified Alternative 1 - Construction Phase (Saipan)

Emissions from construction workers commuting to the job site are estimated in this spreadsheet.

Emission Estimation Method: Air Force Civil Engineer Center (AFCEE), Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Assumptions:

Passenger vehicle emission factors for scenario year 2015 are used.
 The average roundtrip commute for a construction/staff worker = 40 miles
 Number of construction days = 240 days
 Number of construction/Staff workers (daily) = 75 people

Note: None

Personal Operating Vehicle (POV) On-Road Emission Factors for Year 2016 (grams/mile)

NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
0.614	0.759	8.810	0.010	0.025	0.011	551.000

Source: Emission factors for all pollutants are from Table 5-28: On-Road Vehicle Emission Factors - 2016 POV, Gasoline Light Duty Trucks (LDGT) at low altitude, within AFCEC Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Construction Commuter Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	974.603	1204.762	13984.127	15.873	39.683	17.460	874603.175
tons	0.487	0.602	6.992	0.0079	0.0198	0.0087	437.302

Example Calculation: NO_x emissions (lbs) = 60 miles/day * NO_x emission factor (lb/mile) * number of construction days * number of workers

Construction/Haul Truck Emissions - Modified Alternative 1 - Construction Phase (Saipan)

Emissions from hauling construction supplies, demolition debris, fill, and excavated material are estimated in this spreadsheet.

Emission Estimation Method: Air Force Center for Environmental Excellence (AFCEE) Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.

Concrete Mixing and Dump Truck Assumptions:

Dump trucks carry 11 cubic yards of material per trip.

Concrete mixing trucks carry 10 cubic yards of material per trip.

The average distance from the port to Commercial Concrete Supply Company is 7 miles; therefore, dump trucks will travel 14 miles round trip.

The average distance from the Commercial Concrete Supply Company (CCSC) to the project site is 2 miles; therefore, concrete trucks will travel 4 miles round trip.

Fill Materials Assumptions:

Haul trucks carry 20 cubic yards of material per trip.

The average distance from the project site to the materials source is 20 miles; therefore, building material haul trucks will travel 40 miles round trip.

Estimated number of trips required by haul trucks = total amount of material/20 cubic yards per truck

Amount of demolition debris =	0 cubic yards	No Demolition in the Proposed Action
Amount of cement transported from port to CCSC =	1,122 cubic yards	
Amount of concrete transported from CCSC to project site =	17,980 cubic yards	
Amount of Excavation Materials for New Buildings =	553,503 cubic yards	Construction area multiplied by depth of disturbance which is assumed to be 12 feet.
Amount of Building Materials =	415,127 cubic yards	Construction area multiplied by 9 feet.
Number of dump trucks required (port to CCSC) =	102 heavy duty diesel haul truck trips, Cells rounded up	
Number of concrete mixing trucks required (CCSC to project site) =	1798 heavy duty diesel haul truck trips, Cells rounded up	
Number of trucks required (Building Materials) =	48,432 heavy duty diesel haul truck trips	
Miles per trip (port to CCSC) =	14 miles	
Miles per trip (CCSC to project site) =	4 miles	
Miles per trip (Building Materials) =	40 miles	

Low Altitude Heavy Duty Diesel Vehicle 8b (HDDV8b) Average Emission Factors (grams/mile)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
HDDV8b	6.23	0.58	3.33	0.02	0.2	0.19	1615

Notes:

Emission factors for all pollutants are from Appendix A - On-Road Vehicle Emission Factors within AFCEE Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009. Emission factors from calendar year 2015 were used assuming the average vehicle model year is 2005.

HDDV8b Haul Truck Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	26,726.10	2,488.14	14,285.38	85.80	857.98	815.08	6,929,051.32
tons	13.36	1.24	7.14	0.04	0.43	0.41	3,464.53

Example Calculation: NO_x emissions (lbs) = 40 miles per trip * 48,432 trips * NO_x emission factor (g/mile) * lb/453.6 g

No Statistical Area Available for GSN

Row #	State	County	Tier-1	Point Source Emissions					Area Source Emissions (Non-Point and Mobile Sources)					
				CO	NO _x	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NO _x	PM ₁₀	PM _{2.5}	SO ₂
No Data Available														
Grand Total				0	0	0	0	0	0	0	0	0	0	0

SOURCE:

<http://www.epa.gov/ttn/chief/eiinformation.html>

USEPA - AirData NET Tier Report

*Net Air pollution sources (area and point) in tons per year (2002)

Site visited on 02 February 2012.

No Air Quality Control Region Identified

	CO	NO _x	PM ₁₀	PM _{2.5}	SO ₂	VOC
CNMI	0	0	0	0	0	0
CNMI DEQ	0	0	0	0	0	0

Summary Summarizes total emissions by calendar year for Modified Alternative 1 - Implementation Phase (Saipan).

Airfield Operations Airfield operations consist of taxi, take-off and landings (sorties/LTOs), touch-and-go operations (TGOs), and low flybys (LFB) by aircraft.

Fuel Truck and Commuter Vehicle Emissions Estimates emissions for workers and operational vehicles commuting to the site of the Proposed Action.

Fuel Transfer Emissions Fuel loading operations under the Proposed Action involves the loading of fuel into tanker trucks and aircraft.

Internal Combustion Engine (ICE) Emissions Estimates Emissions from Internal Combustion Engines (e.g Generators)

Fuel Storage Tanks Estimates emissions from Above Ground Storage Tanks.

Criteria Pollutant and VOC Emissions Summary for Modified Alternative 1 - Implementation Phase (Saipan) (tons/year)

Source Category	PM10	PM2.5	CO	NOx	SOx	VOCs
Airfield Operations	0.055	0.053	18.672	6.771	0.982	1.246
Fuel Truck and Commuter Vehicle Emissions	0.017	0.013	0.189	0.367	0.001	0.032
Fuel Transfer	N/A	N/A	N/A	N/A	N/A	0.008
Fuel Storage Tanks	N/A	N/A	N/A	N/A	N/A	1.190
Total Criteria and VOC Pollutant Emissions (tons/year)	0.07	0.07	18.86	7.14	0.98	2.48

Greenhouse Gas (GHG) Emissions Summary for Modified Alternative 1 - Implementation Phase (Saipan) (metric tonnes/year)

Source Category	CO ₂ -equivalent (lb/year)	CO ₂ -equivalent (kg/year)	CO ₂ -equivalent (metric tonne/year)
Airfield Operations*	8,833,755	4,006,991	4,007
Fuel Truck and Commuter Vehicle Emissions	205,537	93,232	93
Fuel Transfer	0	0	0
Fuel Storage Tanks	0	0	0
Total GHG Emissions	9,039,293	4,100,223	4,100

DATA - Airfield Operations for Modified Alternative 1 - Implementation Phase (Saipan)

Aircraft exercises under this alternative are based on assuming 2 to 4 KC-135R aircraft operating up to 8 weeks per year for a maximum of 720 KC-135R operations per year. Each operation is equivalent to one landing or one take-off (1 LTO Cycle = 2 operations).

Landing and Takeoff (LTO) Cycles

Description	Quantity
# of KC-135R LTO's per year	360

Legend

Airfield Activity Data (Worst Case Scenario)

Aircraft Model	Aircraft Model Used to Match to Available Emission Factors	Engine Model	# Engines	APU Model	# APUs	Noise	LTO Cycles
KC-135R	KC-135-R	F108-CF-201	4	No data on APUs	See below		360

Note: F108-CF-201 is the military designation of the CFM56-2B-1 engine.

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 1 - Implementation Phase (Saipan)

Aircraft Criteria Pollutant Emission Factors

Aircraft Model	Engine Model	# Engines	Reference Thrust Mode	LTO/TGO Thrust Mode	Fuel Flow (lb/hr)	Emission Factors in lb Pollutant per 1000 lb Fuel Burned						
						PM10	PM2.5	CO	NO _x	SO ₂	VOCs	TIM
KC-135R	F108-CF-201	4	Idle	Idle	1016	0.06	0.06	30.70	4.00	1.06	2.10	47.7
KC-135R	F108-CF-201	4	Approach	Approach	2468	0.06	0.05	4.20	8.20	1.06	0.09	5.2
KC-135R	F108-CF-201	4	Climbout	Climbout	6500	0.05	0.05	0.90	16.00	1.06	0.06	1.6
KC-135R	F108-CF-201	4	Takeoff	Takeoff	7818	0.07	0.06	0.90	18.05	1.06	0.05	0.7

Emission factors from Air Force Civil Engineer Center (AFCEC) October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-8

APU Emission Factors

Aircraft Model	# APU	APU Model	APU Emission Factors in lb Pollutant per hour						APU (hr)
			PM10	PM2.5	CO	NO _x	SO ₂	VOCs	
KC-135R	4		No Data Available.						

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 1 - Implementation Phase (Saipan)

Default Time-in-Mode

Aircraft Type	Typical Duration by Mode (minutes)					
	Taxi/Idle-out	Takeoff	Climbout	Approach	Taxi/Idle-in	Total
KC-135R	32.8	0.7	1.6	5.2	14.9	55.2

Default Time-in-Mode rates are from AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-4

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 1 - Implementation Phase (Saipan)

Greenhouse Gas Emission Factors

Units	CO ₂	CH ₄	N ₂ O
kg/gal fuel	9.80	---	---
g/gal fuel	---	0.27	0.31

Reference: Footnote 2, from Table 2-8 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources.

Calculations - Airfield Operations for Modified Alternative 1 - Implementation Phase (Saipan)

Criteria Pollutant and VOC Emissions per LTO by Aircraft Type

Calculated as the sum of the products of [(minutes) * (fuel flow/minute) * (lbs pollutant/lb fuel)] for each of the thrust modes.

Reported Aircraft Model	APU	Emission in lb Pollutant per LTO							
		Fuel (lb)	PM10 (lb)	PM2.5 (lb)	CO (lb)	NOx (lb)	SOx (lb)	VOCs (lb)	
KC-135R	0	5144.6	0.3	0.3	103.7	37.6	5.5	6.9	0

Total Criteria Pollutant and VOC Emissions for maximum LTO's by Aircraft Type

Reported Aircraft Model	APU	Total LTO's	Fuel (lb)	PM10 (tons)	PM2.5 (tons)	CO (tons)	NOx (tons)	SOx (tons)	VOCs (tons)	APU
			KC-135R	0	360	1,852,065.6	0.05	0.05	18.67	
Worst Case Scenario			1,852,065.60	0.05	0.05	18.67	6.77	0.98	1.25	0

Total gallons of fuel used for LTOs (277,671 gal.) is based on the 6.67 lb/gal density of JP-8 as provided in footnote 2. of Table 2-8 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources. Emissions from LTO's are for the time up to and down from 3,000 feet elevation which is the default mixing height.

Calculations - Airfield Operations for Modified Alternative 1 - Implementation Phase (Saipan)

Greenhouse Gas Emissions

Assume aircraft will use 7,500 pounds of fuel per LTO cycle, which is from the ground to 10,000 feet and from 10,000 feet back to a landing.

This estimated fuel use was obtained from Maj. Travis Miyashiro, HIANG, PACAF A5XP. Fuel use and associated emissions above 10,000 feet are accounted for in the MIRC EIS.

Quantity (gallons)	Fuel Type	CH ₄ (kg)	N ₂ O (kg)	CO ₂ (kg)	CO ₂ -equivalent (kg)	CO ₂ -equivalent (metric tonne)
404,798	JP-8	109	125	3,967,016	4,006,991	4,007

The CH₄ and N₂O Global Warming Potential multipliers are 25 and 298, respectively from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014.

DATA - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Given: Six 10,000 gal Fuel Trucks will take 2 days at 8 hrs/day and 3 hours on a third day to travel from Saipan Port to Saipan International Airport (Site of Proposed Action) and to fill the airport tanks with the needed fuel; 420,000 gallons total. The six 10,000 gallon fuel trucks will make three round trips per day for the first two days and one round trip each on the third day.

Under the commercial lodging option six busses will transport a total of 256 personnel 4 roundtrips/day for a total of 24 roundtrips/day for 8 weeks.

Assumptions: A Gross Vehicle Weight (GVW) of 36,200 lbs will be used, based off of an 84 passenger Blue Bird bus.

Assume fuel truck GVW > 60,000 lbs since fuel load alone is 83,400 lbs.

Assume fuel trucks travel at 55 miles per hour

Assume 40 miles per roundtrip for busses.

Vehicle Weight Classes for Which Emission Factors are Published

Vehicle Category	Description	SCC
LDGV	Light-Duty Gasoline Vehicles (i.e., passenger cars) does not include SUVs, vans or pickups	A2201001000
LDGT1	Light-Duty Gasoline Trucks 1 (0-6,000 lbs GVW - includes pickup trucks, sport utility vehicles and vans)	A2201020000
LDGT3	Light-Duty Gasoline Trucks 3 (6,001-8,500 lbs. GVW - includes pickup trucks, sport utility vehicles and vans)	A2201040000
HDGV2B	Class 2b Heavy-Duty Gasoline Vehicles (8501-10,000 lbs GVW)	A2201070000
HDGV5	Class 5 Heavy-Duty Gasoline Vehicles (16,001-19,500 lbs GVW)	A2201070000
HDGV8A	Class 8a Heavy-Duty Gasoline Vehicles (33,001-60,000 lbs GVW)	A2201070000
LDDV	Light-Duty Diesel Vehicles (Passenger Cars)	
LDDT34	Light-Duty Diesel Trucks 3 and 4 (6,001-8,500 lbs GVW)	A2230002000
HDDV2B	Class 2b Heavy-Duty Diesel Vehicles (8501-10,000 lbs GVW - includes pickup trucks)	A2230070000
HDDV5	Class 5 Heavy-Duty Diesel Vehicles (16,001-19,500 lbs GVW)	A2230070000
HDDV8A	Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	A2230070000
HDDV8B	Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	A2230070000
MC	Motorcycles	A2201080000

Emission Factors - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Emission Factors for Calendar Year 2015

Vehicle Class	Model Year	Emission Factors in grams per Mile ^a								
		PM ₁₀	PM _{2.5}	CO	NOx	SOx	VOCs	CO ₂	Fugitive PM ₁₀	Fugitive PM _{2.5}
HDDV8A*	2005	0.2	0.19	2.8	5.47	0.01	0.48	1544.1	0.05	0.01
HDDV8B**	2005	0.2	0.19	3.33	6.23	0.02	0.58	1615.2	0.05	0.01

* Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8a

**Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8b

a) Emission factors from Appendix A of Air Emissions Factor Guide to Air Force Mobile Sources, AFCEE, December 2009

Greenhouse Gas Emission Factors for Calendar Year 2015

Vehicle Class	CH ₄ (g/mile)	N ₂ O (g/mile)
HDDV	0.0051	0.0048

g/mile = grams per mile

CH₄ = Methane; N₂O = Nitrous Oxide

b) Emission Factors from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>).

Emission Calculations - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Miles for Commuter Emissions for 8 week training exercises

Vehicle Class	Speed Miles/hour	Miles/Trip	Total Trips/Day	Hours/Day	Total Days	Total Miles
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	---	40	24	---	56	53,760
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	55	---	---	48	2,375	6,270

Criteria and VOC Emissions for Commuters

Vehicle Class	Model Year	Annual Miles	Criteria Pollutant Emissions (tons/year)					
			PM ₁₀	PM _{2.5}	CO	NOx	SOx	VOCs
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	2005	53,760	0.015	0.012	0.166	0.324	0.001	0.028
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	2005	6,270	0.002	0.001	0.023	0.043	0.000	0.004
Total			0.017	0.013	0.189	0.367	0.001	0.032

Particulate emissions include exhaust, brake wear, tire wear. Assume paved road.

Greenhouse Gas Emissions for Commuters

Vehicle Class	Annual Miles	CO ₂ (lb/year)	CH ₄ (lb/year)	N ₂ O (lb/year)	CH ₄ GWP Multiplier	N ₂ O GWP Multiplier	CO ₂ Equivalent (lb/year)	CO ₂ Equivalent (metric tonnes/year)
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	53,760	183,004.44	0.60	0.57	25	298	183,189.08	83.09
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	6,270	22,326.51	0.07	0.07	25	298	22,348.04	10.14
Total		205,330.95	0.67	0.64	---	---	205,537.13	93.23

GWP = Global Warming Potential; 100-year GWP values obtained from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>)

Emission Calculations Method - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Calculation Method: Equation 4-1, AFCEE 2009, Mobile Emissions Guide

$$EP = VMTVehCat * EFPolVehCat * 0.002205$$

Where,

EP = Emissions of each individual pollutant (lb/yr)

VMTVehCat = Annual vehicle miles traveled by each vehicle category (LDGV, LDGT1, LDDV, etc.) (mi/yr)

EFPolVehCat = Emission factor of each pollutant for each vehicle category (g/mi)

0.002205 = Factor for converting grams to pounds (g/lb).

DATA - Fuel Loading Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Given:

Total Exercise Days (8 weeks)	56
Initial Fuel Fill Days	2.333333333
Remaining Fuel Fill Days	0
Total # of Fuel Trucks	6
Total Gallons per Fuel Truck	10,000
Trips per day per Fuel Truck	3
1 bbl conversion to gallons	42
Total Fuel (gal) during Initial Fill	420,000
Total Fuel (gal) during Remaining Exercise	0
Total Fuel (gal) during Exercise (8 Weeks)	420,000

Proposed Action Fuel Loading Operations

Location	Description	Fuel Type	Fuel Transferred (gal)	Category
Flightline	Loading Aircraft from Hydrants	JP-8	420,000.0	Loading
Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210000	Loading
Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210000	Loading

Emission Factors - Fuel Loading Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

JP-8 emission factors (lb/Mgal)	Dispensing	Loading
	Splash	Bottom fill
Molecular Weight =	130	
True Vapor Pressure (psia) =	0.011	
Dispensing Displacement losses =	0.0487	0.020
Spillage =	0.7	
Total =	0.749	

AP-42 Table 7.1-2 dated 11/06
 AP-42 Table 7.1-2 dated 11/06 @ 70F (annual avg.)
 AP-42 Section 5.2 dated 6/08 Equation (1)
 AP-42 Table 5.2-7 dated 6/08

Emission Calculations - Fuel Loading Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Location	Description	Fuel Type	Fuel Transferred	Displaced Vapor	Spillage	Total VOC	Total VOC
			(gal)	(lb)	(lb)	(lb)	(ton)
Flightline	Loading Aircraft from Hydrants	JP-8	420,000	8.5	0	8.5	0.004
Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Total			840,000	17	0	17	0.01

Emission Calculations Method - Fuel Loading Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Displacement emissions for Diesel and JP-8 were estimated using Equation (1) from AP-42 Section 5.2, Transportation and Marketing of Petroleum Liquids, dated 6/08

$$L_L = 12.46 (SPM)/T$$

Where

L_L = Loading loss in lb/10³ gal

S = Saturation Factor 1.45 for splash loading, 0.6 for bottom loading

M = molecular weight,

T = temperature of bulk liquid (assume average annual ambient temperature)

DATA - Fuel Storage Tank Emissions for Modified Alternative 1 - Implementation Phase (Saipan)

Fuel storage tank emissions were estimated using the U.S. EPA TANKS storage tank emissions calculation software (Version 4.0.9d). The emissions calculations algorithms in the TANKS program are based on Chapter 7 of EPA's AP-42. Honolulu, Hawaii was used as a surrogate location for the tanks as meteorological data does not exist in TANKS for CNMI. Jet Kerosene fuel was used as the surrogate for JP-8 in the TANKS model as it is the closest in characteristics to JP-8.

Emission Calculations Summary from TANKS*

Tank Type	Throughput (gal.)	Working Loss (lbs)	Breathing Loss (lbs)	VOC Total (lbs)	VOC Total (tons)
Tank 1 (Seaport)- 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 2 (Seaport)- 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 3 (Airport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 4 (Airport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Total		38.52	2341.56	2380.08	1.19

*See the following references for TANKS printouts. (SM11 - TANKS) & (SM12 - TANKS)

4200000

Summary	Summarizes total emissions by calendar year for Modified Alternative 2A - Construction Phase (Tinian North).
Combustion and Evaporative	Estimates emissions from non-road equipment exhaust and evaporative volatile organic compound emissions.
Fugitive	Estimates particulate emissions from construction activities including earthmoving, vehicle traffic, and windblown dust.
Grading	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
Construction Commuter	Estimates emissions for construction workers commuting to the site.
Haul Truck On-Road	Estimates emissions from hauling construction materials to the project site.

Summary of Air Quality Emissions from Divert EIS - Modified Alternative 2A - Construction Phase (Tinian North)

	NO_x (ton)	VOC (ton)	CO (ton)	SO₂ (ton)	PM₁₀ (ton)	PM_{2.5} (ton)	CO₂ (ton)
Construction Combustion/Evaporative	19.668	2.119	8.316	0.956	1.306	1.266	2,329.220
Construction Fugitive Dust	-	-	-	-	230.883	21.912	-
Construction Commuter	0.975	1.205	13.984	0.0159	0.040	0.017	874.603
Haul Truck On-Road	9.815	0.914	5.246	0.032	0.315	0.299	2,544.627
TOTAL	30.46	4.24	27.55	1.00	232.54	23.50	5,748.45

Annual Summary of Air Quality Emissions from Divert EIS - Modified Alternative 2A - Construction Phase (Tinian North)*

	Point and Area Sources Combined						
	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO₂ (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)	CO₂ (metric tons)
CY 01	10.15	1.41	9.18	0.33	77.51	7.83	1,738.30
CY 02	10.15	1.41	9.18	0.33	77.51	7.83	1,738.30
CY 03	10.15	1.41	9.18	0.33	77.51	7.83	1,738.30

* Construction duration is estimated to be 36 months and the emissions are assumed to be distributed evenly over the construction period.

Combustion and Evaporative Emissions - Modified Alternative 2A - Construction Phase (Tinian North)

Combustion Emissions of VOC, NO_x, SO₂, CO, PM_{2.5}, PM₁₀, and CO₂ due to Construction

Assumptions

When multiple options exist under the general construction activities the most conservative value will be used to quantify air emission.

General Construction Activities

	Area Disturbed (ft ²)
Construct Taxiway	1,385,300 ft ²
Construct Road Re-Route	40,585 ft ²
Construct New Access Roads	128,924 ft ²
Construct Maintenance Facility	7,570 ft ²
Construct Jet Fuel System and Fire Pump System (Operational, Bulk and at the Port of Tinian)	891,266 ft ²
Construct Hazardous Cargo Pad	299,754 ft ²
Construct Parking Apron	1,729,805 ft ²

Total General Construction Area:	898,836 ft ²	
	20.6 acres	
Total Demolition Area:	0 ft ²	
	0.0 acres	
Total Pavement Area:	3,584,368 ft ²	
	82.3 acres	
Total Disturbed Area:	4,483,204 ft ²	
	102.9 acres	
Construction Duration:	36 months	
1 Yr Project Construction Activity:	240 days/yr	Assume 12 months, 4 weeks per month, 5 days per week.

Emission Factors Used for Construction Equipment

References: Guide to Air Quality Assessment, Sacramento Metropolitan Air Quality Management District (SMAQMD), 2004; and U.S. EPA NONROAD Emissions Model, Version 2005.0.0
Emission factors are taken from the NONROAD model and were provided to e*M by Larry Landman of the Air Quality and Modeling Center (Landman.Larry@epamail.epa.gov) on 12/14/07. Factors provided are for the weighted average US fleet for CY2007.
Assumptions regarding the type and number of equipment are from SMAQMD Table 3-1 unless otherwise noted.

Grading

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Bulldozer	1	13.60	0.96	5.50	1.02	0.89	0.87	1456.90
Motor Grader	1	9.69	0.73	3.20	0.80	0.68	0.64	1141.65
Water Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	3	41.64	2.58	15.71	0.83	2.55	2.47	4941.53

Paving

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Paver	1	3.83	0.37	2.06	0.28	0.35	0.34	401.93
Roller	1	4.82	0.44	2.51	0.37	0.43	0.42	536.07
Truck	2	36.71	1.79	14.01	3.27	1.99	1.93	4685.95
Total per 10 acres of activity	4	45.37	2.61	18.58	0.91	2.78	2.69	5623.96

Demolition

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Loader	1	13.45	0.99	5.58	0.95	0.93	0.90	1360.10
Haul Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	2	31.81	1.89	12.58	0.64	1.92	1.87	3703.07

Building Construction

Equipment ^d	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Stationary								
Generator Set	1	2.38	0.32	1.18	0.15	0.23	0.22	213.06
Industrial Saw	1	2.62	0.32	1.97	0.20	0.32	0.31	291.92
Welder	1	1.12	0.38	1.50	0.08	0.23	0.22	112.39
Mobile (non-road)								
Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Forklift	1	5.34	0.56	3.33	0.40	0.55	0.54	572.24
Crane	1	9.57	0.66	2.39	0.65	0.50	0.49	931.93
Total per 10 acres of activity	6	39.40	3.13	17.38	3.12	2.83	2.74	4464.51

Architectural Coatings

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Air Compressor	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77
Total per 10 acres of activity	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77

- The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity. (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.
- The SMAQMD 2004 reference lists emission factors for reactive organic gas (ROG). For the purposes of this worksheet ROG = VOC. The NONROAD model contains emissions factors for total HC and for VOC. The factors used here are the VOC factors.
- The NONROAD emission factors assume that the average fuel burned in nonroad trucks is 1100 ppm sulfur. Trucks that would be used for the Proposed Actions will all be fueled by highway grade diesel fuel which cannot exceed 500 ppm sulfur. These estimates therefore over-estimate SO₂ emissions by more than a factor of two.
- Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

Combustion and Evaporative Emissions - Modified Alternative 2A - Construction Phase (Tinian North) - Continued

Project-Specific Combustion and Evaporative Emission Factor Summary

Source	Equipment Multiplier*	Project-Specific Emission Factors (lb/day)						
		NO _x	VOC	CO	SO ₂ **	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	10	416.412	25.770	157.099	8.328	25.455	24.691	49415.263
Paving Equipment	8	362.938	20.846	148.627	7.259	22.209	21.543	44991.655
Demolition Equipment	1	31.808	1.886	12.584	0.636	1.923	1.865	3703.074
Building Construction	2	78.793	6.260	34.765	6.233	5.658	5.488	8929.023
Air Compressor for Architectural Coating	2	7.148	0.746	3.131	0.502	0.619	0.600	719.547
Architectural Coating**			77.268					

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project.

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994
 Example: SMAQMD Emission Factor for Grading Equipment NO_x = (Total Grading NO_x per 10 acre)/(Equipment Multiplier)

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days	
Grading:	4,483,204	102.92	6	(from "Grading" worksheet)
Paving:	3,584,368	82.29	49	
Demolition:	0	0.00	0	
Building Construction:	898,836	20.63	240	
Architectural Coating:	898,836	20.63	20	(per SMAQMD "Air Quality of Thresholds of Significance", 1994)

NOTE: The 'Total Days' estimate for paving is calculated by dividing the total number of acres by 0.21 acres/day, which is a factor derived from the 2005 MEANS Heavy Construction Cost Data, 19th Edition, for 'Asphaltic Concrete Pavement, Lots and Driveways - 6" stone base', which provides an estimate of square feet paved per day. There is also an estimate for 'Plain Cement Concrete Pavement', however the estimate for asphalt is used because it is more conservative. The 'Total Days' estimate for demolition is calculated by dividing the total number of acres by 0.02 acres/day, which is a factor also derived from the 2005 MEANS reference. This is calculated by averaging the demolition estimates from 'Building Demolition - Small Buildings, Concrete', assuming a height of 30 feet for a two-story building; from 'Building Footings and Foundations Demolition - 6" Thick, Plain Concrete'; and from 'Demolish, Remove Pavement and Curb - Concrete to 6" thick, rod reinforced'. Paving is double-weighted since projects typically involve more paving demolition. The 'Total Days' estimate for building construction is assumed to be 230 days, unless project-specific data is known.

Project Combustion and Evaporative Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	2,498.47	154.62	942.59	49.97	152.73	148.15	296.492
Paving	17,783.98	1,021.44	7,282.74	355.68	1,088.23	1,055.58	2,204.591
Demolition	-	-	-	-	-	-	0
Building Construction	18,910.23	1,502.31	8,343.51	1,495.85	1,357.94	1,317.20	2,142.966
Architectural Coatings	142.96	1,560.28	62.62	10.05	12.37	12.00	14,391
Total Emissions (lbs):	39,335.65	4,238.65	16,631.46	1,911.54	2,611.27	2,532.94	4,658.439

Results: Project Annual Combustion and Evaporative Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Total Project Combustion and Evaporative Emissions (lbs)	39,335.65	4,238.65	16,631.46	1,911.54	2,611.27	2,532.94	4,658.439
Total Project Combustion and Evaporative Emissions (tons)	19.67	2.12	8.32	0.96	1.31	1.27	2,329.22

Construction Fugitive Dust Emissions - Proposed Action [Modified Alternative 2A - Construction Phase (Tinian North)]

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
PM_{2.5} Emissions			
PM _{2.5} Multiplier	0.10	(10% of PM ₁₀ emissions assumed to be PM _{2.5})	EPA 2001; EPA 2006
Control Efficiency	0.50	(assume 50% control efficiency for PM ₁₀ and PM _{2.5} emissions)	EPA 2001; EPA 2006

Project Assumptions

New Roadway Construction (0.42 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	82.3 acres

General Construction Activities (0.19 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	20.6 acres

	Project Emissions (tons/year)			
	PM₁₀ uncontrolled	PM₁₀ controlled	PM_{2.5} uncontrolled	PM_{2.5} controlled
New Roadway Construction	414.72	207.36	41.47	20.74
General Construction Activities	47.05	23.52	2.35	1.18
Total	461.77	230.88	43.82	21.91

General Construction Activities Emission Factor

0.19 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM₁₀/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM₁₀/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions From Construction Operations, calculated the 0.19 ton PM₁₀/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM₁₀/acre-month) and 75% of the average emission factor (0.11 ton PM₁₀/acre-month). The 0.19 ton PM₁₀/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM₁₀/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particulate (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District as well as the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM₁₀/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM₁₀/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM_{2.5} Multiplier

0.10

PM_{2.5} emissions are estimated by applying a particle size multiplier of 0.10 to PM₁₀ emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM₁₀ and PM_{2.5}

0.50

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas (EPA 2006). Wetting controls will be applied during project construction.

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Grading Schedule - Proposed Action [Modified Alternative 2A - Construction Phase (Tinian North)]

Estimate of time required to grade a specified area.

Input Parameters

Construction area: 102.9 acres/yr (from Combustion Worksheet)
 Qty Equipment: 31.0 (calculated based on 3 pieces of equipment for every 10 acres)

Assumptions

Terrain is mostly flat.
 An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.
 200 hp bulldozers are used for site clearing.
 300 hp bulldozers are used for stripping, excavation, and backfill.
 Vibratory drum rollers are used for compacting.
 Stripping, Excavation, Backfill and Compaction require an average of two passes each.
 Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 19th Ed., R. S. Means, 2005.

Means Line No.	Operation	Description	Output	Units	Acres per equip-day	equip-days per acre	Acres/yr (project-specific)	Equip-days per year
2230 200 0550	Site Clearing	Dozer & rake, medium brush	8	acre/day	8	0.13	102.92	12.87
2230 500 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	102.92	50.32
2315 432 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	51.46	51.89
2315 120 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	51.46	21.29
2315 310 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	2,300	cu. yd/day	2.85	0.35	102.92	36.10
TOTAL								172.45

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 172.45
 Qty Equipment: 31.00
 Grading days/yr: 5.56

Construction/Staff Commuter Emissions - Modified Alternative 2A - Construction Phase (Tinian North)

Emissions from construction workers commuting to the job site are estimated in this spreadsheet.

Emission Estimation Method: Air Force Civil Engineer Center (AFCEE), Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Assumptions:

Passenger vehicle emission factors for scenario year 2015 are used.
 The average roundtrip commute for a construction/staff worker = 40 miles
 Number of construction days = 240 days
 Number of construction/Staff workers (daily) = 150 people

Note: None

Personal Operating Vehicle (POV) On-Road Emission Factors for Year 2016 (grams/mile)

NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
0.614	0.759	8.810	0.010	0.025	0.011	551.000

Source: Emission factors for all pollutants are from Table 5-28: On-Road Vehicle Emission Factors - 2016 POV, Gasoline Light Duty Trucks (LDGT) at low altitude, within AFCEC Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Construction Commuter Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	1,949,206	2,409,524	27,968,254	31,746	79,365	34,921	1,749,206,349
tons	0.975	1.205	13.984	0.016	0.040	0.017	874.603

Example Calculation: NO_x emissions (lbs) = 60 miles/day * NO_x emission factor (lb/mile) * number of construction days * number of workers

Construction/Haul Truck Emissions - Modified Alternative 2A - Construction Phase (Tinian North)

Emissions from hauling construction supplies, demolition debris, fill, and excavated material are estimated in this spreadsheet.

Emission Estimation Method: Air Force Center for Environmental Excellence (AFCEE) Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.

Concrete Mixing and Dump Truck Assumptions:

Dump trucks carry 11 cubic yards of material per trip.
 Concrete mixing trucks carry 10 cubic yards of material per trip.
 The average distance from the port to Commercial Concrete Supply Company is 1.7 miles; therefore, dump trucks will travel 3.4 miles round trip.
 The average distance from the Commercial Concrete Supply Company (CCSC) to the project site is 2.3 miles; therefore, concrete trucks will travel 4.6 miles round trip.

Fill Materials Assumptions:

Haul trucks carry 20 cubic yards of material per trip.
 The average distance from the project site to the materials source is 20 miles; therefore, building material haul trucks will travel 40 miles round trip.
 Estimated number of trips required by haul trucks = total amount of material/20 cubic yards per truck

Amount of demolition debris =	0 cubic yards	No Demolition in the Proposed Action
Amount of cement transported from port to CCSC =	4,004 cubic yards	
Amount of concrete transported from CCSC to project site =	64,780 cubic yards	
Amount of Excavation Materials for New Structures/Buildings =	399,483 cubic yards	Construction area multiplied by depth of disturbance which is assumed to be 12 feet.
Amount of Building/Structure Materials =	299,612 cubic yards	Construction area multiplied by 9 feet.

Number of dump trucks required (port to CCSC) =	364 heavy duty diesel haul truck trips, Cells rounded up
Number of concrete mixing trucks required (CCSC to project site) =	6478 heavy duty diesel haul truck trips, Cells rounded up
Number of trucks required (Building Materials) =	34,955 heavy duty diesel haul truck trips
Miles per trip (port to CCSC) =	3.4 miles
Miles per trip (CCSC to project site) =	4.6 miles
Miles per trip (Building Materials) =	40.0 miles

Low Altitude Heavy Duty Diesel Vehicle 8b (HDDV8b) Average Emission Factors (grams/mile)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
HDDV8b	6.23	0.58	3.33	0.02	0.20	0.19	1615

Notes:

Emission factors for all pollutants are from Appendix A - On-Road Vehicle Emission Factors within AFCEE Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.
 Emission factors from calendar year 2015 were used assuming the average vehicle model year is 2005.

HDDV8b Haul Truck Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	19,629.80	1,827.49	10,492.33	63.02	630.17	598.66	5,089,253.54
tons	9.81	0.91	5.25	0.03	0.32	0.30	2,544.63

Example Calculation: NO_x emissions (lbs) = 40 miles per trip * 34,955 trips * NO_x emission factor (g/mile) * lb/453.6 g

Summary	Summarizes total emissions by calendar year for Modified Alternative 2a - Implementation Phase (Tinian North).
Airfield Operations	Aircraft operations consist of taxi, take-off and landings (sorties or LTOs), touch-and-go operations (TGOs), and low flybys (LFB) by base aircraft.
Fuel Truck and Commuter Vehicle Emissions	Estimates emissions for workers and operational vehicles commuting to the site of the Proposed Action.
Fuel Transfer Emissions	Fuel loading operations under the Proposed Action involves the loading of fuel into tanker trucks and aircraft.
Internal Combustion Engine (ICE) Emissions	Estimates Emissions from Internal Combustion Engines (e.g Generators)
Fuel Storage Tanks	Estimates emissions from Above Ground Storage Tanks.

Criteria Pollutant and VOC Emissions Summary for Modified Alternative 2a - Implementation Phase (Tinian North) (tons/year)

Source Category	PM10	PM2.5	CO	NOx	SOx	VOCs
Airfield Operations	0.05	0.05	18.67	6.77	0.98	1.25
Fuel Truck and Commuter Vehicle Emissions	0.02	0.01	0.19	0.37	0.00	0.03
Fuel Transfer	N/A	N/A	N/A	N/A	N/A	0.01
Fuel Storage Tanks	N/A	N/A	N/A	N/A	N/A	1.91
Total Criteria and VOC Pollutant Emissions (tons/year)	0.07	0.07	18.86	7.14	0.98	3.19

Greenhouse Gas (GHG) Emissions Summary for Modified Alternative 2a - Implementation Phase (Tinian North) (metric tonnes/year)

Source Category	CO ₂ -equivalent (lb/year)	CO ₂ -equivalent (kg/year)	CO ₂ -equivalent (metric tonne/year)
Airfield Operations*	8,833,755	4,006,991	4,007
Fuel Truck and Commuter Vehicle Emissions	205,537	93,232	93
Fuel Transfer	0	0	0
Fuel Storage Tanks	0	0	0
Total GHG Emissions	9,039,293	4,100,223	4,100

DATA - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Aircraft exercises under this alternative are based on assuming 2 to 4 KC-135R aircraft operating up to 8 weeks per year for a maximum of 720 KC-135R operations per year. Each operation is equivalent to one landing or one take-off (1 LTO Cycle = 2 operations).

Landing and Takeoff (LTO) Cycles

Description	Quantity
# of KC-135R LTO's per year	360

Legend

Airfield Activity Data (Worst Case Scenario)

Aircraft Model	Aircraft Model Used to Match to Available Emission Factors	Engine Model	Engines	APU Model	APUs	Notes	LTO Cycles
KC-135R	KC-135-R	F108-CF-201	4	No data on APUs		See below	360

Note: F108-CF-201 is the military designation of the CFM56-2B-1 engine.

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Aircraft Criteria Pollutant Emission Factors

Aircraft Model	Engine Model	Engines	Reference Thrust Mode	LTO/GO Thrust Mode	Fuel Flow (lb/hr)	Emission Factors in lb Pollutant per 1000 lb Fuel Burned						
						PM10	PM2.5	CO	NO _x	SO ₂	VOCs	TIM
KC-135R	F108-CF-201	4	Idle	Idle	1016	0.06	0.06	30.70	4.00	1.06	2.10	47.7
KC-135R	F108-CF-201	4	Approach	Approach	2468	0.06	0.05	4.20	8.20	1.06	0.09	5.2
KC-135R	F108-CF-201	4	Climbout	Climbout	6500	0.05	0.05	0.90	16.00	1.06	0.06	1.6
KC-135R	F108-CF-201	4	Takeoff	Takeoff	7818	0.07	0.06	0.90	18.05	1.06	0.05	0.7

Emission factors from Air Force Civil Engineer Center (AFCEC) October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-8

APU Emission Factors

Aircraft Model	# APU	APU Model	APU Emission Factors in lb Pollutant per hour							APU (hr)
			PM10	PM2.5	CO	NO _x	SO ₂	VOCs		
KC-135R			No Data Available.							

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Default Time-In-Mode

Aircraft Type	Typical Duration by Mode (minutes)					
	Taxi/Idle	Takeoff	Climbout	Approach	Taxi/Idle-in	Total
KC-135R	32.8	0.7	1.6	5.2	14.9	55.2

Default Time-In-Mode rates are from AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-4

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Greenhouse Gas Emission Factors

Units	CO ₂	CH ₄	N ₂ O
kg/gal fuel	9.80	---	---
g/gal fuel	---	0.27	0.31

Reference: Footnote 2, from Table 2-8 of the AFCEC August 2013 Air Emissions Guide for Air Force Mobile Sources.

Calculations - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Criteria Pollutant and VOC Emissions per LTO by Aircraft Type

Calculated as the sum of the products of [(minutes) * (fuel flow/minute) * (lbs pollutant/lb fuel)] for each of the thrust modes.

Reported Aircraft Model	APU	Emission in lb Pollutant per LTO							
		Fuel (lb)	PM10 (lb)	PM2.5 (lb)	CO (lb)	NOx (lb)	SOx (lb)	VOCs (lb)	APU
KC-135R	0	5144.6	0.3	0.3	103.7	37.6	5.5	6.9	0

Total Criteria Pollutant and VOC Emissions for maximum LTO's by Aircraft Type

Reported Aircraft Model	APU	Total LTO's	Fuel	PM10	PM2.5	CO	NOx	SOx	VOCs	APU
			(lb)	(tons)						
KC-135R	0	360	1,852,065.6	0.05	0.05	18.67	6.77	0.98	1.25	0
Worst Case Scenario			1,852,065.60	0.05	0.05	18.67	6.77	0.98	1.25	0

Total gallons of fuel used for LTOs (277,671 gal.) is based on the 6.67 lb/gal density of JP-8 as provided in footnote 2. of Table 2-8 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources. Emissions from LTO's are for the time up to and down from 3,000 feet elevation which is the default mixing height.

Calculations - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Greenhouse Gas Emissions

Assume aircraft will use 7,500 pounds of fuel per LTO cycle, which is from the ground to 10,000 feet and from 10,000 feet back to a landing. This estimated fuel use was obtained from Maj. Travis Miyashiro, HIANG, PACAF ASXP. Fuel use and associated emissions above 10,000 feet are accounted for in the MIRC EIS.

Quantity (gallons)	Fuel Type	CH ₄ (kg)	N ₂ O (kg)	CO ₂ (kg)	CO ₂ -equivalent (kg)	CO ₂ -equivalent (metric tonne)
404,798	JP-8	109	125	3,367,016	4,006,991	4,007

The CH₄ and N₂O Global Warming Potential multipliers are 25 and 298, respectively from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories. Last Modified 4 April 2014.

DATA - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Given: Six 10,000 gal Fuel Trucks will take 2 days at 8 hrs/day and 3 hours on a third day to travel from Tinian Seaport to Tinian Airport (Site of Proposed Action) and to fill the airport tanks with the needed fuel; 420,000 gallons total. The six 10,000 gallon fuel trucks will make three round trips per day for the first two days and one round trip each on the third day.

Under the commercial lodging option six busses will transport a total of 256 personnel 4 roundtrips/day for a total of 24 roundtrips/day for 8 weeks.

Assumptions: A Gross Vehicle Weight (GVW) of 36,200 lbs will be used, based off of an 84 passenger Blue Bird bus.

Assume fuel truck GVW > 60,000 lbs since fuel load alone is 83,400 lbs.

Assume fuel trucks travel at 55 miles per hour

Assume 40 miles per roundtrip for busses.

Vehicle Weight Classes for Which Emission Factors are Published

Vehicle Category	Description	SCC
LDGV	Light-Duty Gasoline Vehicles (i.e., passenger cars) does not include SUVs, vans or pickups	A2201001000
LDGT1	Light-Duty Gasoline Trucks 1 (0-6,000 lbs GVW - includes pickup trucks, sport utility vehicles and vans)	A2201020000
LDGT3	Light-Duty Gasoline Trucks 3 (6,001-8,500 lbs. GVW - includes pickup trucks, sport utility vehicles and vans)	A2201040000
HDBG2B	Class 2b Heavy-Duty Gasoline Vehicles (8501-10,000 lbs GVW)	A2201070000
HDBG5	Class 5 Heavy-Duty Gasoline Vehicles (16,001-19,500 lbs GVW)	A2201070000
HDBG8A	Class 8a Heavy-Duty Gasoline Vehicles (33,001-60,000 lbs GVW)	A2201070000
LDDV	Light-Duty Diesel Vehicles (Passenger Cars)	
LDDT34	Light-Duty Diesel Trucks 3 and 4 (6,001-8,500 lbs GVW)	A2230002000
HDDV2B	Class 2b Heavy-Duty Diesel Vehicles (8501-10,000 lbs GVW - includes pickup trucks)	A2230070000
HDDV5	Class 5 Heavy-Duty Diesel Vehicles (16,001-19,500 lbs GVW)	A2230070000
HDDV8A	Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	A2230070000
HDDV8B	Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	A2230070000
MC	Motorcycles	A2201080000

Emission Factors - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Emission Factors for Calendar Year 2015

Vehicle Class	Model Year	Emission Factors in grams per Mile ^a								
		PM ₁₀	PM _{2.5}	CO	NOx	SOx	NOCs	CO ₂	Fugitive PM ₁₀	Fugitive PM _{2.5}
HDDVSA*	2005	0.2	0.19	2.8	5.47	0.01	0.48	1544.1	0.05	0.01
HDDVSB**	2005	0.2	0.19	3.33	6.23	0.02	0.58	1615.2	0.05	0.01

* Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8a

**Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8b

a) Emission factors from Appendix A of Air Emissions Factor Guide to Air Force Mobile Sources, AFCEE, December 2009

Greenhouse Gas Emission Factors for Calendar Year 2015

Vehicle Class	CH ₄ (g/mile)	N ₂ O (g/mile)
HDDV	0.0051	0.0048

g/mile = grams per mile

CH₄ = Methane; N₂O = Nitrous Oxide

b) Emission Factors from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>).

Emission Calculations - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Miles for Commuter Emissions for 8 week training exercises

Vehicle Class	Speed		Total Trips/Day	Hours/Day	Total Days	Total Miles
	Miles/hour	Miles/Trip				
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)		40	24		56	53,760
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	55			48	2,375	6,270

Criteria and VOC Emissions for Commuters

Vehicle Class	Model Year	Annual Miles	Criteria Pollutant Emissions (tons/year)					
			PM ₁₀	PM _{2.5}	CO	NO _x	SO _x	VOCs
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	2005	53,760	0.015	0.012	0.166	0.324	0.001	0.028
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	2005	6,270	0.002	0.001	0.023	0.043	0.000	0.004
Total			0.017	0.013	0.189	0.367	0.001	0.032

Particulate emissions include exhaust, brake wear, tire wear. Assume paved road.

Greenhouse Gas Emissions for Commuters

Vehicle Class	Annual Miles	CO ₂ (lb/year)	CH ₄ (lb/year)	N ₂ O (lb/year)	CH ₄ GWP Multiplier	N ₂ O GWP Multiplier	CO ₂ Equivalent (lb/year)	CO ₂ Equivalent (metric tonnes/year)
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	53,760	183,004.44	0.60	0.57	25	298	183,189.08	83.09
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	6,270	22,326.51	0.07	0.07	25	298	22,348.04	10.14
Total		205,330.95	0.67	0.64	---	---	205,537.13	93.23

GWP = Global Warming Potential; 100-year GWP values obtained from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>)

Emission Calculations Method - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Calculation Method: Equation 4-1, AFCEE 2009, Mobile Emissions Guide

$$EP = VMTVehCat * EFPoVehCat * 0.002205$$

Where,

EP = Emissions of each individual pollutant (lb/yr)

VMTVehCat = Annual vehicle miles traveled by each vehicle category (LDGV, LDGT1, LDDV, etc.) (mi/yr)

EFPoVehCat = Emission factor of each pollutant for each vehicle category (g/mi)

0.002205 = Factor for converting grams to pounds (g/lb).

DATA - Fuel Loading Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Given:

Total Exercise Days (8 weeks)	56
Initial Fuel Fill Days	2.333333333
Remaining Fuel Fill Days	0
Total # of Fuel Trucks	6
Total Gallons per Fuel Truck	10,000
Trips per day per Fuel Truck	3
1 bbl conversion to gallons	42
Total Fuel (gal) during Initial Fill	420,000
Total Fuel (gal) during Remaining Exercise	0
Total Fuel (gal) during Exercise (8 Weeks)	420,000

Proposed Action Fuel Loading Operations

Location	Description	Fuel Type	Fuel Transferred (gal)	Category
Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	Loading
Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	Loading
Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	Loading

Emission Factors - Fuel Loading Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

JP-8 emission factors (lb/Mgal)	Dispensing	Loading
	Splash	Bottom fill
Molecular Weight =	130	0.020
True Vapor Pressure (psia) =	0.011	
Dispensing Displacement losses =	0.0487	
Spillage =	0.7	
Total =	0.749	

AP-42 Table 7.1-2 dated 11/06
 AP-42 Table 7.1-2 dated 11/06 @ 70F (annual avg.)
 AP-42 Section 5.2 dated 6/08 Equation (1)
 AP-42 Table 5.2-7 dated 6/08

Emission Calculations - Fuel Loading Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Location	Description	Fuel Type	Fuel Transferred	Displaced Vapor	Spillage	Total VOC	Total VOC
			(gal)	(lb)	(lb)	(lb)	(tons)
Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	8.5	0	8.5	0.004
Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Total			840,000	17	0	16.94	0.01

Emission Calculations Method - Fuel Loading Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Displacement emissions for Diesel and JP-8 were estimated using Equation (1) from AP-42 Section 5.2, Transportation and Marketing of Petroleum Liquids, dated 6/08

$$L_L = 12.46 (SPM)/T$$

Where

L_L = Loading loss in lb/10³ gal

S = Saturation Factor 1.45 for splash loading, 0.6 for bottom loading

M = molecular weight,

T = temperature of bulk liquid (assume average annual ambient temperature)

DATA - Fuel Storage Tank Emissions for Modified Alternative 2a - Implementation Phase (Tinian North)

Fuel storage tank emissions were estimated using the U.S. EPA TANKS storage tank emissions calculation software (Version 4.0.9d). The emissions calculations algorithms in the TANKS program are based on Chapter 7 of EPA's AP-42. Honolulu, Hawaii was used as a surrogate location for the tanks as meteorological data does not exist in TANKS for CNMI. Jet Kerosene fuel was used as the surrogate for JP-8 in the TANKS model as it is the closest in characteristics to JP-8.

Emission Calculations Summary from TANKS*

Tank Type	Throughput (gal.)	Working Loss (lbs)	Breathing Loss (lbs)	VOC Total (lbs)	VOC Total (tons)
Tank 1 (Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 2 (Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 3 (Airport) - 60,000 bbl, cut and cover or AST	114,545	5.25	714.88	720.13	0.36
Tank 4 (Airport) - 60,000 bbl, cut and cover or AST	114,545	5.25	714.88	720.13	0.36
Tank 5 (Airport) - 100,000 bbl, cut and cover or AST	190,909	8.75	1172.01	1180.76	0.59
Total		38.51	3,772.55	3,811.06	1.91

*See the following references for TANKS printouts. (SM12 - TANKS) & (SM13 - TANKS)

Summary	Summarizes total emissions by calendar year for Modified Alternative 2B - Construction Phase (Tinian South).
Combustion and Evaporative	Estimates emissions from non-road equipment exhaust and evaporative volatile organic compound emissions.
Fugitive	Estimates particulate emissions from construction activities including earthmoving, vehicle traffic, and windblown dust.
Grading	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
Construction Commuter	Estimates emissions for construction workers commuting to the site.
Haul Truck On-Road	Estimates emissions from hauling construction materials to the project site.

Summary of Air Quality Emissions from Divert EIS - Modified Alternative 2B - Construction Phase (Tinian South)

	NO_x (ton)	VOC (ton)	CO (ton)	SO₂ (ton)	PM₁₀ (ton)	PM_{2.5} (ton)	CO₂ (ton)
Construction Combustion/Evaporative	13.236	1.755	5.702	0.827	0.912	0.885	1,535.230
Construction Fugitive Dust	-	-	-	-	95.708	8.371	-
Construction Commuter	0.650	0.803	9.323	0.0106	0.026	0.012	583.069
Haul Truck On-Road	9.929	0.924	5.307	0.032	0.319	0.303	2,574.326
TOTAL	23.82	3.48	20.33	0.87	96.97	9.57	4,692.62

Annual Summary of Air Quality Emissions from Divert EIS - Modified Alternative 2B - Construction Phase (Tinian South)*

	Point and Area Sources Combined						
	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO₂ (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)	CO₂ (metric tons)
CY 01	7.94	1.16	6.78	0.29	32.32	3.19	1,419.03
CY 02	7.94	1.16	6.78	0.29	32.32	3.19	1,419.03
CY 03	7.94	1.16	6.78	0.29	32.32	3.19	1,419.03

* Construction duration is estimated to be 36 months and the emissions are assumed to be distributed evenly over the construction period.

Combustion Emissions - Modified Alternative 2B - Construction Phase (Tinian South)

Combustion Emissions of VOC, NO_x, SO₂, CO, PM_{2.5}, PM₁₀, and CO₂ due to Construction

Assumptions

When multiple options exist under the general construction activities the most conservative value will be used to quantify air emissions.

General Construction Activities

Area Disturbed (ft²)

Construct New Access Roads	177,294 ft ²
Construct Maintenance Facility	7,972 ft ²
Construct Jet Fuel System and Fire Pump System (Operational, Bulk and at the Port of Tinian)	908,933 ft ²
Construct Hazardous Cargo Pad	230,165 ft ²
Construct Parking Apron	832,128 ft ²

Total General Construction Area:	916,905 ft ²
	21.0 acres
Total Demolition Area:	0 ft ²
	0.0 acres
Total Pavement Area:	1,239,587 ft ²
	28.5 acres
Total Disturbed Area:	2,156,492 ft ²
	49.5 acres
Construction Duration:	36 months
1 Yr Project Construction Activity:	240 days/yr

Assume 12 months, 4 weeks per month, 5 days per week.

Emission Factors Used for Construction Equipment

References: Guide to Air Quality Assessment, Sacramento Metropolitan Air Quality Management District (SMAQMD), 2004; and U.S. EPA NONROAD Emissions Model, Version 2005.0.0

Emission factors are taken from the NONROAD model and were provided to e³M by Larry Landman of the Air Quality and Modeling Center (Landman.Larry@epamail.epa.gov) on 12/14/07. Factors provided are for the weighted average US fleet for CY2007.

Assumptions regarding the type and number of equipment are from SMAQMD Table 3-1 unless otherwise noted.

Grading

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Bulldozer	1	13.60	0.96	5.50	1.02	0.89	0.87	1456.90
Motor Grader	1	9.69	0.73	3.20	0.80	0.66	0.64	1141.65
Water Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	3	41.64	2.58	15.71	0.83	2.55	2.47	4941.53

Paving

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Paver	1	3.83	0.37	2.06	0.28	0.35	0.34	401.93
Roller	1	4.82	0.44	2.51	0.37	0.43	0.42	536.07
Truck	2	36.71	1.79	14.01	3.27	1.99	1.93	4685.95
Total per 10 acres of activity	4	45.37	2.61	18.58	0.91	2.78	2.69	5623.96

Demolition

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Loader	1	13.45	0.99	5.58	0.95	0.93	0.90	1360.10
Haul Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	2	31.81	1.89	12.58	0.64	1.92	1.87	3703.07

Building Construction

Equipment ^d	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Stationary								
Generator Set	1	2.38	0.32	1.18	0.15	0.23	0.22	213.06
Industrial Saw	1	2.62	0.32	1.97	0.20	0.32	0.31	291.92
Welder	1	1.12	0.38	1.50	0.08	0.23	0.22	112.39
Mobile (non-road)								
Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Forklift	1	5.34	0.56	3.33	0.40	0.55	0.54	572.24
Crane	1	9.57	0.66	2.39	0.65	0.50	0.49	931.93
Total per 10 acres of activity	6	39.40	3.13	17.38	3.12	2.83	2.74	4464.51

Architectural Coatings

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Air Compressor	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77
Total per 10 acres of activity	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77

- The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity, (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.
- The SMAQMD 2004 reference lists emission factors for reactive organic gas (ROG). For the purposes of this worksheet ROG = VOC. The NONROAD model contains emissions factors for total HC and for VOC. The factors used here are the VOC factors.
- The NONROAD emission factors assume that the average fuel burned in nonroad trucks is 1100 ppm sulfur. Trucks that would be used for the Proposed Actions will all be fueled by highway grade diesel fuel which cannot exceed 500 ppm sulfur. These estimates therefore over-estimate SO₂ emissions by more than a factor of two.
- Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

Combustion Emissions - Modified Alternative 2B - Construction Phase (Tinian South) - Continued

Project-Specific Combustion and Evaporative Emission Factor Summary

Source	Equipment Multiplier*	Project-Specific Emission Factors (lb/day)						
		NO _x	VOC	CO	SO ₂ **	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	5	208,206	12,885	78,549	4,164	12,728	12,346	247,076.32
Paving Equipment	3	136,102	7,817	55,735	2,722	8,328	8,078	168,718.71
Demolition Equipment	1	31,808	1,886	12,584	0,636	1,923	1,865	37,030.74
Building Construction	2	78,793	6,260	34,765	6,233	5,658	5,488	89,290.23
Air Compressor for Architectural Coating	2	7,148	0,746	3,131	0,502	0,619	0,600	7,195.47
Architectural Coating**			78,040					

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project.

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994
 Example: SMAQMD Emission Factor for Grading Equipment NO_x = (Total Grading NO_x per 10 acre)/(Equipment Multiplier)

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days	
Grading:	2,156,492	49.51	6	(from "Grading" worksheet)
Paving:	1,239,587	28.46	45	
Demolition:	0	0.00	0	
Building Construction:	916,905	21.05	240	
Architectural Coating:	916,905	21.05	20	(per SMAQMD "Air Quality of Thresholds of Significance", 1994)

NOTE: The 'Total Days' estimate for paving is calculated by dividing the total number of acres by 0.21 acres/day, which is a factor derived from the 2005 MEANS Heavy Construction Cost Data, 19th Edition, for 'Asphaltic Concrete Pavement, Lots and Driveways - 6" stone base', which provides an estimate of square feet paved per day. There is also an estimate for 'Plain Cement Concrete Pavement', however the estimate for asphalt is used because it is more conservative. The 'Total Days' estimate for demolition is calculated by dividing the total number of acres by 0.02 acres/day, which is a factor also derived from the 2005 MEANS reference. This is calculated by averaging the demolition estimates from 'Building Demolition - Small Buildings, Concrete', assuming a height of 30 feet for a two-story building; from 'Building Footings and Foundations Demolition - 6" Thick, Plain Concrete'; and from 'Demolish, Remove Pavement and Curb - Concrete to 6" thick, rod reinforced'. Paving is double-weighted since projects typically involve more paving demolition. The 'Total Days' estimate for building construction is assumed to be 230 days, unless project-specific data is known.

Project Combustion and Evaporative Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	1,249.24	77.31	471.30	24.98	76.37	74.07	148,246
Paving	6,169.95	354.38	2,526.67	123.40	377.55	366.22	764,858
Demolition	-	-	-	-	-	-	0
Building Construction	18,910.23	1,502.31	8,343.51	1,495.85	1,357.94	1,317.20	2,142,966
Architectural Coatings	142.96	1,575.74	62.62	10.05	12.37	12.00	14,391
Total Emissions (lbs):	26,472.38	3,509.73	11,404.09	1,654.28	1,824.23	1,769.50	3,070,460

Results: Project Annual Combustion and Evaporative Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Total Project Combustion and Evaporative Emissions (lbs)	26,472.38	3,509.73	11,404.09	1,654.28	1,824.23	1,769.50	3,070,460
Total Project Combustion and Evaporative Emissions (tons)	13.24	1.75	5.70	0.83	0.91	0.88	1,535.23

Construction Fugitive Dust Emissions - Proposed Action [Modified Alternative 2B - Construction Phase (Tinian South)]

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
PM_{2.5} Emissions			
PM _{2.5} Multiplier	0.10	(10% of PM ₁₀ emissions assumed to be PM _{2.5})	EPA 2001; EPA 2006
Control Efficiency	0.50	(assume 50% control efficiency for PM ₁₀ and PM _{2.5} emissions)	EPA 2001; EPA 2006

Project Assumptions

New Roadway Construction (0.42 ton PM₁₀/acre-month)	
Duration of Construction Project	12 months
Area	28.5 acres
General Construction Activities (0.19 ton PM₁₀/acre-month)	
Duration of Construction Project	12 months
Area	21.0 acres

	Project Emissions (tons/year)			
	PM₁₀ uncontrolled	PM₁₀ controlled	PM_{2.5} uncontrolled	PM_{2.5} controlled
New Roadway Construction	143.42	71.71	14.34	7.17
General Construction Activities	47.99	24.00	2.40	1.20
Total	191.42	95.71	16.74	8.37

General Construction Activities Emission Factor

0.19 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM₁₀/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM₁₀/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions From Construction Operations, calculated the 0.19 ton PM₁₀/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM₁₀/acre-month) and 75% of the average emission factor (0.11 ton PM₁₀/acre-month). The 0.19 ton PM₁₀/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM₁₀/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particulate (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District as well as the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM₁₀/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM₁₀/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM_{2.5} Multiplier

0.10

PM_{2.5} emissions are estimated by applying a particle size multiplier of 0.10 to PM₁₀ emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM₁₀ and PM_{2.5}

0.50

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas (EPA 2006). Wetting controls will be applied during project construction.

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Grading Schedule - Proposed Action [Modified Alternative 2B - Construction Phase (Tinian South)]

Estimate of time required to grade a specified area.

Input Parameters

Construction area: 49.5 acres/yr (from Combustion Worksheet)
 Qty Equipment: 15.0 (calculated based on 3 pieces of equipment for every 10 acres)

Assumptions

Terrain is mostly flat.
 An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.
 200 hp bulldozers are used for site clearing.
 300 hp bulldozers are used for stripping, excavation, and backfill.
 Vibratory drum rollers are used for compacting.
 Stripping, Excavation, Backfill and Compaction require an average of two passes each.
 Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 19th Ed., R. S. Means, 2005.

Means Line No.	Operation	Description	Output	Units	Acres per equip-day	equip-days per acre	Acres/yr (project-specific)	Equip-days per year
2230 200 0550	Site Clearing	Dozer & rake, medium brush	8	acre/day	8	0.13	49.51	6.19
2230 500 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	49.51	24.20
2315 432 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	24.75	24.96
2315 120 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	24.75	10.24
2315 310 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	2,300	cu. yd/day	2.85	0.35	49.51	17.36
TOTAL								82.95

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 82.95
 Qty Equipment: 15.00
 Grading days/yr: 5.53

Construction/Staff Commuter Emissions - Modified Alternative 2B - Construction Phase (Tinian South)

Emissions from construction workers commuting to the job site are estimated in this spreadsheet.

Emission Estimation Method: Emission Estimation Method: Air Force Civil Engineer Center (AFCEE), Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Assumptions:

Passenger vehicle emission factors for scenario year 2015 are used.
 The average roundtrip commute for a construction/staff worker = 40 miles
 Number of construction days = 240 days
 Number of construction/Staff workers (daily) = 100 people

Note: None

Personal Operating Vehicle (POV) On-Road Emission Factors for Year 2016 (grams/mile)

NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
0.614	0.759	8.810	0.010	0.025	0.011	551.000

Source: Emission factors for all pollutants are from Table 5-28: On-Road Vehicle Emission Factors - 2016 POV, Gasoline Light Duty Trucks (LDGT) at low altitude, within AFCEE Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Construction Commuter Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	1,299.471	1,606.349	18,645.503	21.164	52.910	23.280	1,166,137.566
tons	0.650	0.803	9.323	0.011	0.026	0.012	583.069

Example Calculation: NO_x emissions (lbs) = 60 miles/day * NO_x emission factor (lb/mile) * number of construction days * number of workers

Construction/Haul Truck Emissions - Modified Alternative 2B - Construction Phase (Tinian South)

Emissions from hauling construction supplies, demolition debris, fill, and excavated material are estimated in this spreadsheet.

Emission Estimation Method: Air Force Center for Environmental Excellence (AFCEE) Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.

Concrete Mixing and Dump Truck Assumptions:

Dump trucks carry 11 cubic yards of material per trip.
 Concrete mixing trucks carry 10 cubic yards of material per trip.
 The average distance from the port to Commercial Concrete Supply Company is 1.7 miles; therefore, dump trucks will travel 3.4 miles round trip.
 The average distance from the Commercial Concrete Supply Company (CCSC) to the project site is 2.3 miles; therefore, concrete trucks will travel 4.6 miles round trip.

Fill Materials Assumptions:

Haul trucks carry 20 cubic yards of material per trip.
 The average distance from the project site to the materials source is 20 miles; therefore, building material haul trucks will travel 40 miles round trip.
 Estimated number of trips required by haul trucks = total amount of material/20 cubic yards per truck

Amount of demolition debris =	0 cubic yards	No Demolition in the Proposed Action
Amount of cement transported from port to CCSC =	2,530 cubic yards	
Amount of concrete transported from CCSC to project site =	40,930 cubic yards	
Amount of Excavation Materials for New Structures/Buildings =	407,513 cubic yards	Construction area multiplied by depth of disturbance which is assumed to be 12 feet.
Amount of Building/Structure Materials =	305,635 cubic yards	Construction area multiplied by 9 feet.

Number of dump trucks required (port to CCSC) =	230 heavy duty diesel haul truck trips, Cells rounded up
Number of concrete mixing trucks required (CCSC to project site) =	4093 heavy duty diesel haul truck trips, Cells rounded up
Number of trucks required (Building Materials) =	35,657 heavy duty diesel haul truck trips
Miles per trip (port to CCSC) =	3.4 miles
Miles per trip (CCSC to project site) =	4.6 miles
Miles per trip (Building Materials) =	40.0 miles

Low Altitude Heavy Duty Diesel Vehicle 8b (HDDV8b) Average Emission Factors (grams/mile)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
HDDV8b	6.23	0.58	3.33	0.02	0.20	0.19	1615

Notes:

Emission factors for all pollutants are from Appendix A - On-Road Vehicle Emission Factors within AFCEE Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.
 Emission factors from calendar year 2015 were used assuming the average vehicle model year is 2005.

HDDV8b Haul Truck Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	19,858.90	1,848.82	10,614.79	63.75	637.52	605.65	5,148,651.07
tons	9.93	0.92	5.31	0.03	0.32	0.30	2,574.33

Example Calculation: NO_x emissions (lbs) = 40 miles per trip * 35,657 trips * NO_x emission factor (g/mile) * lb/453.6 g

Summary	Summarizes total emissions by calendar year for Modified Alternative 2b - Implementation Phase (Tinian South).
Airfield Operations	Aircraft operations consist of taxi, take-off and landings (sorties or LTOs), touch-and-go operations (TGOs), and low flybys (LFB) by base aircraft.
Fuel Truck and Commuter Vehicle Emissions	Estimates emissions for workers and operational vehicles commuting to the site of the Proposed Action.
Fuel Transfer Emissions	Fuel loading operations under the Proposed Action involves the loading of fuel into tanker trucks and aircraft.
Internal Combustion Engine (ICE) Emissions	Estimates Emissions from Internal Combustion Engines (e.g Generators)
Fuel Storage Tanks	Estimates emissions from Above Ground Storage Tanks.

Criteria Pollutant and VOC Emissions Summary for Modified Alternative 2b - Implementation Phase (Tinian South) (tons/year)

Source Category	PM10	PM2.5	CO	NOx	SOx	VOCs
Airfield Operations	0.05	0.05	18.67	6.77	0.98	1.25
Fuel Truck and Commuter Vehicle Emissions	0.02	0.01	0.19	0.37	0.00	0.03
Fuel Transfer	N/A	N/A	N/A	N/A	N/A	0.01
Fuel Storage Tanks	N/A	N/A	N/A	N/A	N/A	1.91
Total Criteria and VOC Pollutant Emissions (tons/year)	0.07	0.07	18.86	7.14	0.98	3.19

Greenhouse Gas (GHG) Emissions Summary for Modified Alternative 2b - Implementation Phase (Tinian South) (metric tonnes/year)

Source Category	CO ₂ -equivalent (lb/year)	CO ₂ -equivalent (kg/year)	CO ₂ -equivalent (metric tonne/year)
Airfield Operations*	8,833,755	4,006,991	4,007
Fuel Truck and Commuter Vehicle Emissions	205,537	93,232	93
Fuel Transfer	0	0	0
Fuel Storage Tanks	0	0	0
Total GHG Emissions	9,039,293	4,100,223	4,100

DATA - Airfield Operations for Modified Alternative 2b - Implementation Phase (Tinian South)

Aircraft exercises under this alternative are based on assuming 2 to 4 KC-135R aircraft operating up to 8 weeks per year for a maximum of 720 KC-135R operations per year. Each operation is equivalent to one landing or one take-off (1 LTO cycle = 2 operations).

Landing and Takeoff (LTO) Cycles

Description	Quantity
# of KC-135R LTO's per year	360

Legend

Airfield Activity Data (Worst Case Scenario)

Aircraft Model	Aircraft Model Used to Match to Available Emission Factors	Engine Model	# Engines	APU Model	# APUs	Notes	LTO Cycles
KC-135R	KC-135-R	F108-CF-201	4	No data on APUs		See below	360

Note: F108-CF-201 is the military designation of the CFM56-2B-1 engine.

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 2b - Implementation Phase (Tinian South)

Aircraft Criteria Pollutant Emission Factors

Aircraft Model	Engine Model	# Engines	Reference Thrust Mode	LTO/GO Thrust Mode	Fuel Flow (lb/hr)	Emission Factors in lb Pollutant per 1000 lb Fuel Burned						
						PM10	PM2.5	CO	NO _x	SO ₂	VOCs	TIM
KC-135R	F108-CF-201	4	Idle	Idle	1016	0.06	0.06	30.70	4.00	1.06	2.10	47.7
KC-135R	F108-CF-201	4	Approach	Approach	2468	0.06	0.05	4.20	8.20	1.06	0.09	5.2
KC-135R	F108-CF-201	4	Climbout	Climbout	6500	0.05	0.05	0.90	16.00	1.06	0.06	1.6
KC-135R	F108-CF-201	4	Takeoff	Takeoff	7818	0.07	0.06	0.90	18.05	1.06	0.05	0.7

Emission factors from Air Force Civil Engineer Center (AFCEC) October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-8

APU Emission Factors

Aircraft Model	# APU	APU Model	APU Emission Factors in lb Pollutant per hour						APU (hr)
			PM10	PM2.5	CO	NO _x	SO ₂	VOCs	
KC-135R			No Data Available						

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 2b - Implementation Phase (Tinian South)

Default Time-In-Mode

Aircraft Type	Typical Duration by Mode (minutes)					Total
	Taxi/Idle	Takeoff	Climbout	Approach	Taxi/Idle-in	
KC-135R	32.8	0.7	1.6	5.2	14.9	55.2

Default Time-In-Mode rates are from AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-4

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 2b - Implementation Phase (Tinian South)

Greenhouse Gas Emission Factors

Units	CO ₂	CH ₄	N ₂ O
kg/gal fuel	9.80	---	---
g/gal fuel	---	0.27	0.31

Reference: Footnote 2, from Table 2-8 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources.

Calculations - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Criteria Pollutant and VOC Emissions per LTO by Aircraft Type

Calculated as the sum of the products of [(minutes) * (fuel flow/minute) * (lbs pollutant/lb fuel)] for each of the thrust modes.

Reported Aircraft Model	APU	Fuel (lb)	Emission in lb Pollutant per LTO					APU	
			PM10 (lb)	PM2.5 (lb)	CO (lb)	NOx (lb)	SOx (lb)		VOCs (lb)
KC-135R	0	5144.6	0.3	0.3	103.7	37.6	5.5	6.9	0

Total Criteria Pollutant and VOC Emissions for maximum LTO's by Aircraft Type

Reported Aircraft Model	APU	Total LTO's	Fuel (lb)	PM10 (tons)	PM2.5 (tons)	CO (tons)	NOx (tons)	SOx (tons)	VOCs (tons)	APU
			KC-135R	0	360	1,852,065.6	0.05	0.05	18.67	
Worst Case Scenario			1,852,065.60	0.05	0.05	18.67	6.77	0.98	1.25	0

Total gallons of fuel used for LTOs (277,671 gal.) is based on the 6.67 lb/gal density of JP-8 as provided in footnote 2. of Table 2-6 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources. Emissions from LTO's are for the time up to and down from 3,000 feet elevation which is the default mixing height.

Calculations - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Greenhouse Gas Emissions

Assume aircraft will use 7,500 pounds of fuel per LTO cycle, which is from the ground to 10,000 feet and from 10,000 feet back to a landing. This estimated fuel use was obtained from Hqs. Travis Miyashiro, HIANG, PACAF ASXP. Fuel use and associated emissions above 10,000 feet are accounted for in the MIRC EIS.

Quantity (gallons)	Fuel Type	CH ₄ (kg)	N ₂ O (kg)	CO ₂ (kg)	CO ₂ -equivalent (kg)	CO ₂ -equivalent (metric tonne)
404,798	JP-8	109	125	3,967,016	4,006,991	4,007

The CH₄ and N₂O Global Warming Potential multipliers are 25 and 298, respectively from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014.

DATA - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Given: Six 10,000 gal Fuel Trucks will take 2 days at 8 hrs/day and 3 hours on a third day to travel from Tinian Seaport to Tinian Airport (Site of Proposed Action) and to fill the airport tanks with the needed fuel; 420,000 gallons total. The six 10,000 gallon fuel trucks will make three round trips per day for the first two days and one round trip each on the third day.

Under the commercial lodging option six busses will transport a total of 256 personnel 4 roundtrips/day for a total of 24 roundtrips/day for 8 weeks.

Assumptions: A Gross Vehicle Weight (GVW) of 36,200 lbs will be used, based off of an 84 passenger Blue Bird bus.

Assume fuel truck GVW > 60,000 lbs since fuel load alone is 83,400 lbs.

Assume fuel trucks travel at 55 miles per hour

Assume 40 miles per roundtrip for busses.

Vehicle Weight Classes for Which Emission Factors are Published

Vehicle Category	Description	SCC
LDGV	Light-Duty Gasoline Vehicles (i.e., passenger cars) does not include SUVs, vans or pickups	A2201001000
LDGT1	Light-Duty Gasoline Trucks 1 (0-6,000 lbs GVW - includes pickup trucks, sport utility vehicles and vans)	A2201020000
LDGT3	Light-Duty Gasoline Trucks 3 (6,001-8,500 lbs. GVW - includes pickup trucks, sport utility vehicles and vans)	A2201040000
HDBGV2B	Class 2b Heavy-Duty Gasoline Vehicles (8501-10,000 lbs GVW)	A2201070000
HDBGV5	Class 5 Heavy-Duty Gasoline Vehicles (16,001-19,500 lbs GVW)	A2201070000
HDBGV8A	Class 8a Heavy-Duty Gasoline Vehicles (33,001-60,000 lbs GVW)	A2201070000
LDDV	Light-Duty Diesel Vehicles (Passenger Cars)	
LDDT34	Light-Duty Diesel Trucks 3 and 4 (6,001-8,500 lbs GVW)	A2230002000
HDDV2B	Class 2b Heavy-Duty Diesel Vehicles (8501-10,000 lbs GVW - includes pickup trucks)	A2230070000
HDDV5	Class 5 Heavy-Duty Diesel Vehicles (16,001-19,500 lbs GVW)	A2230070000
HDDV8A	Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	A2230070000
HDDV8B	Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	A2230070000
MC	Motorcycles	A2201080000

Emission Factors - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Emission Factors for Calendar Year 2015

Vehicle Class	Model Year	Emission Factors in grams per Mile ^a								
		PM ₁₀	PM _{2.5}	CO	NOx	SOx	NOC's	CO ₂	Fugitive PM ₁₀	Fugitive PM _{2.5}
HDDVSA*	2005	0.2	0.19	2.8	5.47	0.01	0.48	1544.1	0.05	0.01
HDDVSB**	2005	0.2	0.19	3.33	6.23	0.02	0.58	1615.2	0.05	0.01

* Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8a

**Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8b

a) Emission factors from Appendix A of Air Emissions Factor Guide to Air Force Mobile Sources, AFCEE, December 2009

Greenhouse Gas Emission Factors for Calendar Year 2015

Vehicle Class	CH ₄ (g/mile)	N ₂ O (g/mile)
HDDV	0.0051	0.0048

g/mile = grams per mile

CH₄ = Methane; N₂O = Nitrous Oxide

b) Emission Factors from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>).

Emission Calculations - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Miles for Commuter Emissions for 8 week training exercises

Vehicle Class	Speed		Total Trips/Day	Hours/Day	Total Days	Total Miles
	Miles/hour	Miles/Trip				
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)		40	24		56	53,760
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	55			48	2,375	6,270

Criteria and VOC Emissions for Commuters

Vehicle Class	Model Year	Annual Miles	Criteria Pollutant Emissions (tons/year)					
			PM ₁₀	PM _{2.5}	CO	NO _x	SO _x	VOCs
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	2005	53,760	0.015	0.012	0.166	0.324	0.001	0.028
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	2005	6,270	0.002	0.001	0.023	0.043	0.000	0.004
Total			0.017	0.013	0.189	0.367	0.001	0.032

Particulate emissions include exhaust, brake wear, tire wear. Assume paved road.

Greenhouse Gas Emissions for Commuters

Vehicle Class	Annual Miles	CO ₂ (lb/year)	CH ₄ (lb/year)	N ₂ O (lb/year)	CH ₄ GWP Multiplier	N ₂ O GWP Multiplier	CO ₂ Equivalent (lb/year)	CO ₂ Equivalent (metric tonnes/year)
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	53,760	183,004.44	0.60	0.57	25	298	183,189.08	83.09
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	6,270	22,326.51	0.07	0.07	25	298	22,348.04	10.14
Total		205,330.95	0.67	0.64	---	---	205,537.13	93.23

GWP = Global Warming Potential; 100-year GWP values obtained from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>)

Emission Calculations Method - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Calculation Method: Equation 4-1, AFCEE 2009, Mobile Emissions Guide

$$EP = VMTVehCat * EFPoVehCat * 0.002205$$

Where,

EP = Emissions of each individual pollutant (lb/yr)

VMTVehCat = Annual vehicle miles traveled by each vehicle category (LDGV, LDGT1, LDDV, etc.) (mi/yr)

EFPoVehCat = Emission factor of each pollutant for each vehicle category (g/mi)

0.002205 = Factor for converting grams to pounds (g/lb).

DATA - Fuel Loading Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Given:

Total Exercise Days (8 weeks)	56
Initial Fuel Fill Days	2.333333333
Remaining Fuel Fill Days	0
Total # of Fuel Trucks	6
Total Gallons per Fuel Truck	10,000
Trips per day per Fuel Truck	3
1 bbl conversion to gallons	42
Total Fuel (gal) during Initial Fill	420,000
Total Fuel (gal) during Remaining Exercise	0
Total Fuel (gal) during Exercise (8 Weeks)	420,000

Proposed Action Fuel Loading Operations

Location	Description	Fuel Type	Fuel Transferred (gal)	Category
Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	Loading
Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	Loading
Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	Loading

Emission Factors - Fuel Loading Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

JP-8 emission factors (lb/Mgal)	Dispensing	Loading
	Splash	Bottom fill
Molecular Weight =	130	0.020
True Vapor Pressure (psia) =	0.011	
Dispensing Displacement losses =	0.0487	
Spillage =	0.7	
Total =	0.749	

AP-42 Table 7.1-2 dated 11/06
 AP-42 Table 7.1-2 dated 11/06 @ 70F (annual avg.)
 AP-42 Section 5.2 dated 6/08 Equation (1)
 AP-42 Table 5.2-7 dated 6/08

Emission Calculations - Fuel Loading Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Location	Description	Fuel Type	Fuel Transferred	Displaced Vapor	Spillage	Total VOC	Total VOC
			(gal)	(lb)	(lb)	(lb)	(tons)
Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	8.5	0	8.5	0.004
Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Total			840,000	17	0	16.94	0.01

Emission Calculations Method - Fuel Loading Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Displacement emissions for Diesel and JP-8 were estimated using Equation (1) from AP-42 Section 5.2, Transportation and Marketing of Petroleum Liquids, dated 6/08

$$L_L = 12.46 (SPM)/T$$

Where

L_L = Loading loss in lb/10³ gal

S = Saturation Factor 1.45 for splash loading, 0.6 for bottom loading

M = molecular weight,

T = temperature of bulk liquid (assume average annual ambient temperature)

DATA - Fuel Storage Tank Emissions for Modified Alternative 2b - Implementation Phase (Tinian South)

Fuel storage tank emissions were estimated using the U.S. EPA TANKS storage tank emissions calculation software (Version 4.0.9d). The emissions calculations algorithms in the TANKS program are based on Chapter 7 of EPA's AP-42. Honolulu, Hawaii was used as a surrogate location for the tanks as meteorological data does not exist in TANKS for CNMI. Jet Kerosene fuel was used as the surrogate for JP-8 in the TANKS model as it is the closest in characteristics to JP-8.

Emission Calculations Summary from TANKS*

Tank Type	Throughput (gal.)	Working Loss (lbs)	Breathing Loss (lbs)	VOC Total (lbs)	VOC Total (tons)
Tank 1 (Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 2 (Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 3 (Airport) - 60,000 bbl, cut and cover or AST	114,545	5.25	714.88	720.13	0.36
Tank 4 (Airport) - 60,000 bbl, cut and cover or AST	114,545	5.25	714.88	720.13	0.36
Tank 5 (Airport) - 100,000 bbl, cut and cover or AST	190,909	8.75	1172.01	1180.76	0.59
Total		38.51	3,772.55	3,811.06	1.91

*See the following references for TANKS printouts. (SM12 - TANKS) & (SM13 - TANKS)

Summary	Summarizes total emissions by calendar year for Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North).
Combustion and Evaporative	Estimates emissions from non-road equipment exhaust and evaporative volatile organic compound emissions.
Fugitive	Estimates particulate emissions from construction activities including earthmoving, vehicle traffic, and windblown dust.
Grading	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
Construction Commuter	Estimates emissions for construction workers commuting to the site.
Haul Truck On-Road	Estimates emissions from hauling construction materials to the project site.

Summary of Air Quality Emissions from Divert EIS - Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North)

	NO_x (ton)	VOC (ton)	CO (ton)	SO₂ (ton)	PM₁₀ (ton)	PM_{2.5} (ton)	CO₂ (ton)
Construction Combustion/Evaporative	18.431	2.016	7.813	0.931	1.230	1.193	2,176.608
Construction Fugitive Dust	-	-	-	-	202.801	19.198	-
Construction Commuter	1.137	1.406	16.315	0.0185	0.046	0.020	1,020.370
Haul Truck On-Road	9.025	0.840	4.824	0.029	0.290	0.275	2,339.687
TOTAL	28.59	4.26	28.95	0.98	204.37	20.69	5,536.67

Annual Summary of Air Quality Emissions from Divert EIS - Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North)*

	Point and Area Sources Combined						
	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO₂ (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)	CO₂ (metric tons)
CY 01	9.53	1.42	9.65	0.33	68.12	6.90	1,674.26
CY 02	9.53	1.42	9.65	0.33	68.12	6.90	1,674.26
CY 03	9.53	1.42	9.65	0.33	68.12	6.90	1,674.26

* Construction duration is estimated to be 36 months and the emissions are assumed to be distributed evenly over the construction period.

Combustion Emissions - Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North)

Combustion Emissions of VOC, NO_x, SO₂, CO, PM_{2.5}, PM₁₀, and CO₂ due to Construction

Assumptions

When multiple options exist under the general construction activities the most conservative value will be used to quantify air emission.

General Construction Activities	Area Disturbed (ft ²)
Construct Taxiway (Tinian N.)	1,385,300 ft ²
Construct Road Re-Route (Tinian N.)	40,585 ft ²
Construct New Access Roads (Tinian N.)	128,924 ft ²
Construct Maintenance Facility (Saipan)	6,100 ft ²
Construct Maintenance Facility (Tinian N.)	7,570 ft ²
Construct Jet Fuel System and Fire Pump System (Operational, Bulk and at the Port of Tinian) (Saipan/Tinian N.)	813,496 ft ²
Construct Hazardous Cargo Pad (Saipan)	250,470 ft ²
Construct Hazardous Cargo Pad (Tinian N.)	299,754 ft ²
Construct Parking Apron (Tinian N.)	1,026,340 ft ²

Total General Construction Area:	827,166 ft ²	
	19.0 acres	
Total Demolition Area:	0 ft ²	
	0.0 acres	
Total Pavement Area:	3,131,373 ft ²	
	71.9 acres	
Total Disturbed Area:	3,958,539 ft ²	
	90.9 acres	
Construction Duration:	36 months	
1 Yr Project Construction Activity:	240 days/yr	Assume 12 months, 4 weeks per month, 5 days per week.

Emission Factors Used for Construction Equipment

References: Guide to Air Quality Assessment, Sacramento Metropolitan Air Quality Management District (SMAQMD), 2004; and U.S. EPA NONROAD Emissions Model, Version 2005.0.0
 Emission factors are taken from the NONROAD model and were provided to e*M by Larry Landman of the Air Quality and Modeling Center (Landman.Larry@epamail.epa.gov) on 12/14/07. Factors provided are for the weighted average US fleet for CY2007.
 Assumptions regarding the type and number of equipment are from SMAQMD Table 3-1 unless otherwise noted.

Grading

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Bulldozer	1	13.60	0.96	5.50	1.02	0.89	0.87	1456.90
Motor Grader	1	9.69	0.73	3.20	0.80	0.66	0.64	1141.65
Water Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	3	41.64	2.58	15.71	0.83	2.55	2.47	4941.53

Paving

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Paver	1	3.83	0.37	2.06	0.28	0.35	0.34	401.93
Roller	1	4.82	0.44	2.51	0.37	0.43	0.42	536.07
Truck	2	36.71	1.79	14.01	3.27	1.99	1.93	4685.95
Total per 10 acres of activity	4	45.37	2.61	18.58	0.91	2.78	2.69	5623.96

Demolition

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Loader	1	13.45	0.99	5.58	0.95	0.93	0.90	1360.10
Haul Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	2	31.81	1.89	12.58	0.64	1.92	1.87	3703.07

Building Construction

Equipment ^d	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Stationary								
Generator Set	1	2.38	0.32	1.18	0.15	0.23	0.22	213.06
Industrial Saw	1	2.62	0.32	1.97	0.20	0.32	0.31	291.92
Welder	1	1.12	0.38	1.50	0.08	0.23	0.22	112.39
Mobile (non-road)								
Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Forklift	1	5.34	0.56	3.33	0.40	0.55	0.54	572.24
Crane	1	9.57	0.66	2.39	0.65	0.50	0.49	931.93
Total per 10 acres of activity	6	39.40	3.13	17.38	3.12	2.83	2.74	4464.51

Architectural Coatings

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Air Compressor	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77
Total per 10 acres of activity	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77

- The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity, (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.
- The SMAQMD 2004 reference lists emission factors for reactive organic gas (ROG). For the purposes of this worksheet ROG = VOC. The NONROAD model contains emissions factors for total HC and for VOC. The factors used here are the VOC factors.
- The NONROAD emission factors assume that the average fuel burned in nonroad trucks is 1100 ppm sulfur. Trucks that would be used for the Proposed Actions will all be fueled by highway grade diesel fuel which cannot exceed 500 ppm sulfur. These estimates therefore over-estimate SO₂ emissions by more than a factor of two.
- Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

Combustion Emissions - Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North) - Continued

Project-Specific Combustion and Evaporative Emission Factor Summary

Source	Equipment Multiplier*	Project-Specific Emission Factors (lb/day)						
		NO _x	VOC	CO	SO ₂ **	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	9	374.771	23.193	141.389	7.495	22.910	22.222	44473.737
Paving Equipment	7	317.571	18.240	130.049	6.351	19.433	18.850	39367.698
Demolition Equipment	1	31.808	1.886	12.584	0.636	1.923	1.865	3703.074
Building Construction	2	78.793	6.260	34.765	6.233	5.658	5.488	8929.023
Air Compressor for Architectural Coating	2	7.148	0.746	3.131	0.502	0.619	0.600	719.547
Architectural Coating**			74.123					

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project.

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994
 Example: SMAQMD Emission Factor for Grading Equipment NO_x = (Total Grading NO_x per 10 acre)/(Equipment Multiplier)

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days	
Grading:	3,958,539	90.88	6	(from "Grading" worksheet)
Paving:	3,131,373	71.89	49	
Demolition:	0	0.00	0	
Building Construction:	827,166	18.99	240	
Architectural Coating:	827,166	18.99	20	(per SMAQMD "Air Quality of Thresholds of Significance", 1994)

NOTE: The 'Total Days' estimate for paving is calculated by dividing the total number of acres by 0.21 acres/day, which is a factor derived from the 2005 MEANS Heavy Construction Cost Data, 19th Edition, for 'Asphaltic Concrete Pavement, Lots and Driveways - 6" stone base', which provides an estimate of square feet paved per day. There is also an estimate for 'Plain Cement Concrete Pavement', however the estimate for asphalt is used because it is more conservative. The 'Total Days' estimate for demolition is calculated by dividing the total number of acres by 0.02 acres/day, which is a factor also derived from the 2005 MEANS reference. This is calculated by averaging the demolition estimates from 'Building Demolition - Small Buildings, Concrete', assuming a height of 30 feet for a two-story building; from 'Building Footings and Foundations Demolition - 6" Thick, Plain Concrete'; and from 'Demolish, Remove Pavement and Curb - Concrete to 6" thick, rod reinforced'. Paving is double-weighted since projects typically involve more paving demolition. The 'Total Days' estimate for building construction is assumed to be 230 days, unless project-specific data is known.

Project Combustion and Evaporative Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	2,248.63	139.16	848.33	44.97	137.46	133.33	266.842
Paving	15,560.98	893.76	6,372.40	311.22	952.20	923.63	1,929.017
Demolition	-	-	-	-	-	-	0
Building Construction	18,910.23	1,502.31	8,343.51	1,495.85	1,357.94	1,317.20	2,142.966
Architectural Coatings	142.96	1,497.39	62.62	10.05	12.37	12.00	14,391
Total Emissions (lbs):	36,862.80	4,032.62	15,626.86	1,862.09	2,459.97	2,386.17	4,353,216

Results: Project Annual Combustion and Evaporative Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Total Project Combustion and Evaporative Emissions (lbs)	36,862.80	4,032.62	15,626.86	1,862.09	2,459.97	2,386.17	4,353,216
Total Project Combustion and Evaporative Emissions (tons)	18.43	2.02	7.81	0.93	1.23	1.19	2,176.61

Construction Fugitive Dust Emissions - Proposed Action [Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North)]

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
PM_{2.5} Emissions			
PM _{2.5} Multiplier	0.10	(10% of PM ₁₀ emissions assumed to be PM _{2.5})	EPA 2001; EPA 2006
Control Efficiency	0.50	(assume 50% control efficiency for PM ₁₀ and PM _{2.5} emissions)	EPA 2001; EPA 2006

Project Assumptions

New Roadway Construction (0.42 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	71.9 acres

General Construction Activities (0.19 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	19.0 acres

	Project Emissions (tons/year)			
	PM₁₀ uncontrolled	PM₁₀ controlled	PM_{2.5} uncontrolled	PM_{2.5} controlled
New Roadway Construction	362.31	181.15	36.23	18.12
General Construction Activities	43.30	21.65	2.16	1.08
Total	405.60	202.80	38.40	19.20

General Construction Activities Emission Factor

0.19 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM₁₀/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM₁₀/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions From Construction Operations, calculated the 0.19 ton PM₁₀/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM₁₀/acre-month) and 75% of the average emission factor (0.11 ton PM₁₀/acre-month). The 0.19 ton PM₁₀/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM₁₀/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particulate (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District as well as the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM₁₀/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM₁₀/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM_{2.5} Multiplier

0.10

PM_{2.5} emissions are estimated by applying a particle size multiplier of 0.10 to PM₁₀ emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM₁₀ and PM_{2.5}

0.50

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas (EPA 2006). Wetting controls will be applied during project construction.

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Grading Schedule - Proposed Action [Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North)]

Estimate of time required to grade a specified area.

Input Parameters

Construction area: 90.9 acres/yr (from Combustion Worksheet)
 Qty Equipment: 28.0 (calculated based on 3 pieces of equipment for every 10 acres)

Assumptions

Terrain is mostly flat.
 An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.
 200 hp bulldozers are used for site clearing.
 300 hp bulldozers are used for stripping, excavation, and backfill.
 Vibratory drum rollers are used for compacting.
 Stripping, Excavation, Backfill and Compaction require an average of two passes each.
 Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 19th Ed., R. S. Means, 2005.

Means Line No.	Operation	Description	Output	Units	Acres per equip-day	equip-days per acre	Acres/yr (project-specific)	Equip-days per year
2230 200 0550	Site Clearing	Dozer & rake, medium brush	8	acre/day	8	0.13	90.88	11.36
2230 500 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	90.88	44.43
2315 432 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	45.44	45.82
2315 120 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	45.44	18.80
2315 310 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	2,300	cu. yd/day	2.85	0.35	90.88	31.87
TOTAL								152.27

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 152.27
 Qty Equipment: 28.00
 Grading days/yr: 5.44

Construction/Staff Commuter Emissions - Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North)

Emissions from construction workers commuting to the job site are estimated in this spreadsheet.

Emission Estimation Method: Air Force Civil Engineer Center (AFCEE), Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Assumptions:

Passenger vehicle emission factors for scenario year 2015 are used.
 The average roundtrip commute for a construction/staff worker = 40 miles
 Number of construction days = 240 days
 Number of construction/Staff workers (daily) = 175 people

Note: None

Personal Operating Vehicle (POV) On-Road Emission Factors for Year 2016 (grams/mile)

NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
0.614	0.759	8.810	0.010	0.025	0.011	551.000

Source: Emission factors for all pollutants are from Table 5-28: On-Road Vehicle Emission Factors - 2016 POV, Gasoline Light Duty Trucks (LDGT) at low altitude, within AFCEE Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Construction Commuter Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	2,274.074	2,811.111	32,629.630	37.037	92.593	40.741	2,040,740.741
tons	1.137	1.406	16.315	0.019	0.046	0.020	1,020.370

Example Calculation: NO_x emissions (lbs) = 60 miles/day * NO_x emission factor (lb/mile) * number of construction days * number of workers

Construction/Haul Truck Emissions - Modified Alternative 3A - Construction Phase (Hybrid Saipan/Tinian North)

Emissions from hauling construction supplies, demolition debris, fill, and excavated material are estimated in this spreadsheet.

Emission Estimation Method: Air Force Center for Environmental Excellence (AFCEE) Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.

Concrete Mixing and Dump Truck Assumptions:

Dump trucks carry 11 cubic yards of material per trip.

Concrete mixing trucks carry 10 cubic yards of material per trip.

Saipan

The average distance from the port to Commercial Concrete Supply Company is 7 miles; therefore, dump trucks will travel 14 miles round trip.

The average distance from the Commercial Concrete Supply Company (CCSC) to the project site is 2 miles; therefore, concrete trucks will travel 4 miles round trip.

Tinian N.

The average distance from the port to Commercial Concrete Supply Company is 1.7 miles; therefore, dump trucks will travel 3.4 miles round trip.

The average distance from the Commercial Concrete Supply Company (CCSC) to the project site is 2.3 miles; therefore, concrete trucks will travel 4.6 miles round trip.

Building Materials Assumptions:

Haul trucks carry 20 cubic yards of material per trip.

The average distance from the project site to the materials source is 20 miles; therefore, building material haul trucks will travel 40 miles round trip.

Estimated number of trips required by haul trucks = total amount of material/20 cubic yards per truck

Amount of demolition debris =	0 cubic yards	No Demolition in the Proposed Action
Amount of cement transported from port to CCSC (Saipan)=	396 cubic yards	
Amount of cement transported from port to CCSC (Tinian N.)=	3,190 cubic yards	
Amount of concrete transported from CCSC to project site (Saipan) =	5,610 cubic yards	
Amount of concrete transported from CCSC to project site (Tinian N.) =	51,580 cubic yards	
Amount of Excavation Materials for New Structures/Buildings (Saipan) =	61,372 cubic yards	Construction area multiplied by depth of disturbance which is assumed to be 12 feet.
Amount of Excavation Materials for New Structures/Buildings (Tinian N.) =	306,257 cubic yards	Construction area multiplied by depth of disturbance which is assumed to be 12 feet.
Amount of Building/Structure Materials (Saipan) =	46,029 cubic yards	Construction area multiplied by 9 feet.
Amount of Building/Structure Materials (Tinian N.) =	229,693 cubic yards	Construction area multiplied by 9 feet.
Number of dump trucks required (port to CCSC) (Saipan) =	36 heavy duty diesel haul truck trips, Cells rounded up	
Number of dump trucks required (port to CCSC) (Tinian N.) =	290 heavy duty diesel haul truck trips, Cells rounded up	
Number of concrete mixing trucks required (CCSC to project site) (Saipan) =	561 heavy duty diesel haul truck trips, Cells rounded up	
Number of concrete mixing trucks required (CCSC to project site) (Tinian N.) =	5158 heavy duty diesel haul truck trips, Cells rounded up	
Number of trucks required (Building Materials) (Saipan) =	5,370 heavy duty diesel haul truck trips	
Number of trucks required (Building Materials) (Tinian N.) =	26,798 heavy duty diesel haul truck trips	
Miles per roundtrip (port to CCSC) (Saipan) =	14 miles	
Miles per roundtrip (port to CCSC) (Tinian N.) =	3.4 miles	
Miles per roundtrip (CCSC to project site) (Saipan) =	4 miles	
Miles per roundtrip (CCSC to project site) (Tinian N.) =	4.6 miles	
Miles per roundtrip (Building Materials) (Saipan) =	40.0 miles	
Miles per roundtrip (Building Materials) (Tinian N.) =	40.0 miles	

Low Altitude Heavy Duty Diesel Vehicle 8b (HDDV8b) Average Emission Factors (grams/mile)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
HDDV8b	6.23	0.58	3.33	0.02	0.20	0.19	1615

Notes:

Emission factors for all pollutants are from Appendix A - On-Road Vehicle Emission Factors within AFCEE Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.

Emission factors from calendar year 2015 were used assuming the average vehicle model year is 2005.

HDDV8b Haul Truck Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	18,049.47	1,680.31	9,647.30	57.94	579.42	550.45	4,679,374.22
tons	9.02	0.84	4.82	0.03	0.29	0.28	2,339.69

Example Calculation: NO_x emissions (lbs) = 40 miles per trip * 34,955 trips * NO_x emission factor (g/mile) * lb/453.6 g

Summary	Summarizes total emissions by calendar year for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North).
Airfield Operations	Aircraft operations consist of taxi, take-off and landings (sorties or LTOs), touch-and-go operations (TGOs), and low flybys (LFB) by base aircraft.
Fuel Truck and Commuter Vehicle Emissions	Estimates emissions for workers and operational vehicles commuting to the site of the Proposed Action.
Fuel Transfer Emissions	Fuel loading operations under the Proposed Action involves the loading of fuel into tanker trucks and aircraft.
Internal Combustion Engine (ICE) Emissions	Estimates Emissions from Internal Combustion Engines (e.g Generators)
Fuel Storage Tanks	Estimates emissions from Above Ground Storage Tanks.

Criteria Pollutant and VOC Emissions Summary for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North) (tons/year)

Source Category	PM10	PM2.5	CO	NOx	SOx	VOCs
Airfield Operations	0.05	0.05	18.67	6.77	0.98	1.25
Fuel Truck and Commuter Vehicle Emissions	0.02	0.01	0.19	0.37	0.00	0.03
Fuel Transfer	N/A	N/A	N/A	N/A	N/A	0.01
Fuel Storage Tanks	N/A	N/A	N/A	N/A	N/A	1.32
Total Criteria and VOC Pollutant Emissions (tons/year)	0.07	0.07	18.86	7.14	0.98	2.61

Greenhouse Gas (GHG) Emissions Summary for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North) (metric tonnes/year)

Source Category	CO ₂ -equivalent (lb/year)	CO ₂ -equivalent (kg/year)	CO ₂ -equivalent (metric tonne/year)
Airfield Operations*	8,833,755	4,006,991	4,007
Fuel Truck and Commuter Vehicle Emissions	205,537	93,232	93
Fuel Transfer	0	0	0
Fuel Storage Tanks	0	0	0
Total GHG Emissions	9,039,293	4,100,223	4,100

DATA - Airfield Operations for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Aircraft exercises under this alternative are based on assuming 2 to 4 KC-135R aircraft operating up to 8 weeks per year for a maximum of 720 KC-135R operations per year. Each operation is equivalent to one landing or one take-off (1 LTO Cycle = 2 operations). These 720 total operations could occur at either Saipan or Tinian North.

Landing and Takeoff (LTO) Cycles

Description	Quantity
# of KC-135R LTO's per year	360

Legend

Airfield Activity Data (Worst Case Scenario)

Aircraft Model	Aircraft Model Used to Match to Available Emission Factors	Engine Model	# Engines	APU Model	# APUs	Notes	LTO Cycles
KC-135R	KC-135-R	F108-CF-201	4	No data on APUs		See below	360

Note: F108-CF-201 is the military designation of the CFM56-2B-1 engine.

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Aircraft Criteria Pollutant Emission Factors

Aircraft Model	Engine Model	# Engines	Reference Thrust Mode	LTO/TGO Thrust Mode	Fuel Flow (lb/hr)	Emission Factors in lb Pollutant per 1000 lb Fuel Burned						
						PM10	PM2.5	CO	NO _x	SO ₂	VOCs	TIM
KC-135R	F108-CF-201	4	Idle	Idle	1016	0.06	0.06	30.70	4.00	1.06	2.10	47.7
KC-135R	F108-CF-201	4	Approach	Approach	2468	0.06	0.05	4.20	8.20	1.06	0.09	5.2
KC-135R	F108-CF-201	4	Climbout	Climbout	6500	0.05	0.05	0.90	16.00	1.06	0.06	1.6
KC-135R	F108-CF-201	4	Takeoff	Takeoff	7818	0.07	0.06	0.90	18.05	1.06	0.05	0.7

Emission factors from Air Force Civil Engineer Center (AFCEC) October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-8

APU Emission Factors

Aircraft Model	# APU	APU Model	APU Emission Factors in lb Pollutant per hour						APU (hr)
			PM10	PM2.5	CO	NO _x	SO ₂	VOCs	
KC-135R			No Data Available						

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Default Time-In-Mode

Aircraft Type	Typical Duration by Mode (minutes)					Total
	Taxi/Idle	Takeoff	Climbout	Approach	Taxi/Idle-in	
KC-135R	32.8	0.7	1.6	5.2	14.9	55.2

Default Time-In-Mode rates are from AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-4

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Greenhouse Gas Emission Factors

Units	CO ₂	CH ₄	N ₂ O
kg/gal fuel	9.80	---	---
g/gal fuel	---	0.27	0.31

Reference: Footnote 2, from Table 2-8 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources.

Calculations - Airfield Operations for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Criteria Pollutant and VOC Emissions per LTO by Aircraft Type

Calculated as the sum of the products of [(minutes) * (fuel flow/minute) * (lbs pollutant/lb fuel)] for each of the thrust modes.

Reported Aircraft Model	APU	Emission in lb Pollutant per LTO							
		Fuel (lb)	PM10 (lb)	PM2.5 (lb)	CO (lb)	NOx (lb)	SOx (lb)	VOCs (lb)	APU
KC-135R	0	5144.6	0.3	0.3	103.7	37.6	5.5	6.9	0

Total Criteria Pollutant and VOC Emissions for maximum LTO's by Aircraft Type

Reported Aircraft Model	APU	Total LTO's	Emission in lb Pollutant per LTO							APU
			Fuel (lb)	PM10 (tons)	PM2.5 (tons)	CO (tons)	NOx (tons)	SOx (tons)	VOCs (tons)	
KC-135R	0	360	1,852,065.6	0.05	0.05	18.67	6.77	0.98	1.25	0
Worst Case Scenario										
			1,852,065.60	0.05	0.05	18.67	6.77	0.98	1.25	0

Total gallons of fuel used for LTOs (277,671 gal.) is based on the 6.67 lb/gal density of JP-8 as provided in footnote 2. of Table 2-8 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources.

Calculations - Airfield Operations for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Greenhouse Gas Emissions

Assume aircraft will use 7,500 pounds of fuel per LTO cycle, which is from the ground to 10,000 feet and from 10,000 feet back to a landing. This estimated fuel use was obtained from Hqs. Travis Miyashiro, HIANG, PACAF ASD/P. Fuel use and associated emissions above 10,000 feet are accounted for in the MIRC EIS.

Quantity (gallons)	Fuel Type	CH ₄ (kg)	N ₂ O (kg)	CO ₂ (kg)	CO ₂ -equivalent (kg)	CO ₂ -equivalent (metric tonne)
404,798	JP-8	109	125	3,957,016	4,066,991	4,007

The CH₄ and N₂O Global Warming Potential multipliers are 25 and 298, respectively from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014.

DATA - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Given:

Saipan

Six 10,000 gal Fuel Trucks will take 2 days at 8 hrs/day and 3 hours on a third day to travel from Saipan Seaport to Saipan International Airport (Site of Proposed Action) and to fill the airport tanks with the needed fuel; 420,000 gallons total. The six 10,000 gallon fuel trucks will make three round trips per day for the first two days and one round trip each on the third day.

Tinian North

Six 10,000 gal Fuel Trucks will take 2 days at 8 hrs/day and 3 hours on a third day to travel from Tinian Seaport to Tinian Airport (Site of Proposed Action) and to fill the airport tanks with the needed fuel; 420,000 gallons total. The six 10,000 gallon fuel trucks will make three round trips per day for the first two days and one round trip each on the third day.

Under the commercial lodging option at Saipan, six busses will transport a total of 256 personnel 4 roundtrips/day for a total of 24 roundtrips/day for 8 weeks. This same number of personnel, busses, and roundtrips could alternatively occur at Tinian.

Assumptions:

A Gross Vehicle Weight (GVW) of 36,200 lbs will be used, based off of an 84 passenger Blue Bird bus.

Assume fuel truck GVW > 60,000 lbs since fuel load alone is 83,400 lbs.

Assume fuel trucks travel at 55 miles per hour

Assume 40 miles per roundtrip for busses.

Vehicle Weight Classes for Which Emission Factors are Published

Vehicle Category	Description	SCC
LDGV	Light-Duty Gasoline Vehicles (i.e., passenger cars) does not include SUVs, vans or pickups	A2201001000
LDGT1	Light-Duty Gasoline Trucks 1 (0-6,000 lbs GVW - includes pickup trucks, sport utility vehicles and vans)	A2201020000
LDGT3	Light-Duty Gasoline Trucks 3 (6,001-8,500 lbs. GVW - includes pickup trucks, sport utility vehicles and vans)	A2201040000
HDBGV2B	Class 2b Heavy-Duty Gasoline Vehicles (8501-10,000 lbs GVW)	A2201070000
HDBGV5	Class 5 Heavy-Duty Gasoline Vehicles (16,001-19,500 lbs GVW)	A2201070000
HDBGV8A	Class 8a Heavy-Duty Gasoline Vehicles (33,001-60,000 lbs GVW)	A2201070000
LDDV	Light-Duty Diesel Vehicles (Passenger Cars)	
LDDT34	Light-Duty Diesel Trucks 3 and 4 (6,001-8,500 lbs GVW)	A2230002000
HDDV2B	Class 2b Heavy-Duty Diesel Vehicles (8501-10,000 lbs GVW - includes pickup trucks)	A2230070000
HDDV5	Class 5 Heavy-Duty Diesel Vehicles (16,001-19,500 lbs GVW)	A2230070000
HDDV8A	Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	A2230070000
HDDV8B	Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	A2230070000
MC	Motorcycles	A2201080000

Emission Factors - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Emission Factors for Calendar Year 2015

Vehicle Class	Model Year	Emission Factors in grams per Mile ^a								
		PM ₁₀	PM _{2.5}	CO	NO _x	NO _x	NOCs	CO ₂	Fugitive PM ₁₀	Fugitive PM _{2.5}
HDDVSA*	2005	0.2	0.19	2.8	5.47	0.01	0.48	1544.1	0.05	0.01
HDDVSB**	2005	0.2	0.19	3.33	6.23	0.02	0.58	1615.2	0.05	0.01

* Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8a

**Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8b

a) Emission factors from Appendix A of Air Emissions Factor Guide to Air Force Mobile Sources, AFCEE, December 2009

Greenhouse Gas Emission Factors for Calendar Year 2015

Vehicle Class	CH ₄ (g/mile)	N ₂ O (g/mile)
HDDV	0.0051	0.0048

g/mile = grams per mile

CH₄ = Methane; N₂O = Nitrous Oxide

b) Emission Factors from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>).

Emission Calculations - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Miles for Commuter Emissions for 8 week training exercises

Vehicle Class	Speed Miles/hour	Miles/Trip	Total Trips/Day	Hours/Day	Total Days	Total Miles
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)		40	24		56	53,760
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	55			48	2.375	6,270

Criteria and VOC Emissions for Commuters

Vehicle Class	Model Year	Annual Miles	Criteria Pollutant Emissions (tons/year)					
			PM ₁₀	PM _{2.5}	CO	NOx	SOx	VOCs
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	2005	53,760	0.015	0.012	0.166	0.324	0.001	0.028
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	2005	6,270	0.002	0.001	0.023	0.043	0.000	0.004
Total			0.017	0.013	0.189	0.367	0.001	0.032

Particulate emissions include exhaust, brake wear, tire wear. Assume paved road.

Greenhouse Gas Emissions for Commuters

Vehicle Class	Annual Miles	CO ₂ (lb/year)	CH ₄ (lb/year)	N ₂ O (lb/year)	CH ₄ GWP Multiplier	N ₂ O GWP Multiplier	CO ₂ Equivalent (lb/year)	CO ₂ Equivalent (metric tonnes/year)
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	53,760	183,004.44	0.60	0.57	25	298	183,189.08	83.09
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	6,270	22,326.51	0.07	0.07	25	298	22,348.04	10.14
Total		205,330.95	0.67	0.64	---	---	205,537.13	93.23

GWP = Global Warming Potential; 100-year GWP values obtained from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>)

Emission Calculations Method - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Calculation Method: Equation 4-1, AFCEE 2009, Mobile Emissions Guide

$$EP = VMTVehCat * EFPolVehCat * 0.002205$$

Where,

EP = Emissions of each individual pollutant (lb/yr)

VMTVehCat = Annual vehicle miles traveled by each vehicle category (LDGV, LDGT1, LDDV, etc.) (mi/yr)

EFPolVehCat = Emission factor of each pollutant for each vehicle category (g/mi)

0.002205 = Factor for converting grams to pounds (g/lb).

DATA - Fuel Loading Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Given:		Saipan	
Total Exercise Days (8 weeks)		56	
Initial Fuel Fill Days		2.333333333	
Remaining Fuel Fill Days		0	
Total # of Fuel Trucks		6	
Total Gallons per Fuel Truck		10,000	
Trips per day per Fuel Truck		3	
1 bbl conversion to gallons		42	
Total Fuel (gal) during Initial Fill		420,000	
Total Fuel (gal) during Remaining Exercise		0	
Total Fuel (gal) during Exercise (8 Weeks)		420,000	

Proposed Action Fuel Loading Operations				
Location	Description	Fuel Type	Fuel Transferred (gal)	Category
Saipan Airport Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	Loading
Saipan Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	Loading
Saipan Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	Loading

Given:		Tinian North	
Total Exercise Days (8 weeks)		56	
Initial Fuel Fill Days		2.333333333	
Remaining Fuel Fill Days		0	
Total # of Fuel Trucks		6	
Total Gallons per Fuel Truck		10,000	
Trips per day per Fuel Truck		3	
1 bbl conversion to gallons		42	
Total Fuel (gal) during Initial Fill		420,000	
Total Fuel (gal) during Remaining Exercise		0	
Total Fuel (gal) during Exercise (8 Weeks)		420,000	

Proposed Action Fuel Loading Operations				
Location	Description	Fuel Type	Fuel Transferred (gal)	Category
Tinian North Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	Loading
Tinian Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	Loading
Tinian Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	Loading

Emission Factors - Fuel Loading Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

JP-8 emission factors (lb/Mgal)	Dispensing		Loading	
	Splash	Bottom fill		
Molecular Weight =	130			
True Vapor Pressure (psia) =	0.011			
Dispensing Displacement losses =	0.0487		0.020	
Spillage =	0.7			
Total =	0.749			

AP-42 Table 7.1-2 dated 11/06
 AP-42 Table 7.1-2 dated 11/06 @ 70F (annual avg.)
 AP-42 Section 5.2 dated 6/08 Equation (1)
 AP-42 Table 5.2-7 dated 6/08

Emission Calculations - Fuel Loading Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Saipan

Location	Description	Fuel Type	Fuel Transferred	Displaced Vapor	Spillage	Total VOC	Total VOC
			(gal)	(lb)	(lb)	(lb)	(tons)
Saipan Airport Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	8.5	0	8.5	0.004
Saipan Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Saipan Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Total			840,000	17	0	16.94	0.01

Tinian

Location	Description	Fuel Type	Fuel Transferred	Displaced Vapor	Spillage	Total VOC	Total VOC
			(gal)	(lb)	(lb)	(lb)	(tons)
Tinian North Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	8.5	0	8.5	0.004
Tinian Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Tinian Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Total			840,000	17	0	16.94	0.01

Maximum Emissions **16.94** **0.01**

Emission Calculations Method - Fuel Loading Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Displacement emissions for Diesel and JP-8 were estimated using Equation (1) from AP-42 Section 5.2, Transportation and Marketing of Petroleum Liquids, dated 6/08

$$L_L = 12.46 (SPM)/T$$

Where

L_L = Loading loss in lb/10³ gal

S = Saturation Factor 1.45 for splash loading, 0.6 for bottom loading

M = molecular weight,

T = temperature of bulk liquid (assume average annual ambient temperature)

DATA - Fuel Storage Tank Emissions for Modified Alternative 3a - Implementation Phase (Hybrid Saipan/Tinian North)

Fuel storage tank emissions were estimated using the U.S. EPA TANKS storage tank emissions calculation software (Version 4.0.9d). The emissions calculations algorithms in the TANKS program are based on Chapter 7 of EPA's AP-42. Honolulu, Hawaii was used as a surrogate location for the tanks as meteorological data does not exist in TANKS for CNMI. Jet Kerosene fuel was used as the surrogate for JP-8 in the TANKS model as it is the closest in characteristics to JP-8.

Emission Calculations Summary from TANKS* - Saipan

Tank Type	Throughput (gal.)	Working Loss (lbs)	Breathing Loss (lbs)	VOC Total (lbs)	VOC Total (tons)
Tank 1 (Saipan Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 2 (Saipan Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 3 (Saipan Airport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 4 (Saipan Airport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Total		38.52	2,341.56	2,380.08	1.19

*See the following references for TANKS printouts. (SM12 - TANKS) & (SM13 - TANKS)

Emission Calculations Summary from TANKS* - Tinian North

Tank Type	Throughput (gal.)	Working Loss (lbs)	Breathing Loss (lbs)	VOC Total (lbs)	VOC Total (tons)
Tank 1 (Tinian Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 2 (Tinian Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 3 (Tinian Airport) - 60,000 bbl, cut and cover or AST	210,000	9.63	714.88	724.51	0.36
Tank 4 (Tinian Airport) - 60,000 bbl, cut and cover or AST	210,000	9.63	714.88	724.51	0.36
Total		38.52	2,600.54	2,639.06	1.32

*See the following references for TANKS printouts. (SM12 - TANKS) & (SM13 - TANKS)

Maximum Emissions	2,639.06	1.32
--------------------------	-----------------	-------------

Summary	Summarizes total emissions by calendar year for Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South).
Combustion and Evaporative	Estimates emissions from non-road equipment exhaust and evaporative volatile organic compound emissions.
Fugitive	Estimates particulate emissions from construction activities including earthmoving, vehicle traffic, and windblown dust.
Grading	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
Construction Commuter	Estimates emissions for construction workers commuting to the site.
Haul Truck On-Road	Estimates emissions from hauling construction materials to the project site.

Summary of Air Quality Emissions from Divert EIS - Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)

	NO_x (ton)	VOC (ton)	CO (ton)	SO₂ (ton)	PM₁₀ (ton)	PM_{2.5} (ton)	CO₂ (ton)
Construction Combustion/Evaporative	15.777	1.866	6.735	0.878	1.068	1.036	1,848.889
Construction Fugitive Dust	-	-	-	-	147.150	13.623	-
Construction Commuter	0.812	1.004	11.653	0.0132	0.033	0.015	728.836
Haul Truck On-Road	9.023	0.840	4.823	0.029	0.290	0.275	2,339.226
TOTAL	25.61	3.71	23.21	0.92	148.54	14.95	4,916.95

Annual Summary of Air Quality Emissions from Divert EIS - Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)*

	Point and Area Sources Combined						
	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO₂ (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)	CO₂ (metric tons)
CY 01	8.54	1.24	7.74	0.31	49.51	4.98	1,486.86
CY 02	8.54	1.24	7.74	0.31	49.51	4.98	1,486.86
CY 03	8.54	1.24	7.74	0.31	49.51	4.98	1,486.86

* Construction duration is estimated to be 36 months and the emissions are assumed to be distributed evenly over the construction period.

Combustion Emissions - Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)

Combustion Emissions of VOC, NO_x, SO₂, CO, PM_{2.5}, PM₁₀, and CO₂ due to Construction

Assumptions

When multiple options exist under the general construction activities the most conservative value will be used to quantify air emissions.

General Construction Activities

	Area Disturbed (ft ²)
Construct New Access Roads (Tinian South)	177,294 ft ²
Construct Maintenance Facility (Saipan)	6,100 ft ²
Construct Maintenance Facility (Tinian South)	7,972 ft ²
Construct Jet Fuel System and Fire Pump System (Operational, Bulk and at the Port of Tinian) (Saipan/Tinian South)	820,200 ft ²
Construct Hazardous Cargo Pad (Saipan)	250,470 ft ²
Construct Hazardous Cargo Pad (Tinian South)	230,165 ft ²
Construct Parking Apron (Tinian South)	1,508,251 ft ²

Total General Construction Area:	834,272 ft ²
	19.2 acres
Total Demolition Area:	0 ft ²
	0.0 acres
Total Pavement Area:	2,166,180 ft ²
	49.7 acres
Total Disturbed Area:	3,000,452 ft ²
	68.9 acres
Construction Duration:	36 months
1 Yr Project Construction Activity:	240 days/yr

Assume 12 months, 4 weeks per month, 5 days per week.

Emission Factors Used for Construction Equipment

References: Guide to Air Quality Assessment, Sacramento Metropolitan Air Quality Management District (SMAQMD), 2004; and U.S. EPA NONROAD Emissions Model, Version 2005.0.0
Emission factors are taken from the NONROAD model and were provided to eM by Larry Landman of the Air Quality and Modeling Center (Landman.Larry@epamail.epa.gov) on 12/14/07. Factors provided are for the weighted average US fleet for CY2007. Assumptions regarding the type and number of equipment are from SMAQMD Table 3-1 unless otherwise noted.

Grading

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Bulldozer	1	13.60	0.96	5.50	1.02	0.89	0.87	1456.90
Motor Grader	1	9.69	0.73	3.20	0.80	0.68	0.64	1141.65
Water Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	3	41.64	2.58	15.71	0.83	2.55	2.47	4941.53

Paving

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Paver	1	3.83	0.37	2.06	0.28	0.35	0.34	401.93
Roller	1	4.82	0.44	2.51	0.37	0.43	0.42	536.07
Truck	2	36.71	1.79	14.01	3.27	1.99	1.93	4685.95
Total per 10 acres of activity	4	45.37	2.61	18.58	0.91	2.78	2.69	5623.96

Demolition

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Loader	1	13.45	0.99	5.58	0.95	0.93	0.90	1360.10
Haul Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Total per 10 acres of activity	2	31.81	1.89	12.58	0.64	1.92	1.87	3703.07

Building Construction

Equipment ^d	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Stationary								
Generator Set	1	2.38	0.32	1.18	0.15	0.23	0.22	213.06
Industrial Saw	1	2.62	0.32	1.97	0.20	0.32	0.31	291.92
Welder	1	1.12	0.38	1.50	0.08	0.23	0.22	112.39
Mobile (non-road)								
Truck	1	18.36	0.89	7.00	1.64	1.00	0.97	2342.98
Forklift	1	5.34	0.56	3.33	0.40	0.55	0.54	572.24
Crane	1	9.57	0.66	2.39	0.65	0.50	0.49	931.93
Total per 10 acres of activity	6	39.40	3.13	17.38	3.12	2.83	2.74	4464.51

Architectural Coatings

Equipment	No. Reqd. ^a per 10 acres	NO _x (lb/day)	VOC ^b (lb/day)	CO (lb/day)	SO ₂ ^c (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)	CO ₂ (lb/day)
Air Compressor	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77
Total per 10 acres of activity	1	3.57	0.37	1.57	0.25	0.31	0.30	359.77

- The SMAQMD 2004 guidance suggests a default equipment fleet for each activity, assuming 10 acres of that activity, (e.g., 10 acres of grading, 10 acres of paving, etc.). The default equipment fleet is increased for each 10 acre increment in the size of the construction project. That is, a 26 acre project would round to 30 acres and the fleet size would be three times the default fleet for a 10 acre project.
- The SMAQMD 2004 reference lists emission factors for reactive organic gas (ROG). For the purposes of this worksheet ROG = VOC. The NONROAD model contains emissions factors for total HC and for VOC. The factors used here are the VOC factors.
- The NONROAD emission factors assume that the average fuel burned in nonroad trucks is 1100 ppm sulfur. Trucks that would be used for the Proposed Actions will all be fueled by highway grade diesel fuel which cannot exceed 500 ppm sulfur. These estimates therefore over-estimate SO₂ emissions by more than a factor of two.
- Typical equipment fleet for building construction was not itemized in SMAQMD 2004 guidance. The equipment list above was assumed based on SMAQMD 1994 guidance.

Combustion Emissions - Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)

Project-Specific Combustion and Evaporative Emission Factor Summary

Source	Equipment Multiplier*	Project-Specific Emission Factors (lb/day)						
		NO _x	VOC	CO	SO ₂ **	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	7	291.489	18.039	109.969	5.830	17.819	17.284	34590.684
Paving Equipment	5	226.836	13.029	92.892	4.537	13.880	13.464	28119.784
Demolition Equipment	1	31.808	1.886	12.584	0.636	1.923	1.865	3703.074
Building Construction	2	78.793	6.260	34.765	6.233	5.658	5.488	8929.023
Air Compressor for Architectural Coating	2	7.148	0.746	3.131	0.502	0.619	0.600	719.547
Architectural Coating**			74.441					

*The equipment multiplier is an integer that represents units of 10 acres for purposes of estimating the number of equipment required for the project.

**Emission factor is from the evaporation of solvents during painting, per "Air Quality Thresholds of Significance", SMAQMD, 1994
 Example: SMAQMD Emission Factor for Grading Equipment NO_x = (Total Grading NO_x per 10 acre)/(Equipment Multiplier)

Summary of Input Parameters

	Total Area (ft ²)	Total Area (acres)	Total Days	
Grading:	3,000,452	68.88	6	(from "Grading" worksheet)
Paving:	2,166,180	49.73	47	
Demolition:	0	0.00	0	
Building Construction:	834,272	19.15	240	
Architectural Coating:	834,272	19.15	20	(per SMAQMD "Air Quality of Thresholds of Significance", 1994)

NOTE: The 'Total Days' estimate for paving is calculated by dividing the total number of acres by 0.21 acres/day, which is a factor derived from the 2005 MEANS Heavy Construction Cost Data, 19th Edition, for 'Asphaltic Concrete Pavement, Lots and Driveways - 6" stone base', which provides an estimate of square feet paved per day. There is also an estimate for 'Plain Cement Concrete Pavement', however the estimate for asphalt is used because it is more conservative. The 'Total Days' estimate for demolition is calculated by dividing the total number of acres by 0.02 acres/day, which is a factor also derived from the 2005 MEANS reference. This is calculated by averaging the demolition estimates from 'Building Demolition - Small Buildings, Concrete', assuming a height of 30 feet for a two-story building; from 'Building Footings and Foundations Demolition - 6" Thick, Plain Concrete'; and from 'Demolish, Remove Pavement and Curb - Concrete to 6" thick, rod reinforced'. Paving is double-weighted since projects typically involve more paving demolition. The 'Total Days' estimate for building construction is assumed to be 230 days, unless project-specific data is known.

Project Combustion and Evaporative Emissions by Activity (lbs)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Grading Equipment	1,748.93	108.23	659.82	34.98	106.91	103.70	207,544
Paving	10,752.05	617.56	4,403.09	215.04	657.93	638.20	1,332,878
Demolition	-	-	-	-	-	-	0
Building Construction	18,910.23	1,502.31	8,343.51	1,495.85	1,357.94	1,317.20	2,142,966
Architectural Coatings	142.96	1,503.74	62.62	10.05	12.37	12.00	14,391
Total Emissions (lbs):	31,554.17	3,731.84	13,469.03	1,755.91	2,135.16	2,071.11	3,697,778

Results: Project Annual Combustion and Evaporative Emission Rates

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
Total Project Combustion and Evaporative Emissions (lbs)	31,554.17	3,731.84	13,469.03	1,755.91	2,135.16	2,071.11	3,697,778
Total Project Combustion and Evaporative Emissions (tons)	15.78	1.87	6.73	0.88	1.07	1.04	1,848.89

Construction Fugitive Dust Emissions - Proposed Action [Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)]

Construction Fugitive Dust Emission Factors

	Emission Factor	Units	Source
General Construction Activities	0.19 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
New Road Construction	0.42 ton PM ₁₀ /acre-month		MRI 1996; EPA 2001; EPA 2006
PM_{2.5} Emissions			
PM _{2.5} Multiplier	0.10	(10% of PM ₁₀ emissions assumed to be PM _{2.5})	EPA 2001; EPA 2006
Control Efficiency	0.50	(assume 50% control efficiency for PM ₁₀ and PM _{2.5} emissions)	EPA 2001; EPA 2006

Project Assumptions

New Roadway Construction (0.42 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	49.7 acres

General Construction Activities (0.19 ton PM₁₀/acre-month)

Duration of Construction Project	12 months
Area	19.2 acres

	Project Emissions (tons/year)			
	PM₁₀ uncontrolled	PM₁₀ controlled	PM_{2.5} uncontrolled	PM_{2.5} controlled
New Roadway Construction	250.63	125.32	25.06	12.53
General Construction Activities	43.67	21.83	2.18	1.09
Total	294.30	147.15	27.25	13.62

General Construction Activities Emission Factor

0.19 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The area-based emission factor for construction activities is based on a study completed by the Midwest Research Institute (MRI) Improvement of Specific Emission Factors (BACM Project No. 1), March 29, 1996. The MRI study evaluated seven construction projects in Nevada and California (Las Vegas, Coachella Valley, South Coast Air Basin, and the San Joaquin Valley). The study determined an average emission factor of 0.11 ton PM₁₀/acre-month for sites without large-scale cut/fill operations. A worst-case emission factor of 0.42 ton PM₁₀/acre-month was calculated for sites with active large-scale earth moving operations. The monthly emission factors are based on 168 work-hours per month (MRI 1996). A subsequent MRI Report in 1999, Estimating Particulate Matter Emissions From Construction Operations, calculated the 0.19 ton PM₁₀/acre-month emission factor by applying 25% of the large-scale earthmoving emission factor (0.42 ton PM₁₀/acre-month) and 75% of the average emission factor (0.11 ton PM₁₀/acre-month). The 0.19 ton PM₁₀/acre-month emission factor is referenced by the EPA for non-residential construction activities in recent procedures documents for the National Emission Inventory (EPA 2001; EPA 2006). The 0.19 ton PM₁₀/acre-month emission factor represents a refinement of EPA's original AP-42 area-based total suspended particulate (TSP) emission factor in Section 13.2.3 Heavy Construction Operations. In addition to the EPA, this methodology is also supported by the South Coast Air Quality Management District as well as the Western Regional Air Partnership (WRAP) which is funded by the EPA and is administered jointly by the Western Governor's Association and the National Tribal Environmental Council. The emission factor is assumed to encompass a variety of non-residential construction activities including building construction (commercial, industrial, institutional, governmental), public works, and travel on unpaved roads. The EPA National Emission Inventory documentation assumes that the emission factors are uncontrolled and recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas.

New Road Construction Emission Factor

0.42 ton PM₁₀/acre-month Source: MRI 1996; EPA 2001; EPA 2006

The emission factor for new road construction is based on the worst-case conditions emission factor from the MRI 1996 study described above (0.42 tons PM₁₀/acre-month). It is assumed that road construction involves extensive earthmoving and heavy construction vehicle travel resulting in emissions that are higher than other general construction projects. The 0.42 ton PM₁₀/acre-month emission factor for road construction is referenced in recent procedures documents for the EPA National Emission Inventory (EPA 2001; EPA 2006).

PM_{2.5} Multiplier

0.10

PM_{2.5} emissions are estimated by applying a particle size multiplier of 0.10 to PM₁₀ emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).

Control Efficiency for PM₁₀ and PM_{2.5}

0.50

The EPA National Emission Inventory documentation recommends a control efficiency of 50% for PM₁₀ and PM_{2.5} in PM nonattainment areas (EPA 2006). Wetting controls will be applied during project construction.

References:

EPA 2001. *Procedures Document for National Emissions Inventory, Criteria Air Pollutants, 1985-1999*. EPA-454/R-01-006. Office of Air Quality Planning and Standards, United States Environmental Protection Agency. March 2001.

EPA 2006. *Documentation for the Final 2002 Nonpoint Sector (Feb 06 version) National Emission Inventory for Criteria and Hazardous Air Pollutants*. Prepared for: Emissions Inventory and Analysis Group (C339-02) Air Quality Assessment Division Office of Air Quality Planning and Standards, United States Environmental Protection Agency. July 2006.

MRI 1996. *Improvement of Specific Emission Factors (BACM Project No. 1)*. Midwest Research Institute (MRI). Prepared for the California South Coast Air Quality Management District, March 29, 1996.

Grading Schedule - Proposed Action [Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)]

Estimate of time required to grade a specified area.

Input Parameters

Construction area: 68.9 acres/yr (from Combustion Worksheet)
 Qty Equipment: 21.0 (calculated based on 3 pieces of equipment for every 10 acres)

Assumptions

Terrain is mostly flat.
 An average of 6" soil is excavated from one half of the site and backfilled to the other half of the site; no soil is hauled off-site or borrowed.
 200 hp bulldozers are used for site clearing.
 300 hp bulldozers are used for stripping, excavation, and backfill.
 Vibratory drum rollers are used for compacting.
 Stripping, Excavation, Backfill and Compaction require an average of two passes each.
 Excavation and Backfill are assumed to involve only half of the site.

Calculation of days required for one piece of equipment to grade the specified area.

Reference: Means Heavy Construction Cost Data, 19th Ed., R. S. Means, 2005.

Means Line No.	Operation	Description	Output	Units	Acres per equip-day	equip-days per acre	Acres/yr (project-specific)	Equip-days per year
2230 200 0550	Site Clearing	Dozer & rake, medium brush	8	acre/day	8	0.13	68.88	8.61
2230 500 0300	Stripping	Topsoil & stockpiling, adverse soil	1,650	cu. yd/day	2.05	0.49	68.88	33.68
2315 432 5220	Excavation	Bulk, open site, common earth, 150' haul	800	cu. yd/day	0.99	1.01	34.44	34.73
2315 120 5220	Backfill	Structural, common earth, 150' haul	1,950	cu. yd/day	2.42	0.41	34.44	14.25
2315 310 5020	Compaction	Vibrating roller, 6" lifts, 3 passes	2,300	cu. yd/day	2.85	0.35	68.88	24.16
TOTAL								115.42

Calculation of days required for the indicated pieces of equipment to grade the designated acreage.

(Equip)(day)/yr: 115.42
 Qty Equipment: 21.00
 Grading days/yr: 5.50

Construction/Staff Commuter Emissions - Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)

Emissions from construction workers commuting to the job site are estimated in this spreadsheet.

Emission Estimation Method: Air Force Civil Engineer Center (AFCEE), Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Assumptions:

Passenger vehicle emission factors for scenario year 2015 are used.
 The average roundtrip commute for a construction/staff worker = 40 miles
 Number of construction days = 240 days
 Number of construction/Staff workers (daily) = 125 people

Note: None

Personal Operating Vehicle (POV) On-Road Emission Factors for Year 2016 (grams/mile)

NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
0.614	0.759	8.810	0.010	0.025	0.011	551.000

Source: Emission factors for all pollutants are from Table 5-28: On-Road Vehicle Emission Factors - 2016 POV, Gasoline Light Duty Trucks (LDGT) at low altitude, within AFCEC Air Emissions Factor Guide to Air Force Mobile Sources, October 2014.

Construction Commuter Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	1,624.339	2,007.937	23,306.878	26.455	66.138	29.101	1,457,671.958
tons	0.812	1.004	11.653	0.013	0.033	0.015	728.836

Example Calculation: NO_x emissions (lbs) = 60 miles/day * NO_x emission factor (lb/mile) * number of construction days * number of workers

Construction/Haul Truck Emissions - Modified Alternative 3B - Construction Phase (Hybrid Saipan/Tinian South)

Emissions from hauling construction supplies, demolition debris, fill, and excavated material are estimated in this spreadsheet.

Emission Estimation Method: Air Force Center for Environmental Excellence (AFCEE) Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.

Concrete Mixing and Dump Truck Assumptions:

Dump trucks carry 11 cubic yards of material per trip.
 Concrete mixing trucks carry 10 cubic yards of material per trip.
 Saipan

The average distance from the port to Commercial Concrete Supply Company is 7 miles; therefore, dump trucks will travel 14 miles round trip.
 The average distance from the Commercial Concrete Supply Company (CCSC) to the project site is 2 miles; therefore, concrete trucks will travel 4 miles round trip.
 Tinian N.

The average distance from the port to Commercial Concrete Supply Company is 1.7 miles; therefore, dump trucks will travel 3.4 miles round trip.
 The average distance from the Commercial Concrete Supply Company (CCSC) to the project site is 2.3 miles; therefore, concrete trucks will travel 4.6 miles round trip.

Building Materials Assumptions:

Haul trucks carry 20 cubic yards of material per trip.
 The average distance from the project site to the materials source is 20 miles; therefore, building material haul trucks will travel 40 miles round trip.
 Estimated number of trips required by haul trucks = total amount of material/20 cubic yards per truck

Amount of demolition debris =	0 cubic yards	No Demolition in the Proposed Action
Amount of cement transported from port to CCSC (Saipan)=	396 cubic yards	
Amount of cement transported from port to CCSC (Tinian N.)=	1,727 cubic yards	
Amount of concrete transported from CCSC to project site (Saipan) =	5,610 cubic yards	
Amount of concrete transported from CCSC to project site (Tinian N.) =	27,970 cubic yards	
Amount of Excavation Materials for New Structures/Buildings (Saipan) =	61,372 cubic yards	Construction area multiplied by depth of disturbance which is assumed to be 12 feet.
Amount of Excavation Materials for New Structures/Buildings (Tinian N.) =	309,416 cubic yards	Construction area multiplied by depth of disturbance which is assumed to be 12 feet.
Amount of Building/Structure Materials (Saipan) =	46,029 cubic yards	Construction area multiplied by 9 feet.
Amount of Building/Structure Materials (Tinian N.) =	232,062 cubic yards	Construction area multiplied by 9 feet.
Number of dump trucks required (port to CCSC) (Saipan) =	36 heavy duty diesel haul truck trips, Cells rounded up	
Number of dump trucks required (port to CCSC) (Tinian N.) =	157 heavy duty diesel haul truck trips, Cells rounded up	
Number of concrete mixing trucks required (CCSC to project site) (Saipan) =	561 heavy duty diesel haul truck trips, Cells rounded up	
Number of concrete mixing trucks required (CCSC to project site) (Tinian N.) =	2797 heavy duty diesel haul truck trips, Cells rounded up	
Number of trucks required (Building Materials) (Saipan) =	5,370 heavy duty diesel haul truck trips	
Number of trucks required (Building Materials) (Tinian N.) =	27,074 heavy duty diesel haul truck trips	
Miles per roundtrip (port to CCSC) (Saipan) =	14 miles	
Miles per roundtrip (port to CCSC) (Tinian N.) =	3.4 miles	
Miles per roundtrip (CCSC to project site) (Saipan) =	4 miles	
Miles per roundtrip (CCSC to project site) (Tinian N.) =	4.6 miles	
Miles per roundtrip (Building Materials) (Saipan) =	40.0 miles	
Miles per roundtrip (Building Materials) (Tinian N.) =	40.0 miles	

Low Altitude Heavy Duty Diesel Vehicle 8b (HDDV8b) Average Emission Factors (grams/mile)

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
HDDV8b	6.23	0.58	3.33	0.02	0.20	0.19	1615

Notes:

Emission factors for all pollutants are from Appendix A - On-Road Vehicle Emission Factors within AFCEE Air Emissions Factor Guide to Air Force Mobile Sources, Dec. 2009.
 Emission factors from calendar year 2015 were used assuming the average vehicle model year is 2005.

HDDV8b Haul Truck Emissions

	NO _x	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	CO ₂
lbs	18,045.91	1,679.98	9,645.40	57.93	579.30	550.34	4,678,451.88
tons	9.02	0.84	4.82	0.03	0.29	0.28	2,339.23

Example Calculation: NO_x emissions (lbs) = 40 miles per trip * 27,074 trips * NO_x emission factor (g/mile) * lb/453.6 g

No Statistical Area Available for TNI

Row #	State	County	Tier-1	Point Source Emissions					Area Source Emissions (Non-Point and Mobile Sources)						
				CO	NO _x	PM ₁₀	PM _{2.5}	SO ₂	VOC	CO	NO _x	PM ₁₀	PM _{2.5}	SO ₂	VOC
No Data Available															
Grand Total				0	0	0	0	0	0	0	0	0	0	0	0

SOURCE:

<http://www.epa.gov/ttn/chiefeiiinformation.html>

USEPA - AirData NET Tier Report

*Net Air pollution sources (area and point) in tons per year (2002)

Site visited on 02 February 2012.

No Air Quality Control Region Identified

	CO	NO _x	PM ₁₀	PM _{2.5}	SO ₂	VOC
CNMI	0	0	0	0	0	0
CNMI DEQ	0	0	0	0	0	0

- Summary** Summarizes total emissions by calendar year for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South).
- Airfield Operations** Aircraft operations consist of taxi, take-off and landings (sorties or LTOs), touch-and-go operations (TGOs), and low flybys (LFB) by base aircraft.
- Fuel Truck and Commuter Vehicle Emissions** Estimates emissions for workers and operational vehicles commuting to the site of the Proposed Action.
- Fuel Transfer Emissions** Fuel loading operations under the Proposed Action involves the loading of fuel into tanker trucks and aircraft.
- Internal Combustion Engine (ICE) Emissions** Estimates Emissions from Internal Combustion Engines (e.g Generators)
- Fuel Storage Tanks** Estimates emissions from Above Ground Storage Tanks.

Criteria Pollutant and VOC Emissions Summary for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South) (tons/year)

Source Category	PM10	PM2.5	CO	NOx	SOx	VOCs
Airfield Operations	0.05	0.05	18.67	6.77	0.98	1.25
Fuel Truck and Commuter Vehicle Emissions	0.02	0.01	0.19	0.37	0.00	0.03
Fuel Transfer	N/A	N/A	N/A	N/A	N/A	0.01
Fuel Storage Tanks	N/A	N/A	N/A	N/A	N/A	1.32
Total Criteria and VOC Pollutant Emissions (tons/year)	0.07	0.07	18.86	7.14	0.98	2.61

Greenhouse Gas (GHG) Emissions Summary for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South) (metric tonnes/year)

Source Category	CO ₂ -equivalent (lb/year)	CO ₂ -equivalent (kg/year)	CO ₂ -equivalent (metric tonne/year)
Airfield Operations*	8,833,755	4,006,991	4,007
Fuel Truck and Commuter Vehicle Emissions	205,537	93,232	93
Fuel Transfer	0	0	0
Fuel Storage Tanks	0	0	0
Total GHG Emissions	9,039,293	4,100,223	4,100

DATA - Airfield Operations for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Aircraft exercises under this alternative are based on assuming 2 to 4 KC-135R aircraft operating up to 8 weeks per year for a maximum of 720 KC-135R operations per year. Each operation is equivalent to one landing or one take-off (1 LTO Cycle = 2 operations). These 720 operations could occur at either Saipan or Tinian.

Landing and Takeoff (LTO) Cycles

Description	Quantity
# of KC-135R LTO's per year	360

Legend

Airfield Activity Data (Worst Case Scenario)

Aircraft Model	Aircraft Model Used to Match to Available Emission Factors	Engine Model	# Engines	APU Model	# APUs	Notes	LTO Cycles
KC-135R	KC-135-R	F108-CF-201	4	No data on APUs		See below	360

Note: F108-CF-201 is the military designation of the CFM56-2B-1 engine.
Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Aircraft Criteria Pollutant Emission Factors

Aircraft Model	Engine Model	# Engines	Reference Thrust Mode	LTO/GO Thrust Mode	Fuel Flow (lb/hr)	Emission Factors in lb Pollutant per 1000 lb Fuel Burned						
						PM10	PM2.5	CO	NO _x	SO ₂	VOCs	TIM
KC-135R	F108-CF-201	4	Idle	Idle	1016	0.06	0.06	30.70	4.00	1.06	2.10	47.7
KC-135R	F108-CF-201	4	Approach	Approach	2468	0.06	0.05	4.20	8.20	1.06	0.09	5.2
KC-135R	F108-CF-201	4	Climbout	Climbout	6500	0.05	0.05	0.90	16.00	1.06	0.06	1.6
KC-135R	F108-CF-201	4	Takeoff	Takeoff	7818	0.07	0.06	0.90	18.05	1.06	0.05	0.7

Emission factors from Air Force Civil Engineer Center (AFCEC) October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-8

APU Emission Factors

Aircraft Model	# APU	APU Model	APU Emission Factors in lb Pollutant per hour						APU (hr)
			PM10	PM2.5	CO	NO _x	SO ₂	VOCs	
KC-135R			No Data Available						

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Default Time-In-Mode

Aircraft Type	Typical Duration by Mode (minutes)					
	Taxi/Idle	Takeoff	Climbout	Approach	Taxi/Idle-in	Total
KC-135R	32.8	0.7	1.6	5.2	14.9	55.2

Default Time-In-Mode rates are from AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources, Table 2-4

Emission Factors (EFs) and Constants - Airfield Operations for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Greenhouse Gas Emission Factors

Units	CO ₂	CH ₄	N ₂ O
kg/gal fuel	9.80	---	---
g/gal fuel	---	0.27	0.31

Reference: Footnote 2, from Table 2-8 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources.

Calculations - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Criteria Pollutant and VOC Emissions per LTO by Aircraft Type

Calculated as the sum of the products of [(minutes) * (fuel flow/minute) * (lbs pollutant/lb fuel)] for each of the thrust modes.

Reported Aircraft Model	APU	Fuel (lb)	Emission in lb Pollutant per LTO					APU	
			PM10 (lb)	PM2.5 (lb)	CO (lb)	NOx (lb)	SOx (lb)		VOCs (lb)
KC-135R	0	5144.6	0.3	0.3	103.7	37.6	5.5	6.9	0

Total Criteria Pollutant and VOC Emissions for maximum LTO's by Aircraft Type

Reported Aircraft Model	APU	Total LTO's	Fuel (lb)	PM10 (tons)	PM2.5 (tons)	CO (tons)	NOx (tons)	SOx (tons)	VOCs (tons)	APU
			KC-135R	0	360	1,852,065.6	0.05	0.05	18.67	6.77
Worst Case Scenario			1,852,065.60	0.05	0.05	18.67	6.77	0.98	1.25	0

Total gallons of fuel used for LTOs (277,671 gal.) is based on the 6.67 lb/gal density of JP-8 as provided in footnote 2. of Table 2-6 of the AFCEC October 2014 Air Emissions Guide for Air Force Mobile Sources.

Calculations - Airfield Operations for Modified Alternative 2a - Implementation Phase (Tinian North)

Greenhouse Gas Emissions

Assume aircraft will use 7,500 pounds of fuel per LTO cycle, which is from the ground to 10,000 feet and from 10,000 feet back to a landing. This estimated fuel use was obtained from Hqs. Travis Miyashiro, HIANG, PACAF ASXP. Fuel use and associated emissions above 10,000 feet are accounted for in the MIRC EIS.

Quantity (gallons)	Fuel Type	CH ₄ (kg)	N ₂ O (kg)	CO ₂ (kg)	CO ₂ -equivalent (kg)	CO ₂ -equivalent (metric tonne)
404,798	JP-8	109	125	3,967,016	4,006,991	4,007

The CH₄ and N₂O Global Warming Potential multipliers are 25 and 298, respectively from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014.

DATA - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Given:

Saipan

Six 10,000 gal Fuel Trucks will take 14 days at 10hrs/day to provide initial fill from Saipan seaport to Saipan Airport (Site of Proposed Action). The six 10,000 gallon Fuel trucks will operate 10hrs/day for the duration of the exercises. The total exercise time is 8 weeks (56 days), therefore the fuel trucks will operate an additional 42 days after the initial fill.

Tinian North

Six 10,000 gal Fuel Trucks will take 17 days at 10hrs/day to provide initial fill from Tinian seaport to Tinian Airport (Site of Proposed Action). The six 10,000 gallon Fuel trucks will operate 10hrs/day for the duration of the exercises. The total exercise time is 8 weeks (56 days), therefore the fuel trucks will operate an additional 39 days after the initial fill.

Under the commercial lodging option at Saipan, six busses will transport a total of 256 personnel 4 roundtrips/day for a total of 24 roundtrips/day for 8 weeks. This same number of personnel, busses, and roundtrips could also occur at Tinian.

Assumptions:

A Gross Vehicle Weight (GVW) of 36,200 lbs will be used, based off of an 84 passenger Blue Bird bus.

Assume fuel truck GVW > 60,000 lbs since fuel load alone is 83,400 lbs.

Assume fuel trucks travel at 55 miles per hour

Assume 40 miles per roundtrip for busses.

Vehicle Weight Classes for Which Emission Factors are Published

Vehicle Category	Description	SCC
LDGV	Light-Duty Gasoline Vehicles (i.e., passenger cars) does not include SUVs, vans or pickups	A2201001000
LDGT1	Light-Duty Gasoline Trucks 1 (0-6,000 lbs GVW - includes pickup trucks, sport utility vehicles and vans)	A2201020000
LDGT3	Light-Duty Gasoline Trucks 3 (6,001-8,500 lbs. GVW - includes pickup trucks, sport utility vehicles and vans)	A2201040000
HDBGV2B	Class 2b Heavy-Duty Gasoline Vehicles (8501-10,000 lbs GVW)	A2201070000
HDBGV5	Class 5 Heavy-Duty Gasoline Vehicles (16,001-19,500 lbs GVW)	A2201070000
HDBGV8A	Class 8a Heavy-Duty Gasoline Vehicles (33,001-60,000 lbs GVW)	A2201070000
LDDV	Light-Duty Diesel Vehicles (Passenger Cars)	
LDDT34	Light-Duty Diesel Trucks 3 and 4 (6,001-8,500 lbs GVW)	A2230002000
HDDV2B	Class 2b Heavy-Duty Diesel Vehicles (8501-10,000 lbs GVW - includes pickup trucks)	A2230070000
HDDV5	Class 5 Heavy-Duty Diesel Vehicles (16,001-19,500 lbs GVW)	A2230070000
HDDV8A	Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	A2230070000
HDDV8B	Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	A2230070000
MC	Motorcycles	A2201080000

Emission Factors - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Emission Factors for Calendar Year 2015

Vehicle Class	Model Year	Emission Factors in grams per Mile ^a								
		PM ₁₀	PM _{2.5}	CO	NO _x	NO _x	NOCs	CO ₂	Fugitive PM ₁₀	Fugitive PM _{2.5}
HDDVSA*	2005	0.2	0.19	2.8	5.47	0.01	0.48	1544.1	0.05	0.01
HDDVSB**	2005	0.2	0.19	3.33	6.23	0.02	0.58	1615.2	0.05	0.01

* Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8a

**Low Altitude Emission Factors for Heavy Duty Diesel Vehicles Class 8b

a) Emission factors from Appendix A of Air Emissions Factor Guide to Air Force Mobile Sources, AFCEE, December 2009

Greenhouse Gas Emission Factors for Calendar Year 2015

Vehicle Class	CH ₄ (g/mile)	N ₂ O (g/mile)
HDDV	0.0051	0.0048

g/mile = grams per mile

CH₄ = Methane; N₂O = Nitrous Oxide

b) Emission Factors from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>).

Emission Calculations - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Miles for Commuter Emissions for 8 week training exercises

Vehicle Class	Speed Miles/hour	Miles/Trip	Total Trips/Day	Hours/Day	Total Days	Total Miles
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)		40	24		56	53,760
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	55			48	2,375	6,270

Criteria and VOC Emissions for Commuters

Vehicle Class	Model Year	Annual Miles	Criteria Pollutant Emissions (tons/year)					
			PM ₁₀	PM _{2.5}	CO	NOx	SOx	VOCs
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	2005	53,760	0.015	0.012	0.166	0.324	0.001	0.028
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	2005	6,270	0.002	0.001	0.023	0.043	0.000	0.004
Total			0.017	0.013	0.189	0.367	0.001	0.032

Particulate emissions include exhaust, brake wear, tire wear. Assume paved road.

Greenhouse Gas Emissions for Commuters

Vehicle Class	Annual Miles	CO ₂ (lb/year)	CH ₄ (lb/year)	N ₂ O (lb/year)	CH ₄ GWP Multiplier	N ₂ O GWP Multiplier	CO ₂ Equivalent (lb/year)	CO ₂ Equivalent (metric tonnes/year)
HDDV8A - Class 8a Heavy-Duty Diesel Vehicles (33,001-60,000 lbs GVW)	53,760	183,004.44	0.60	0.57	25	298	183,189.08	83.09
HDDV8B - Class 8b Heavy-Duty Diesel Vehicles (>60,000 lbs GVW)	6,270	22,326.51	0.07	0.07	25	298	22,348.04	10.14
Total		205,330.95	0.67	0.64	---	---	205,537.13	93.23

GWP = Global Warming Potential; 100-year GWP values obtained from EPA's Climate Leadership, Emission Factors for Greenhouse Gas Inventories, Last Modified 4 April 2014 (<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>)

Emission Calculations Method - Fuel Truck and Commuter Vehicle Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Calculation Method: Equation 4-1, AFCEE 2009, Mobile Emissions Guide

$$EP = VMTVehCat * EFPolVehCat * 0.002205$$

Where,

EP = Emissions of each individual pollutant (lb/yr)

VMTVehCat = Annual vehicle miles traveled by each vehicle category (LDGV, LDGT1, LDDV, etc.) (mi/yr)

EFPolVehCat = Emission factor of each pollutant for each vehicle category (g/mi)

0.002205 = Factor for converting grams to pounds (g/lb).

DATA - Fuel Loading Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Given:		Saipan
Total Exercise Days (8 weeks)		56
Initial Fuel Fill Days		2.333333333
Remaining Fuel Fill Days		0
Total # of Fuel Trucks		6
Total Gallons per Fuel Truck		10,000
Trips per day per Fuel Truck		3
1 bbl conversion to gallons		42
Total Fuel (gal) during Initial Fill		420,000
Total Fuel (gal) during Remaining Exercise		0
Total Fuel (gal) during Exercise (8 Weeks)		420,000

Proposed Action Fuel Loading Operations

Location	Description	Fuel Type	Fuel Transferred (gal)	Category
Saipan Airport Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	Loading
Saipan Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	Loading
Saipan Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	Loading

Given:		Tinian North
Total Exercise Days (8 weeks)		56
Initial Fuel Fill Days		2.333333333
Remaining Fuel Fill Days		0
Total # of Fuel Trucks		6
Total Gallons per Fuel Truck		10,000
Trips per day per Fuel Truck		3
1 bbl conversion to gallons		42
Total Fuel (gal) during Initial Fill		420,000
Total Fuel (gal) during Remaining Exercise		0
Total Fuel (gal) during Exercise (8 Weeks)		420,000

Proposed Action Fuel Loading Operations

Location	Description	Fuel Type	Fuel Transferred (gal)	Category
Tinian South Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	Loading
Tinian Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	Loading
Tinian Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	Loading

Emission Factors - Fuel Loading Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

JP-8 emission factors (lb/Mgal)	Dispensing	Loading
	Splash	Bottom fill
Molecular Weight =	130	0.020
True Vapor Pressure (psia) =	0.011	
Dispensing Displacement losses =	0.0487	
Spillage =	0.7	
Total =	0.749	

AP-42 Table 7.1-2 dated 11/06
 AP-42 Table 7.1-2 dated 11/06 @ 70F (annual avg.)
 AP-42 Section 5.2 dated 6/08 Equation (1)
 AP-42 Table 5.2-7 dated 6/08

Emission Calculations - Fuel Loading Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Saipan

Location	Description	Fuel Type	Fuel Transferred	Displaced Vapor	Spillage	Total VOC	Total VOC
			(gal)	(lb)	(lb)	(lb)	(tons)
Saipan Airport Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	8.5	0	8.5	0.004
Saipan Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Saipan Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Total			840,000	17	0	16.94	0.01

Tinian

Location	Description	Fuel Type	Fuel Transferred	Displaced Vapor	Spillage	Total VOC	Total VOC
			(gal)	(lb)	(lb)	(lb)	(tons)
Tinian South Flightline	Loading Aircraft from Truck Fill Stands	JP-8	420,000	8.5	0	8.5	0.004
Tinian Seaport, Loading Racks (50,000 bbl tank 1)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Tinian Seaport, Loading Racks (50,000 bbl tank 2)	Loading Refueler Trucks	JP-8	210,000	4.2	0	4.2	0.002
Total			840,000	17	0	16.94	0.01

Maximum Emissions **16.94** **0.01**

Emission Calculations Method - Fuel Loading Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Displacement emissions for Diesel and JP-8 were estimated using Equation (1) from AP-42 Section 5.2, Transportation and Marketing of Petroleum Liquids, dated 6/08

$$L_L = 12.46 \text{ (SPM)/T}$$

Where

L_L = Loading loss in lb/10³ gal

S = Saturation Factor 1.45 for splash loading, 0.6 for bottom loading

M = molecular weight,

T = temperature of bulk liquid (assume average annual ambient temperature)

DATA - Fuel Storage Tank Emissions for Modified Alternative 3b - Implementation Phase (Hybrid Saipan/Tinian South)

Fuel storage tank emissions were estimated using the U.S. EPA TANKS storage tank emissions calculation software (Version 4.0.9d). The emissions calculations algorithms in the TANKS program are based on Chapter 7 of EPA's AP-42. Honolulu, Hawaii was used as a surrogate location for the tanks as meteorological data does not exist in TANKS for CNMI. Jet Kerosene fuel was used as the surrogate for JP-8 in the TANKS model as it is the closest in characteristics to JP-8.

Emission Calculations Summary from TANKS* - Saipan

Tank Type	Throughput (gal.)	Working Loss (lbs)	Breathing Loss (lbs)	VOC Total (lbs)	VOC Total (tons)
Tank 1 (Saipan Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 2 (Saipan Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 3 (Saipan Airport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 4 (Saipan Airport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Total		38.52	2,341.56	2,380.08	1.19

*See the following references for TANKS printouts. (SM12 - TANKS) & (SM13 - TANKS)

Emission Calculations Summary from TANKS* - Tinian North

Tank Type	Throughput (gal.)	Working Loss (lbs)	Breathing Loss (lbs)	VOC Total (lbs)	VOC Total (tons)
Tank 1 (Tinian Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 2 (Tinian Seaport) - 50,000 bbl, cut and cover or AST	210,000	9.63	585.39	595.02	0.30
Tank 3 (Tinian Airport) - 60,000 bbl, cut and cover or AST	210,000	9.63	714.88	724.51	0.36
Tank 4 (Tinian Airport) - 60,000 bbl, cut and cover or AST	210,000	9.63	714.88	724.51	0.36
Total		38.52	2,600.54	2,639.06	1.32

*See the following references for TANKS printouts. (SM12 - TANKS) & (SM13 - TANKS)

Maximum Emissions	2,639.06	1.32
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APPENDIX F

Aeronautical Study in the Commonwealth of the Northern Mariana Islands



Revised Final

Aeronautical Study

in the Commonwealth of the Northern Mariana Islands (CNMI)

Prepared for

Air Force Center for Engineering and the Environment (AFCEE) and Headquarters Pacific Air Forces (PACAF)

Prepared by

HDR, Inc.

Contract No. FA8903-08-D-8771,
Task Order 0159

January
2016



ABBREVIATIONS AND ACRONYMS

AFFF	aqueous film-forming foam	RPZ	Runway Protection Zone
AGL	above ground level	RSA	Runway Safety Area
ALP	Airport Layout Plan	RWY	Runway
AMSL	above mean sea level	SAR	Search and Rescue
ARFF	Aircraft Rescue and Fire Fighting	SMS	Safety Management System
ARTCC	Air Route Traffic Control Center	TERPS	Terminal Instrument Procedures
ATADS	Air Traffic Activity System	TNI	Tinian International Airport
ATC	Air Traffic Control	USAF	United States Air Force
BASH	Bird Aircraft Strike Hazard	USMC	United States Marine Corps
CFR	Code of Federal Regulation	VFR	Visual Flight Rule
CNMI	Commonwealth of the Northern Mariana Islands		
CPA	Commonwealth Port Authority		
CTAF	Common Traffic Advisory Frequency		
DOD	Department of Defense		
DME	Distance Measuring Equipment		
DNE	Does Not Exceed		
EIS	Environmental Impact Statement		
EMI	Electromagnetic Interference		
FAA	Federal Aviation Administration		
FAR	Federal Aviation Regulation		
FIR	Flight Information Region		
FL	Flight Level		
FOD	Foreign Object Debris		
GPS	Global Positioning Satellite		
GSN	Saipan International Airport		
IFR	Instrument Flight Rule		
IR	Instrument Route		
JO	Joint Order		
LMM	Locator Middle Marker		
MOCA	Minimum Obstacle Clearance Altitude		
MSL	mean sea level		
MTR	Military Training Route		
NAVAID	Navigational Aid		
NDB	Non-Directional Beacon		
NM	Nautical Mile		
NNR	No Notice Required		
OFA	Object Free Area		
OFZ	Obstacle Free Zone		
PACAF	Pacific Air Force		
PNR	Possible Notice Required		
RNAV	Area Navigation		

1 Executive Summary

2 This aeronautical study was developed in response to a request from the Federal Aviation
3 Administration (FAA) to the United States Air Force (USAF) Pacific Air Forces (PACAF) as part
4 of the ongoing development of the PACAF Divert Activities and Exercises, Commonwealth of
5 the Northern Mariana Islands (CNMI) planning efforts (Divert). This study, in conjunction with
6 the Divert Activities and Exercises, CNMI Environmental Impact Statement (Divert EIS), will
7 provide PACAF and Headquarters Air Force with the information required to make a decision on
8 where and how to develop and implement the required airfield improvements and activities
9 needed to fulfill the PACAF requirements as stated herein and in the EIS. An aeronautical study
10 is conducted to identify the impact of an aeronautical proposal on the safe and efficient use of
11 airspace, air traffic control, and airfield procedures. This aeronautical study was requested by
12 FAA Honolulu Airports Division Office personnel in response to FAA's role as a cooperating
13 agency of the Divert EIS. This document analyzes the impact to commercial air operations in
14 the vicinity of the CNMI should PACAF develop and implement the required airfield
15 improvements to support divert landings, joint military exercises, and humanitarian assistance
16 and disaster relief efforts at Saipan International Airport (GSN) and/or Tinian International
17 Airport (TNI).

18 This aeronautical study analyzes six areas: Instrument Flight Rules/Visual Flight Rules and
19 Terminal Area; Civilian Air Traffic (Public Use and Charter) Services; Instrument Flight Rules
20 En-route Operations; Federal Aviation Regulation Part 77 Obstacle Evaluations; Saipan and
21 Tinian Pending Proposals; and Air Traffic Control and Airfield Facilities Services Assessment.
22 Each area of study is its own chapter and includes the impacts of the United States Air Force
23 proposals to civilian air traffic. The final chapter provides potential mitigation measures and
24 recommendations to avoid or lessen impacts.

25 Alterations or changes to an airfield, including construction or increased air traffic, could result in
26 impacts to existing air operations. Potential impacts from implementing proposed divert
27 activities and exercises at GSN or TNI include:

- 28 • Aircraft Rescue and Firefighting (ARFF) department line-of-sight obstruction.

29 Impacts could be minimized or negated through cooperation and collaboration with the
30 stakeholder agencies. Under this proposal, agreements should be established with FAA and
31 Commonwealth Port Authority (CPA) officials. The following possible mitigation measures and
32 recommendations would avoid or lessen impacts:

- 33 • Adhere to aircraft number and operations written within the Divert EIS.
- 34 • File FAA Form 7460-1, Notice of Proposed Construction or Alteration for all proposed
35 construction.
- 36 • Install a tower on the ARFF facility, or add surveillance cameras on airfield, or request a
37 waiver for ARFF line-of-sight.;

- 1 • Assist CPA with modifications to the Airport Layout Plan and securing FAA approval
- 2 prior to construction.
- 3 • Assist CPA with a Safety Management System evaluation for each proposed
- 4 construction.

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1 1. Francisco C. Ada/Saipan International
2 Airport (GSN) Existing Environment and
3 Proposed Construction

4 1.1 GSN Existing Conditions

5 GSN is a public airport located on the Island of Saipan within the Commonwealth of the
6 Northern Mariana Islands (CNMI) (see **Figure 1-1**) and is owned and operated by the
7 Commonwealth Port Authority (CPA). Though the islands of Rota, Tinian, and Saipan are all
8 considered immigration ports of entry into the United States, Saipan is considered the gateway
9 to the CNMI because of its infrastructure. GSN is also designated as the commercial aviation
10 divert airfield location for eastbound flights originating in western Asia and for all flights bound
11 for Guam. The GSN main terminal accommodates international passengers with six jetways
12 that lead to immigration and customs processing. There are seven major airlines operating at
13 Saipan International Airport: Delta Airlines, Asiana Airlines, Shanghai Airlines, Sichuan Airlines,
14 China Eastern, United Airlines, and Fly Guam. Saipan International Airport has scheduled
15 flights from cities in Russia, Japan, Korea, China, and Guam with the capability to increase
16 direct flights to the Republic of Palau, the Federated States of Micronesia, Australia, and other
17 oceanic destinations. The commuter terminal at GSN serves as a general aviation terminal and
18 as the terminal for one feeder or air taxi service, Star Marianas. Star Marianas services Tinian
19 and Rota using single-engine aircraft and dual-engine, short take-off aircraft. Artic Circle Air
20 provides charter and cargo between Saipan and Rota (CPA 2005).



21
22 **Figure 1-1. Aerial View of GSN**

1 **Runway (RWY) 07/25.** Saipan has one Instrument Flight Rule (IFR) runway, RWY 07/25 which
2 is surfaced with asphalt. RWY 07/25 is 8,700 feet long and 150 feet wide. RWY 07/25 has four
3 taxiways on which aircraft can transit to and from the parking aprons. RWY 07/25 is also
4 equipped with High Intensity Runway Edge Lights that outline the edges of runways during
5 periods of darkness or restricted visibility conditions. A structure parallel to RWY 07/25,
6 formerly called RWY 06/24 was used as a temporary runway that was 7,001 feet long and 100
7 feet wide but has been turned into a parallel taxiway.

8 RWY 07 has runway end identifier lights, which consists of two lighting units that flash
9 simultaneously. RWY 25 is also equipped with a medium-intensity approach light system, which
10 consists of a combination of threshold lamps, and steady burning light bars and flashers. The
11 medium-intensity approach light system provides visual information to pilots on runway
12 alignment, height perception, role guidance, and horizontal references for Category I Precision
13 Approaches (FAA 2012). RWY 07/25 has a visual approach slope indicator at each runway
14 end, which is a system of lights arranged to provide visual descent guidance information during
15 the approach to a runway (FAA 2012).

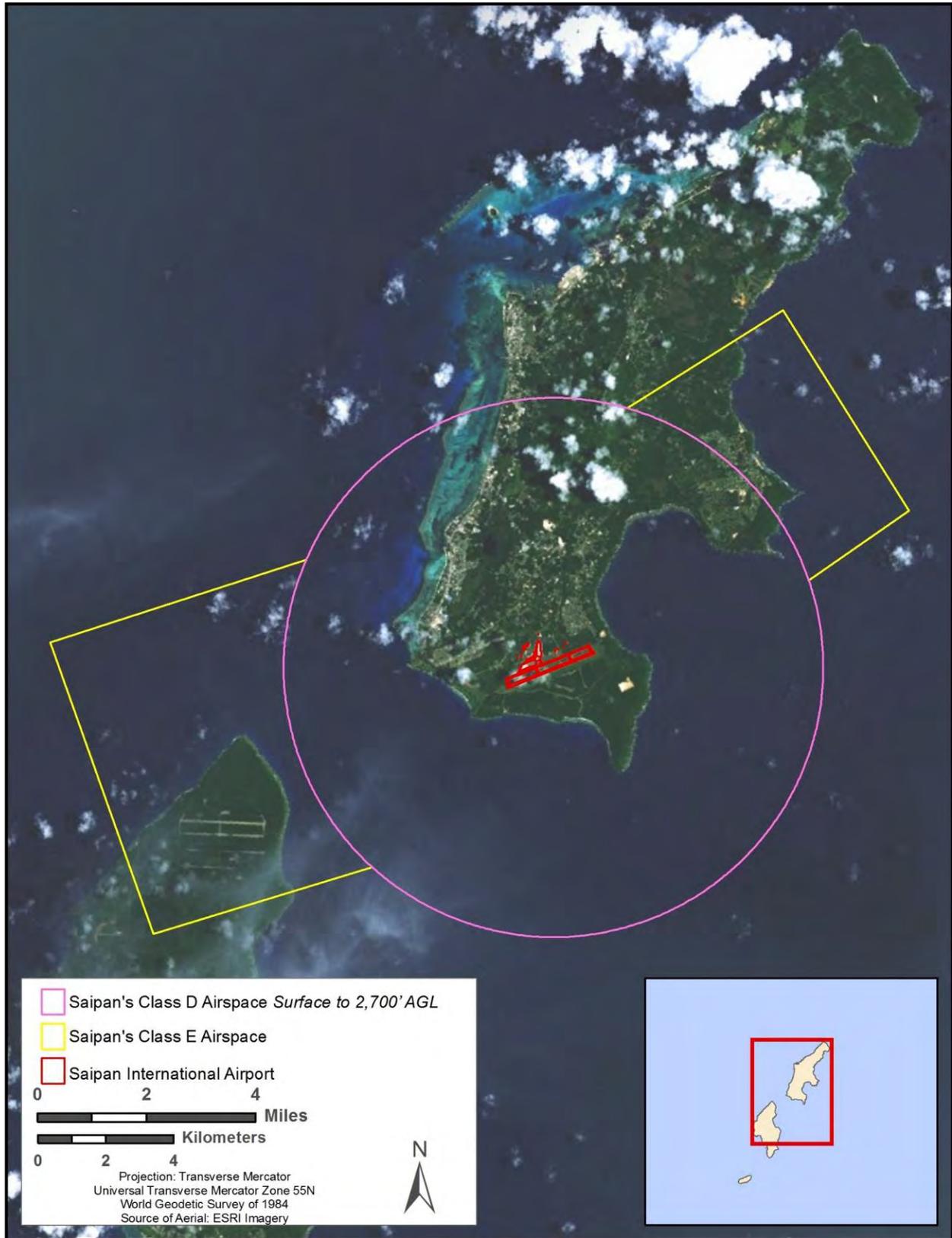
16 **Airfield Obstructions.** There are no obstructions within GSN's approach surfaces. According
17 to Federal Aviation Regulation (FAR) § 77.25(d), the approach surface is longitudinally centered
18 on the extended runway centerline and extending outward and upward from each end of the
19 primary surface. An approach surface is applied to each end of each runway based upon the
20 type of approach available or planned for that runway end.

21 **Hours of Operation.** RWY 07/25 is the primary runway and open 24 hours per day, 7 days per
22 week.

23 **Instrument Flight Rules Capabilities.** There are two navigational aids (NAVAIDS) located on
24 GSN's airfield, a non-directional beacon (NDB) and an instrument landing system. The
25 following instrument approach procedures are published to RWY 07/25: instrument landing
26 system or Localizer (LOC)/Distance Measuring Equipment (DME) RWY 07; Area Navigation
27 (RNAV) (GPS) RWY 07; NDB/DME RWY 07; NDB RWY 07; RNAV (GPS) RWY 25; and
28 NDB/DME RWY 25 (see **Appendix A**).

29 **Aircraft Fueling.** All fueling and defueling of aircraft is conducted from fuel systems and fuel
30 trucks approved by the CPA. Due to 14 Code of Federal Regulations § 139 requirements, only
31 airlines, the fuel system operator, and fixed-base operators are authorized to perform into-plane
32 fueling services. Fueling and refueling operators are responsible for compliance with all Federal
33 Aviation Administration (FAA) codes, regulations and laws associated with the process. GSN
34 provides three types of aviation fuel: Avgas 100 (green), Avgas 100LL (blue), and Jet A-1+.
35 Avgas 100 (green) and 100LL (blue) is gasoline fuel for reciprocating piston engine aircraft.
36 Jet-A-1 is a kerosene grade of fuel suitable for most turbine engine aircraft.

37 **Air Traffic Control (ATC) Services.** FAA operates the ATC tower at GSN. The ATC tower is
38 responsible for the separation and efficient movement of aircraft and vehicles operating on the
39 taxiways and runways of the airport itself, and the aircraft within Saipan's Class D and Class E
40 extension airspace as shown in **Figure 1-2**. Class D Airspace is generally a 5-nautical mile
41 (NM) radius from the airport reference point, surface to 2,500 feet above ground level (AGL).



1

2 Figure 1-2. GSN Class D and E extension Airspace

1 However, Class D airspace is also tailored to meet the needs of the airport. GSN's Class D
2 Airspace encompasses a 4.3-mile radius, surface to 2,700 feet AGL. Class D airspace only
3 surrounds airports that have an operational control tower such as GSN. Class E airspace
4 extends upward from either the surface or a designated altitude to the overlying or adjacent
5 controlled airspace and is used by aircraft transiting to and from the terminal or en-route
6 environment. GSN Class E Airspace extends upward from the surface within a 4.3-mile radius
7 of GSN and within 2.6 miles each side of the Saipan NDB 264 degree bearing, extending from
8 the 4.3-mile radius to 7.4 miles west of the Saipan NDB and within 1.8 mile each side of the
9 Saipan NDB 248 degree radial, extending from the 4.3-mile radius to 7.4 miles west of the
10 Saipan NDB and within 1.8 mile each side of the Saipan NDB 068 degree radial, extending from
11 the 4.3-mile radius to 6.5 miles east of GSN (SERCO 2012). Pilots are required to establish
12 and maintain two-way radio communications with GSN's ATC tower prior to entering their Class
13 D/E airspace.

14 The Island of Saipan is within FAA's Guam Center Air Route Traffic Control Center (ARTCC)
15 Flight Information Region (FIR). Guam ARTCC is responsible for controlling aircraft en route to,
16 transiting within, and arriving at or departing from the airports within their FIR. Guam ARTCC
17 radar coverage and service begins at 3,500 feet above mean sea level (AMSL) above the
18 airport. Guam ARTCC provides approach and departure service for GSN. Between Saipan's
19 Class D Airspace and Guam ARTCC FIR is Class G Airspace. Class G Airspace is uncontrolled
20 airspace.

21 **Commonwealth Port Authority Services.** GSN has an Aircraft Rescue and Firefighting
22 (ARFF) department with approximately 35 personnel as shown in **Figure 1-3**. The department
23 manages two 24-hour shifts with approximately 15 personnel assigned to each shift, and an
24 average of 8 personnel on duty per shift daily. A fire captain is in charge of each shift. The fire
25 department has six vehicles; a Striker 1500, an Oshkosh 1500, an Oshkosh 3000, a Rapid
26 Intervention Vehicle, a Tanker, and a Command Vehicle. Saipan's ARFF possesses a 500,000-
27 gallon water tank on their premises. The CPA Police Department is responsible for airport
28 security.



29
30 **Figure 1-3. GSN Aircraft Rescue and Firefighting Department**

1.2 GSN FAA Runway Clearance Criteria

Safe and efficient operations at an airport require that certain areas on and near the airport are clear of objects or restricted to objects with a certain function, composition, or height. To ensure safe operations, FAA developed four areas or zones for airport runways: the Runway Safety Area (RSA), Obstacle Free Zone (OFZ), Runway Protection Zone (RPZ), and Obstacle Free Area (OFA). The existing and proposed areas and zones are depicted in **Figure 1-4** and the dimensions are provided in **Table 1-1**.

Table 1-1. GSN Clearance Area Dimensions

Zone	Width	Length
RSA	500 feet wide (250 feet from centerline)	Extends 1,000 feet from end of runway
OFZ	400 feet wide (200 feet from centerline)	Extends 200 feet from end of runway
RPZ	400 feet wide (200 feet from centerline)	Starts 200 feet from end of runway and extends 1,700 feet based on CAT C/D 1-mile visibility
OFA	400 feet wide (200 feet from centerline)	Extends 1,000 feet from end of runway

Runway Safety Area (RSA). The RSA is centered on the runway centerline. The runway safety area will be:

- (1) Cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations. Drained by grading or storm sewers to prevent water accumulation
- (2) Capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and firefighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft
- (3) Free of objects, except for objects that need to be located in the RSA because of their function. Objects higher than 3 inches above grade should be constructed, to the extent practicable, on low impact resistant supports (frangible mounted structures) of the lowest practical height with the frangible point no higher than 3 inches above grade. Other objects, such as manholes, should be constructed at grade. In no case should their height exceed 3 inches above grade (FAA 1989).



Figure 1-4. GSN FAA Clearance Zones

1 **Obstacle Free Zone (OFZ).** The OFZ clearing standard precludes taxiing and parked airplanes
2 and object penetrations, except for frangible visual NAVAIDs that need to be located in the OFZ
3 because of their function. The runway OFZ and, when applicable, the precision OFZ, the inner-
4 approach OFZ, and the inner-transitional OFZ comprise the OFZ. The runway OFZ is a defined
5 volume of airspace centered above the runway centerline. The runway OFZ is the airspace
6 above a surface whose elevation at any point is the same as the elevation of the nearest point
7 on the runway centerline. The runway OFZ extends 200 feet beyond each end of the runway.
8 Its width is as follows:

- 9 (1) For runways serving small airplanes exclusively:
- 10 (a) 300 feet for runways with lower than 3/4-statute mile (approach visibility
11 minimums.
- 12 (b) 250 feet for other runways serving small airplanes with approach speeds of 50
13 knots or more.
- 14 (c) 120 feet for other runways serving small airplanes with approach speeds of less
15 than 50 knots.
- 16 (2) For runways serving large airplanes, 400 feet (FAA 1989).

17 **Runway Protection Zone (RPZ).** The RPZ enhances the protection of people and property on
18 the ground. This is achieved through airport owner control over RPZs. Such control includes
19 clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Control
20 is preferably exercised through the acquisition of sufficient property interest in the RPZ.

- 21 (1) RPZ Configuration and Location. The RPZ is trapezoidal in shape and centered above
22 the runway centerline. The central portion and controlled activity area are the two
23 components of the RPZ. The RPZ dimension for a particular runway end is a function of
24 the type of aircraft and approach visibility minimum associated with that runway end.
25 Other than with a special application of declared distances, the RPZ begins 200 feet
26 beyond the end of the area usable for takeoff or landing (FAA 1989).

27 **Object Free Area (OFA).** The runway OFA is centered on the runway centerline. The runway
28 OFA clearing standard requires clearing the OFA of above ground objects protruding above the
29 runway safety area edge elevation. Except where precluded by other clearing standards, it is
30 acceptable to place objects that need to be located in the OFA for air navigation or aircraft
31 ground maneuvering purposes and to taxi and hold aircraft in the OFA. Objects non-essential
32 for air navigation or aircraft ground maneuvering purposes must not to be placed in the OFA.
33 This includes parked airplanes and agricultural operations (FAA 1989).

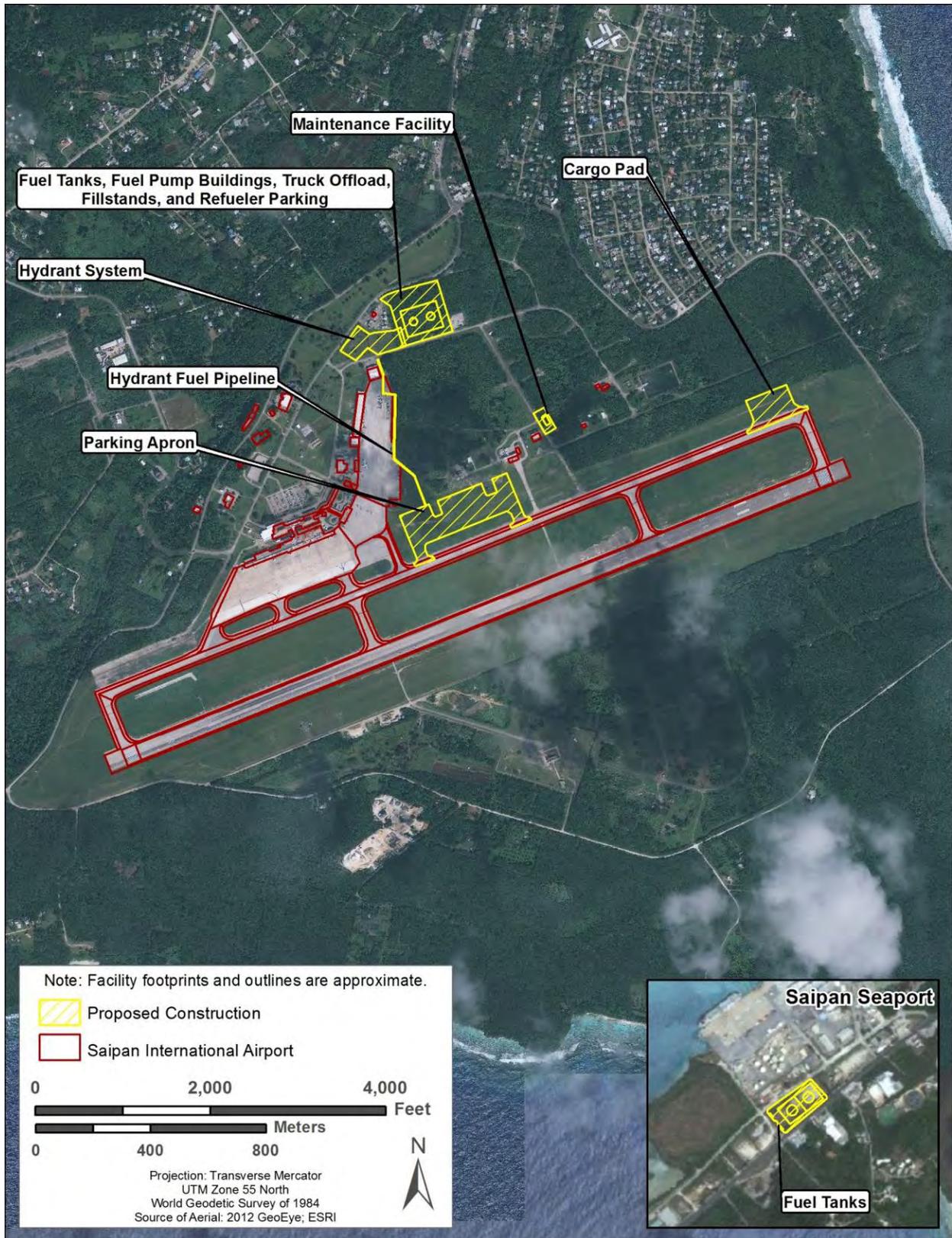
34 The OFA dimensions are based on the category of aircraft which utilize the runway. RWY 07/25
35 OFA dimensions are: 800 feet wide; 400 feet from the runway centerline; and 1,000 feet long
36 from the end of the runway as shown in **Figure 1-4**.

1 1.3 GSN Proposed Construction

2 Pacific Air Force's (PACAF's) proposed construction is based on accommodating a combination
3 of joint military cargo, tanker, or similar aircraft and associated support personnel. In order to
4 accommodate these aircraft and achieve the necessary divert capabilities, supporting
5 infrastructure would be needed to meet airfield operational requirements. There are two
6 proposed alternatives for construction on Saipan: Alternative 1 (Saipan Alternative) and
7 Alternative 3 (Saipan Hybrid Alternative).

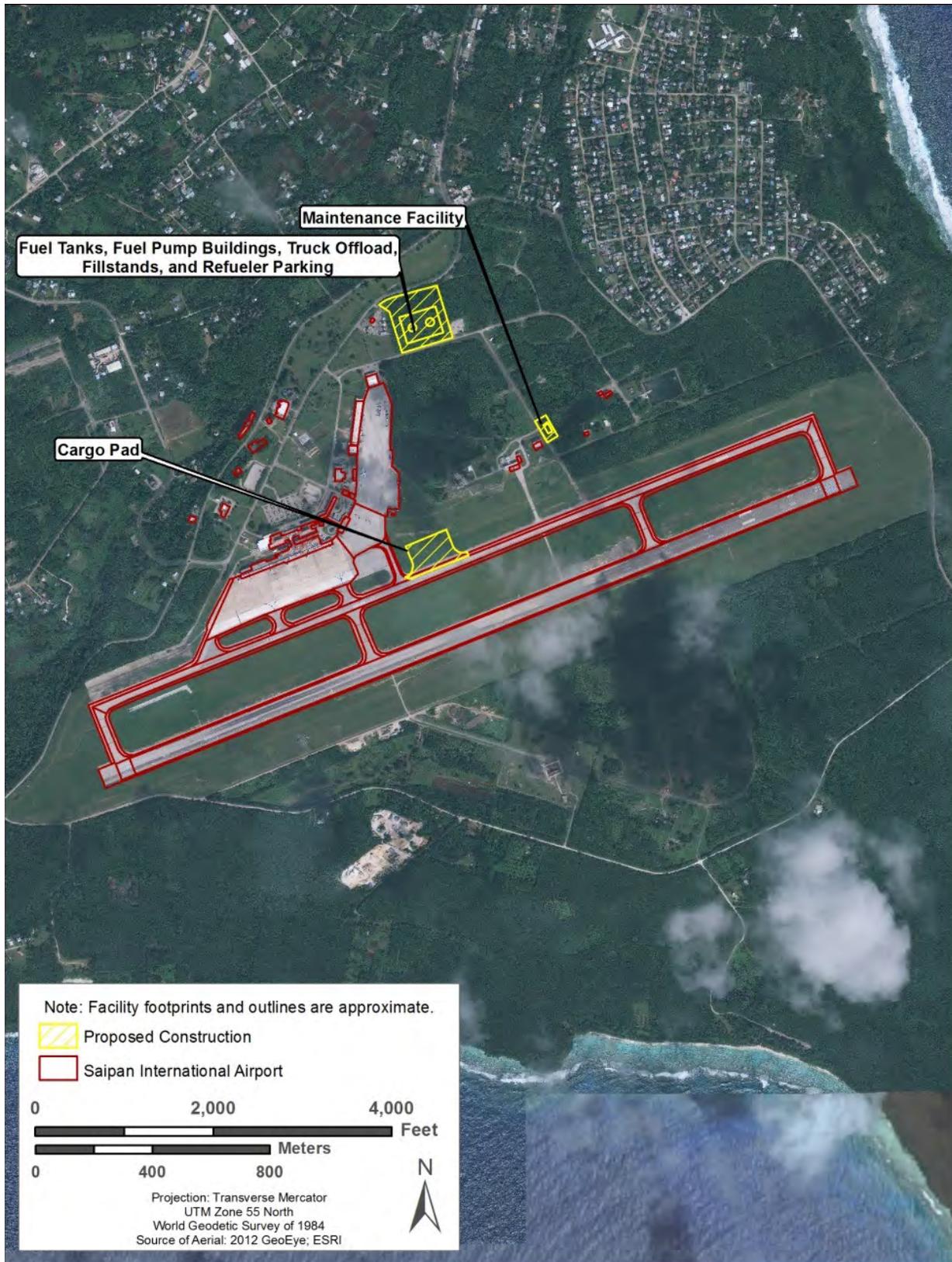
8 Proposed infrastructure at GSN under Alternative 1 includes one parking apron, one cargo pad,
9 one maintenance facility, fuel tanks and supporting infrastructure, and a fuel hydrant system
10 including a hydrant fuel pipeline from the hydrant system to the parking apron. The parking
11 apron would be able to accommodate six KC-135 and the cargo pad could accommodate up to
12 three KC-135. Alternative 1 at GSN is shown in **Figure 1-5**.

13 Proposed infrastructure at GSN under Alternative 3 includes one cargo pad, one maintenance
14 facility, and fuel tanks and supporting infrastructure. The United States Air Force (USAF) would
15 not build a parking apron, a fuel hydrant system, or hydrant fuel pipeline at GSN under
16 Alternative 3. Alternative 3 at GSN is shown in **Figure 1-6**. Alternative 3 also includes
17 construction at the Tinian International Airport (TNI) and is addressed in **Section 2.3**.



1

2 Figure 1-5. Alternative 1 GSN Proposed Construction



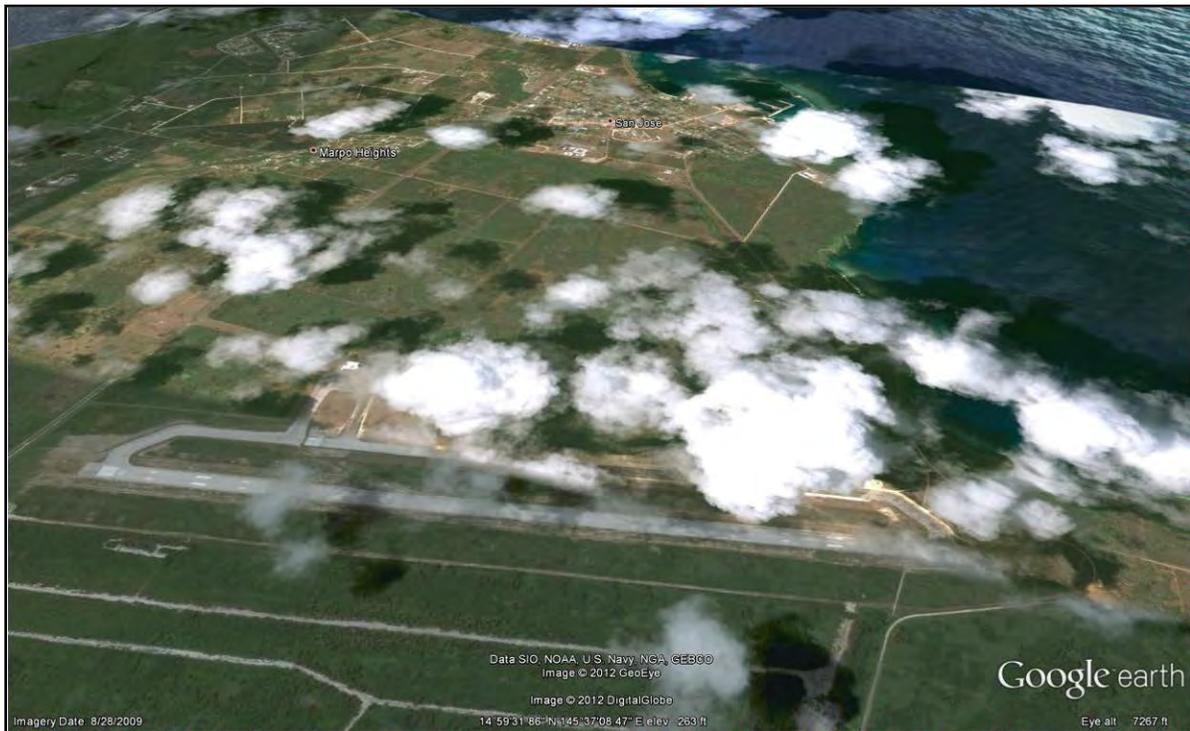
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2 Figure 1-6. Alternative 3 GSN Proposed Construction

2. Tinian International Airport (TNI) Existing Environment and Proposed Construction

2.1 TNI Existing Conditions

TNI, as shown in **Figure 2-1**, is primarily used for inter-island passenger traffic between the islands of Saipan, Rota, and Guam. The airport is equipped for night operation, and are chartered night flights from Saipan and Guam primarily service the Tinian Dynasty hotel and casino. Charter flights are available through Star Marianas.



8
9 **Figure 2-1. Aerial View of TNI**

10 **RWY 08/26.** TNI has one runway, RWY 08/26, which is 8,600 feet long and 150 feet wide.
11 RWY 08/26 has two taxiways, one at each end of the runway, in which aircraft can transit to and
12 from the parking aprons. RWY 08/26 is equipped with medium-intensity runway lights, which
13 are used to outline the edges of runways during periods of darkness or restricted visibility
14 conditions. TNI also uses a precision approach path indicator system on each runway end to
15 provide visual descent information to pilots. This system is similar to the visual approach slope
16 indicator but is installed in a single row of either two or four light units. In addition, TNI uses a
17 runway end identifier lights on each runway end, which consists of two light units flashing
18 simultaneously (FAA 2012).

19 **Airfield Obstructions.** There is a 30-foot hill at the west end of the CPA property
20 approximately 1,300 feet from the end of RWY 08 within the approach surface. Broadway
21 Avenue, the main north-south thoroughfare on Tinian, is at the east end of CPA property

1 approximately 1,500 feet from the end of the runway. According to FAR Part 77.25(d), the
2 approach surface is longitudinally centered on the extended runway centerline and extends
3 outward and upward from each end of the primary surface. The approach surface is applied to
4 each end of each runway based upon the type of approach available or planned for that runway
5 end. There are no existing obstructions within approach surfaces with the existing conditions at
6 TNI.

7 **Hours of Operations.** RWY 08/26 is open between the hours of 0600–2000 Chamorro
8 Standard Time. Aircraft operating outside of the designated hours require prior permission from
9 the CPA.

10 **Instrument Flight Rules Capabilities.** Navigation guidance approaching TNI is based on
11 GSN's NDB. The following instrument approach procedures are published to RWY 08/26: Area
12 navigation (RNAV) (GPS) RWY 08; 10 RNAV (GPS) RWY 26; and NDB/DME A (see **Appendix**
13 **B**).

14 **Air Traffic Control Services.** The airspace surrounding TNI is designated Class G Airspace.
15 Class G Airspace is uncontrolled airspace when the weather is at or above visual
16 meteorological conditions. It becomes controlled airspace when the weather is below visual
17 meteorological conditions to protect aircraft using the instrument approaches to the airport. TNI
18 operates without an ATC tower, Class D Airspace, or ground control. Aircraft provide courtesy
19 notification to CPA operations and ATC in Saipan for approach and departure clearance. TNI is
20 considered an uncontrolled or non-towered airfield and pilots are responsible for their own
21 separation for takeoffs and landings. Uncontrolled airports use a universal communication
22 system or Common Traffic Advisory Frequency (CTAF) that pilots can use to transmit their
23 intentions to other aircraft using the airport (FAA 2010). Like Saipan, the Island of Tinian is
24 within FAA's Guam ARTCC FIR. Guam ARTCC is responsible for controlling aircraft operating
25 under IFR en-route to, transiting within, and arriving or departing airports within their FIR. FIR is
26 a region of airspace with specific dimensions, in which air traffic control and flight information
27 services are provided. Guam ARTCC radar coverage and service begins 3,500 feet AMSL
28 above the Island of Tinian. Air taxi service to and from Saipan and Tinian generally remain
29 under 3,000 feet.

30 **Commonwealth Port Authority Services.** The TNI ARFF department consists of
31 approximately 10 personnel (see **Figure 2-2**). Personnel have dual roles as ARFF and port
32 police officers. The ARFF operations run three 8-hour shifts per day with an average of two to
33 three personnel on duty per shift daily. A fire and police captain runs the daily operations for
34 both law enforcement and ARFF protection for the airport. The fire department has three
35 vehicles: an Oshkosh 1500, a Striker 1500, and a HAZMAT full-size pickup. Tinian's ARFF
36 possesses a 60,000-gallon reserve water tank on their premises. For military operations, the
37 deploying unit is required to provide their own expeditionary airfield support, including bulk water
38 carriers and tankers and crash-and-rescue equipment.



1

2 **Figure 2-2. TNI Aircraft Rescue and Firefighting Department**

3 **2.2 TNI FAA Runway Clearance Criteria.**

4 Safe and efficient operations at an airport require that certain areas on and near the airport are
5 clear of objects or restricted to objects with a certain function, composition, or height. The FAA
6 has developed four areas and zones for airport runways to ensure safe operations: RSA, OFZ,
7 RPZ, and OFA. The existing and proposed areas and zones at TNI are depicted in **Figure 2-3**
8 and the dimensions are provided in **Table 2-1**.

9 **Runway Safety Area (RSA).** The RSA is centered on the runway centerline. The RSA will be:

- 10 (1) Cleared and graded and have no potentially hazardous ruts, humps, depressions, or
11 other surface variations
- 12 (2) Drained by grading or storm sewers to prevent water accumulation
- 13 (3) Capable, under dry conditions, of supporting snow removal equipment, aircraft rescue
14 and firefighting equipment, and the occasional passage of aircraft without causing
15 structural damage to the aircraft

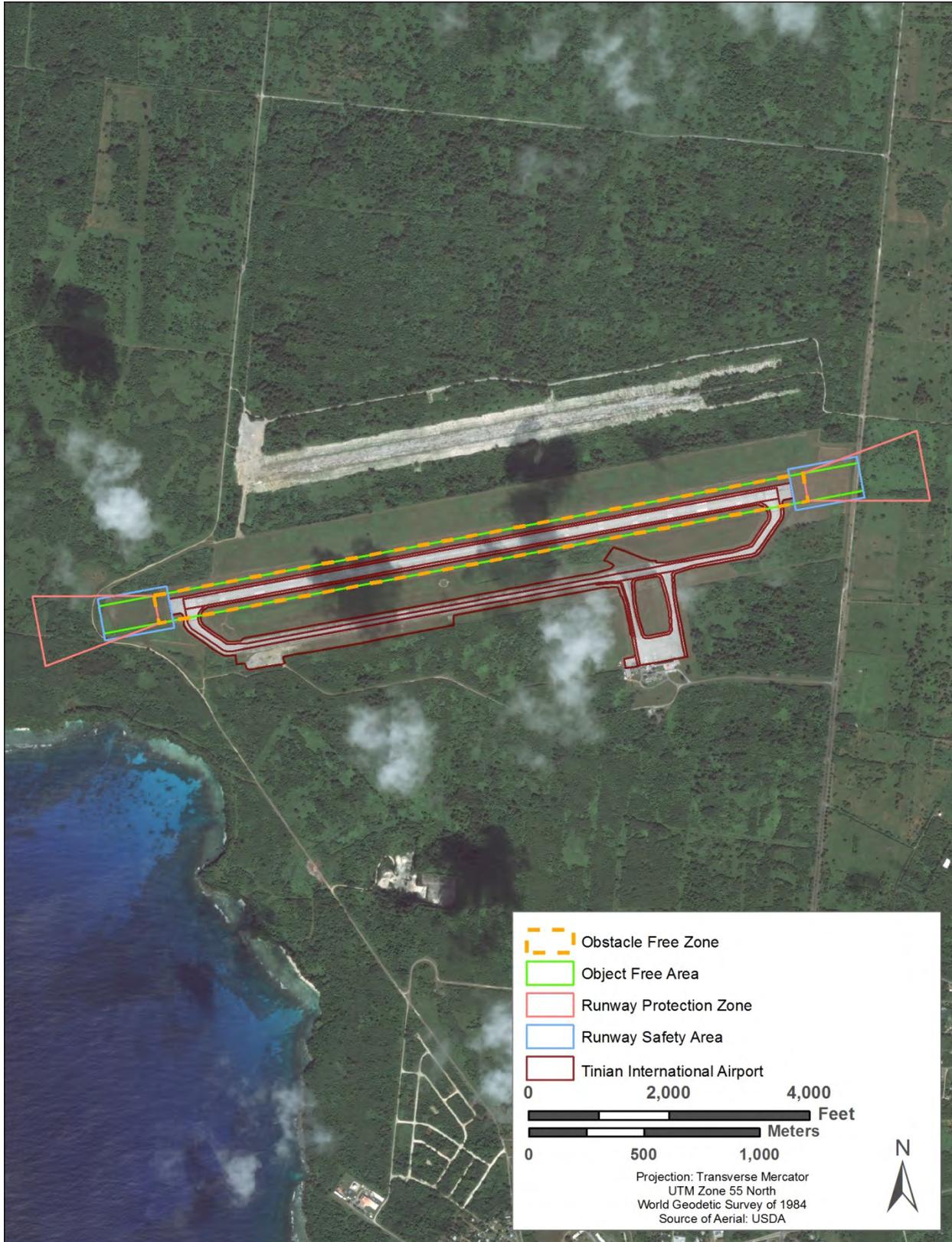


Figure 2-3. TNI FAA Clearance Zones

1 **Table 2-1. TNI Clearance Area Dimensions**

Zone	Width	Length
RSA	500 feet wide (250 feet from centerline)	Extends 1,000 feet from end of runway
OFZ	400 feet wide (200 feet from centerline)	Extends 200 feet from end of runway
RPZ	400 feet wide (200 feet from centerline)	Starts 200 feet from end of runway and extends 1,700 feet based on CAT C/D 1-mile visibility
OFA	400 feet wide (200 feet from centerline)	Extends 1,000 feet from end of runway

2 (4) Free of objects, except for objects that need to be located in the RSA because of their
 3 function. Objects higher than 3 inches above grade should be constructed, to the extent
 4 practicable, on low impact resistant supports (frangible mounted structures) of the lowest
 5 practical height with the frangible point no higher than 3 inches above grade. Other
 6 objects, such as manholes, should be constructed at grade. In no case should their
 7 height exceed 3 inches above grade (FAA 1989).

8 **Obstacle Free Zone (OFZ).** The OFZ clearing standard precludes taxiing and parked airplanes
 9 and object penetrations, except for frangible visual NAVAIDs that need to be located in the OFZ
 10 because of their function. The runway OFZ and, when applicable, the precision OFZ, the inner-
 11 approach OFZ, and the inner-transitional OFZ comprise all aspects of the total OFZ. The
 12 runway OFZ is a defined volume of airspace centered above the runway centerline. The
 13 runway OFZ is the airspace above a surface whose elevation at any point is the same as the
 14 elevation of the nearest point on the runway centerline. The runway OFZ extends 200 feet
 15 beyond each end of the runway. Its width is as follows:

- 16 (1) For runways serving small airplanes exclusively:
- 17 a. 300 feet for runways with lower than 3/4-statute mile approach visibility
 - 18 minimums.
 - 19 b. 250 feet for other runways serving small airplanes with approach speeds of 50
 - 20 knots or more.
 - 21 c. 120 feet for other runways serving small airplanes with approach speeds of less
 - 22 than 50 knots.

23 (2) For runways serving large airplanes, 400 feet. [FAA 1989]

24 **Runway Protection Zone (RPZ).** The RPZ enhances the protection of people and property on
 25 the ground. This is achieved through airport owner control over RPZs. Such control includes
 26 clearing RPZ areas (and maintaining them) of incompatible objects and activities. Control is
 27 preferably exercised through the acquisition of sufficient property interest in the RPZ.

1 (1) RPZ Configuration and Location. The RPZ is trapezoidal in shape and centered above
2 the extended runway centerline. The central portion and controlled activity area are the
3 two components of the RPZ. The RPZ dimension for a particular runway end is a
4 function of the type of aircraft and approach visibility minimum associated with that
5 runway end. Other than with a special application of declared distances, the RPZ begins
6 200 feet beyond the end of the area usable for takeoff or landing (FAA 1989).

7 **Object Free Area.** The runway OFA is centered on the runway centerline. The runway OFA
8 clearing standard requires clearing the OFA of above ground objects protruding above the
9 runway safety area edge elevation. Except where precluded by other clearing standards, it is
10 acceptable to place objects that need to be located in the OFA for air navigation or aircraft
11 ground maneuvering purposes and to taxi and hold aircraft in the OFA. Objects non-essential
12 for air navigation or aircraft ground maneuvering purposes must not be placed in the OFA.
13 This includes parked airplanes and agricultural operations (FAA 1989).

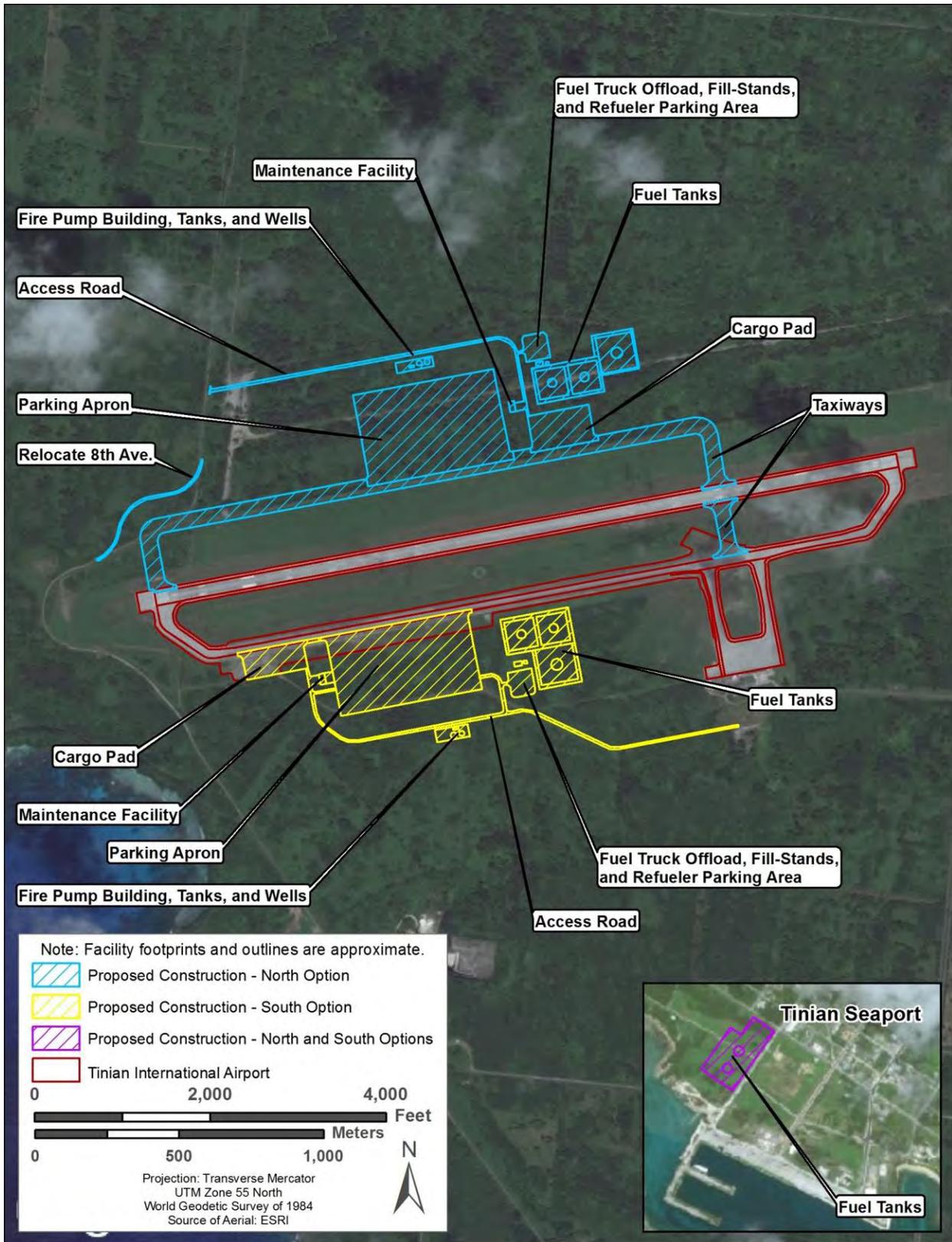
14 OFA dimensions are based on the category of aircraft which utilize the runway. RWY 08/26
15 OFA dimensions are: 800 feet wide; 400 feet from the runway centerline; and 1,000 feet long
16 from the end of the runway as shown in **Figure 2-4**.

17 2.3 TNI Proposed Construction

18 PACAF's proposed construction is based on accommodating a combination of joint military
19 cargo, tanker, or similar aircraft and associated support personnel. In order to accommodate
20 these aircraft and achieve the necessary divert capabilities, supporting infrastructure would be
21 needed to meet airfield operational requirements. There are two proposed alternatives for
22 construction on Tinian: Alternative 2 (Tinian Alternative) and Alternative 3 (Tinian Hybrid
23 Alternative).

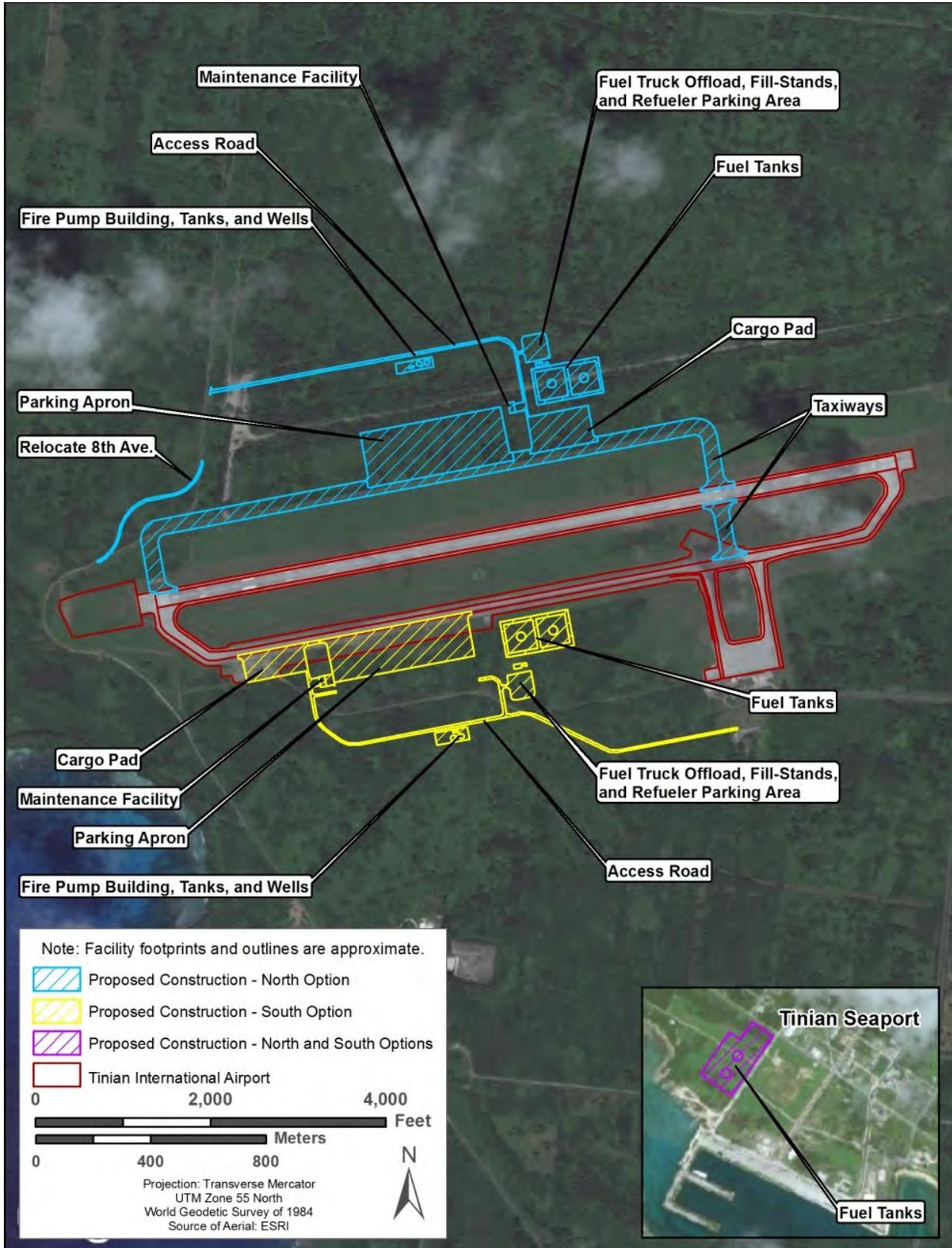
24 Proposed infrastructure at TNI under Alternative 2 could be constructed on the north side of the
25 airport (North Option) or the south side of the airport (South Option). Construction on both the
26 north and south sides would include one parking apron, one cargo pad, one maintenance
27 facility, fuel tanks and supporting infrastructure, a fuel hydrant system, a fire suppression
28 system (containing water only), and an access road. On the north side of the runway, USAF
29 would also build taxiways to connect the cargo pad and parking apron to the runway and reroute
30 8th Avenue on the western side of the runway to avoid the proposed taxiway. The Alternative 2
31 North and South Options on TNI are shown in **Figure 2-4**.

32 Proposed infrastructure at TNI under Alternative 3 could be constructed on the north side of the
33 airport (North Option) or the south side of the airport (South Option). Construction on both the
34 north and south sides would include one parking apron, one cargo pad, one maintenance
35 facility, fuel tanks and supporting infrastructure, a fuel hydrant system, a fire suppression
36 system, and an access road. The parking apron and fuel storage capacity on TNI under
37 Alternative 3 would be smaller than that proposed under Alternative 2. On the north side of the
38 runway, USAF would also build a taxiway to connect the cargo pad and parking apron to the
39 runway and reroute 8th Avenue on the western side of the runway. Alternative 3 at TNI is
40 shown in **Figure 2-5**. Alternative 3 also includes construction at the GSN and is addressed in
41 **Section 1.3**.



1
 2 **Figure 2-4. Alternative 2 TNI Proposed Construction**

1



2

3 Figure 2-5. Alternative 3 TNI Proposed Construction

1 3. Impacts to GSN/TNI IFR, VFR, and Airport 2 Terminal Area

3 3.1 Background

4 This chapter analyzes the potential impact on IFR, VFR, and the airport's terminal area at GSN
5 or TNI from PACAF's proposed construction and implementation of divert activities and
6 exercises. The terminal area includes the airspace and airfield immediately surrounding the
7 airport in which ATC service or airport ground traffic services are provided.

8 3.2 GSN Arrival and Departure Flows

9 Potential minor impacts could occur on arrival and departure flows at GSN from the proposed
10 divert activities and exercises.

11 GSN possesses an FAA-certified ATC tower which manages their Class D airspace.
12 Department of Defense (DOD) aircraft will not have priority over current civilian aircraft
13 operating within Saipan's Class D airspace. Per FAA Joint Order (JO) 7110.65T, Air Traffic
14 Control paragraph 2-1-4, Operational Priority, ATC service should be provided to aircraft on a
15 "first come, first served" basis as circumstances permit. However, wake turbulence separation
16 standards may cause minor delays to small aircraft. Wake turbulence is the phenomena
17 resulting from the passage of an aircraft through the atmosphere. The term includes vortices,
18 thrust stream turbulence, jet blast, jet wash, propeller wash, and rotor wash both on the ground
19 and in the air (FAA JO 2010). For aircraft departures, FAA JO 7110.65T paragraph 2-1-19
20 states "Apply wake turbulence procedures to aircraft operating behind heavy jets/B757s and,
21 where indicated, to small aircraft behind large aircraft. The separation minima shall continue to
22 touchdown for all IFR aircraft not making a visual approach or maintaining visual separation."
23 Small commuter aircraft may experience minor delays due to wake turbulence criteria when
24 arriving or departing behind baseline KC-135 aircraft.

25 3.3 GSN Airport Terminal Area

26 Potential impacts could occur to the GSN terminal area from the proposed divert activities and
27 exercises.

28 The construction of the proposed aircraft parking apron could impede the GSN ARFF line-of-
29 sight to the runway. Per FAA AC 150/5210-15A, future expansions should not attempt to limit or
30 reduce ARFF airport surveillance. KC-135s parked on the proposed apron could limit GSN
31 ARFF line-of-sight to the approach end of RWY 25.

32 3.4 GSN Limiting Factors

33 Several limiting factors would need to be addressed prior to the commencement of construction
34 at GSN.

1 **ATC Services.** The airfield does possess ATC services. The primary purpose of ATC is to
2 separate aircraft to prevent collisions, organize and expedite the flow of traffic, and provide
3 information and other support for pilots. The contracted ATC tower only possesses five air
4 traffic controllers and their schedules are arranged to ensure at least two air traffic controllers
5 are on duty during their peak air traffic hours.

6 **Bird Aircraft Strike Hazard (BASH) Program.** GSN Airport Authority has the civilian
7 equivalent of a BASH program however numerous birds (black noddy) were located on or near
8 the runways during a site visit in June 2012. CPA airport personnel stated the bird population
9 on or near the airfield increases from October to January. BASH information is located in
10 PACAF's Divert EIS Chapter 3, paragraph 3.3.2.1.

11 **Runway Sweeper Truck.** The sweeper truck has been inoperable for an extended period due
12 to the lack of parts to repair the truck. The sweeper truck gives airfield personnel the ability to
13 collect foreign object debris (FOD). FOD is defined as any foreign object external to the aircraft
14 that can cause damage. Examples of FOD include nuts, bolts, misplaced tools, sand, rocks,
15 asphalt chunks, birds, snakes, and rodents. However, Saipan CPA personnel personally check
16 the runway three times a day during each shift change for FOD.

17 3.5 TNI Arrival and Departure Flows

18 Potential minor impacts due to wake turbulence could occur on arrival and departure flows at
19 TNI from proposed divert activities and exercises under the North and South Options.
20 Construction and use of the taxiways proposed under the North Option would have no impact
21 on the aircraft arrivals and departures at TNI.

22 Aircraft arrivals and departures at TNI occur on a first come, first served basis. Pilots notify
23 each other of intentions via the CTAF. A CTAF is employed at many airports where there is no
24 control tower present. A CTAF uses a single communications frequency where aircraft make
25 announcements of their intentions.

26 Even with first come, first serve procedures there could be minor delays due to wake
27 turbulence. Wake turbulence is the phenomena resulting from the passage of an aircraft
28 through the atmosphere. The term includes vortices, thrust stream turbulence, jet blast, jet
29 wash, propeller wash, and rotor wash both on the ground and in the air (FAA JO 2010). Small
30 commuter aircraft could experience minor delays due to wake turbulence criteria when arriving
31 or departing behind baseline KC-135 aircraft.

32 3.6 TNI Limiting Factors

33 Several limiting factors that need to be addressed prior to the commencement of construction at
34 TNI. The TNI ARFF is rated Index A and has 60,000 gallons of water available. It does not
35 meet USAF requirements for the proposed divert activities and exercises. PACAF's proposal
36 would require an "ARFF Index D" to support their proposed operations in accordance with FAR
37 Part 139 Section 137 Aircraft Rescue and Firefighting: Equipment and Agents. USAF proposes
38 to install a fire suppression system and supporting wells at TNI to support proposed exercises.

1 However, until the system is operational, current TNI ARFF capabilities would be considered a
2 limiting factor. Unless otherwise authorized by the Administrator, the following rescue and
3 firefighting equipment and agents are the minimum required for the each Index:

4 (a) *Index A.* One vehicle carrying at least:

5 (1) 500 pounds of sodium-based dry chemical, halon 1211, or clean agent; or

6 (2) 450 pounds of potassium-based dry chemical and water with a
7 commensurate quantity of aqueous film-forming foam (AFFF) to total 100 gallons
8 for simultaneous dry chemical and AFFF application.

9 (b) *Index B.* Either of the following:

10 (1) One vehicle carrying at least 500 pounds of sodium-based dry chemical,
11 halon 1211, or clean agent and 1,500 gallons of water and the commensurate
12 quantity of AFFF for foam production.

13 (2) Two vehicles:

14 (i) One vehicle carrying the extinguishing agents as specified in
15 paragraphs (a)(1) or (a)(2) of this section; and

16 (ii) One vehicle carrying an amount of water and the commensurate
17 quantity of AFFF so the total quantity of water for foam production carried
18 by both vehicles is at least 1,500 gallons.

19 (c) *Index C.* Either of the following:

20 (1) Three vehicles:

21 (i) One vehicle carrying the extinguishing agents as specified in
22 paragraph (a)(1) or (a)(2) of this section; and

23 (ii) Two vehicles carrying an amount of water and the commensurate
24 quantity of AFFF so the total quantity of water for foam production carried
25 by all three vehicles is at least 3,000 gallons.

26 (2) Two vehicles:

27 (i) One vehicle carrying the extinguishing agents as specified in
28 paragraph (b)(1) of this section; and

29 (ii) One vehicle carrying water and the commensurate quantity of AFFF
30 so the total quantity of water for foam production carried by both vehicles
31 is at least 3,000 gallons.

32 (d) *Index D.* Three vehicles:

33 (1) One vehicle carrying the extinguishing agents as specified in paragraphs
34 (a)(1) or (a)(2) of this section; and

1 (2) Two vehicles carrying an amount of water and the commensurate quantity of
2 AFFF so the total quantity of water for foam production carried by all three
3 vehicles is at least 4,000 gallons.

4 (e) *Index E.* Three vehicles:

5 (1) One vehicle carrying the extinguishing agents as specified in paragraphs
6 (a)(1) or (a)(2) of this section; and

7 (2) Two vehicles carrying an amount of water and the commensurate quantity of
8 AFFF so the total quantity of water for foam production carried by all three
9 vehicles is at least 6,000 gallons.

10 **ATC Services.** The airfield does not possess ATC services. The primary purpose of ATC is to
11 separate aircraft to prevent collisions, to organize and expedite the flow of traffic, and to provide
12 information and other support for pilots. USAF could install a mobile ATC tower at Tinian to
13 support proposed exercises.

14 **NAVAIDs.** The airfield does not possess any NAVAIDS. A NAVAID is an electronic device
15 which provides point-to-point guidance information or position data to aircrafts.

16 **BASH Program.** Tinian CPA possesses the civilian equivalent of a BASH program; however,
17 numerous birds were located on or near the runways during a site visit in June 2012.
18 Additionally, the landscaping equipment was inoperative and had been inoperative for over a
19 month due to a lack of parts. Maintaining the grass height is a viable part of all BASH
20 programs. BASH information is located in PACAF's Divert EIS Chapter 3, paragraph 3.3.2.2.

21 **Runway Sweeper Truck.** The sweeper truck has been inoperable for an extended period due
22 to the lack of parts to repair. The sweeper truck gives airfield personnel the ability collect FOD.
23 FOD is defined as any foreign object external to the aircraft that can cause damage. Examples
24 of FOD include nuts, bolts, misplaced tools, sand, rocks, asphalt chunks, birds, snakes, and
25 rodents. However, Tinian CPA personnel personally check the runway twice a day for FOD.

26 3.7 Aircraft Noise

27 Aircraft noise is noise pollution produced by any aircraft or its components, during various
28 phases of a flight: on the ground while parked; while taxiing; on run-up from propeller and jet
29 exhaust; during takeoff; over-flying while en route; or during landing. FAA Order 1050.1f states,
30 "For aviation noise analyses, the FAA has determined that the cumulative noise energy
31 exposure of individuals to noise resulting from aviation activities must be established in
32 terms of Yearly Day Night Average Sound Level, the FAA's primary noise metric." Aircraft
33 noise analyses in terms of Yearly Day Night Average Sound Level is located in PACAF's
34 Divert EIS Section 3.1 and 4.1.

35

1 3.8 Impacts to IFR, VFR, and Terminal Area

2 Potential impacts could occur on the GSN and TNI IFR, VFR and Terminal Area if either airport
3 is selected for the proposed divert activities and exercises. Impacts include:

- 4 • **ARFF Line-of-Sight.** Per FAA AC 150/5210-15A, future expansions should not attempt
5 to limit or reduce ARFF airport surveillance. KC-135s parked on the proposed apron
6 could limit ARFF line-of-sight to the approach end of the runways.
- 7 ○ **GSN:** The proposed parking apron could impede line-of-sight to the approach
8 end of RWY 25.

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4. Civilian Air Traffic (Public Use and Charter) Services

4.1 Background

This chapter analyzes the potential impact of PACAF’s proposed divert activities and exercises at GSN or TNI on civilian air traffic public use and charter services. Public use aircraft refers to an aircraft operated by or on behalf of the United States government, a state, the District of Columbia, or a territory or possession of the United States. Charter aircraft refers to a company or individually owned aircraft that leases seats or whole aircraft to another individual or group for transportation. Commercial air carriers are certificated in accordance with FAR Part 121 or 127 to conduct scheduled services on specified routes. Commercial air carriers may also provide non-scheduled or charter services as a secondary operation.

4.2 GSN Air Traffic Activity

The air traffic activity below is based on information derived from the FAA Air Traffic Activity System (ATADS). Because TNI does not possess an FAA facility on its airfield, the air traffic activity is not included within ATADS. **Table 4-1** shows the 2011 ATADS information for GSN.

Table 4-1. GSN ATADs: Standard Report from January through December 2014 (FAA 2015)

Itinerant Air Carrier	Itinerant Air Taxi	Itinerant General Aviation	Itinerant Military	Local Civil	Local Military	Total Operations
5,095	37,984	26,540	324	18	17	69,978

4.3 GSN and TNI Airlines

There are six airlines that utilize GSN and TNI daily transiting personnel and cargo:

- *Artic Circle Air (GSN)*. Artic Circle Air is located on Saipan and provides charter and cargo between Saipan and Rota.
- *Asiana Airlines (GSN)*. Headquartered in Seoul, South Korea, Asiana Airlines is the second largest major airline in South Korea. It has 67 planes, traveling to 14 domestic and 45 international cities.
- *Cape Air (GSN)*. Cape Air is headquartered in Barnstable, Massachusetts. They have scheduled services in Micronesia, the Northeast United States, Florida, the Mid-Atlantic United States, the Midwest United States, and the Caribbean. Flights in Micronesia are accomplished through a joint venture with United Airlines. In 2004, Cape Air began service in Micronesia and added ATR 42s to their fleet. These aircraft seat 46 passengers and serve routes between Guam, Rota and Saipan.

- 1 • *Delta Airlines (GSN)*. Delta Airlines serves more than 160 million customers each year.
2 Headquartered in Atlanta, Georgia, Delta employs more than 80,000 employees
3 worldwide and operates a fleet of more than 700 aircraft.
- 4 • *Sichuan Airlines (GSN)*. Sichuan Airlines is an airline based in Chengdu, Sichuan in the
5 People's Republic of China. Sichuan Airlines operates over 130 flights daily connecting
6 over 90 destinations all over the world.
- 7 • *Star Marianas (GSN and TNI)*. Star Marianas is a Tinian-based airline which operates
8 scheduled passenger and cargo services between Saipan and Tinian. Star Marianas
9 utilizes Piper Cherokee aircraft between Saipan and Tinian. They also provide sight-
10 seeing tours from Saipan.

11 4.4 Aircraft Priorities

12 DOD aircraft would not have priority over current aircraft operating from GSN and TNI. FAA JO
13 7110.65T, Air Traffic Control paragraph 2-1-4, Operational Priority states that air traffic control
14 will provide service to aircraft on a first come, first served basis as circumstances permit,
15 although certain circumstances may apply which will alter priority. These include the following
16 situations:

- 17 a. An aircraft in distress has the right of way over all other air traffic.
- 18 b. Give priority to civilian air ambulance flights. Air carrier/taxi usage of the "LIFEGUARD"
19 call sign, indicates that operational priority is requested. When verbally requested,
20 provide priority to military air evacuation flights and scheduled air carrier/air taxi flights.
- 21 c. Provide maximum assistance to search and rescue aircraft performing a search and
22 rescue mission.
- 23 d. Expedite the movement of presidential aircraft and entourage and any rescue support
24 aircraft as well as related control messages when traffic conditions and communications
25 facilities permit.
- 26 e. Provide special handling, as required to expedite Flight Check aircraft.
- 27 f. Expedite movement of NIGHT WATCH aircraft when National Airborne Operations
28 Center is indicated in the remarks section of the flight plan or in air/ground
29 communications.
- 30 g. Provide expeditious handling for any civil or military aircraft using the code name
31 "FLYNET."
- 32 h. Provide expeditious handling of aircraft using the code name "Garden Plot" only when
33 Central Altitude Reservation Function notifies you that such priority is authorized.
- 34 i. Provide special handling for USAF aircraft engaged in aerial sampling missions using
35 the code name "SAMP."
- 36 j. Provide maximum assistance to expedite the movement of interceptor aircraft on active
37 air defense missions until the unknown aircraft is identified.

- 1 k. Expedite movement of Special Air Mission aircraft when “SCOOT” is indicated in the
2 remarks section of the flight plan or in air/ground communications.
- 3 l. When requested, provide priority handling to TEAL¹ and National Oceanic and
4 Atmospheric Administration mission aircraft.
- 5 m. IFR aircraft must have priority over SVFR aircraft.
- 6 n. Providing priority and special handling to expedite the movement of OPEN SKIES
7 observation and demonstration flights.
- 8 o. Aircraft operating under the North American Route Program and in airspace identified in
9 the High Altitude Redesign program are not subject to route limiting restrictions (e.g.,
10 published preferred IFR routes, letter of agreement requirements, standard operating
11 procedures).
- 12 p. If able, provide priority handling to diverted flights. Priority handling may be requested
13 via use of “DVRSN” in the remarks section of the flight plan or by the flight being placed
14 on the Diversion Recovery Tool.

15 In addition to the requirements in the ATC order, the CNMI was issued FAA grant assurances
16 when they accepted FAA grant money. These grant assurances may further affect the activity
17 of military aircraft on these civilian airports. Grant Assurance 27 states in part that government
18 aircraft (including military) can use the facilities on the airport constructed with Federal money in
19 common with other aircraft at all times, except when the substantial use of the airport by
20 government aircraft unduly interferes with use of the airport by other authorized aircraft.

21 4.5 Wake Turbulence

22 Wake turbulence is the phenomena resulting from the passage of an aircraft through the
23 atmosphere. The term includes vortices, thrust stream turbulence, jet blast, jet wash, propeller
24 wash, and rotor wash both on the ground and in the air (FAA JO 2010). For aircraft departures,
25 FAA JO 7110.65T paragraph 2-1-19 states, “Apply wake turbulence procedures to aircraft
26 operating behind heavy jets/B757s and, where indicated, to small aircraft behind large aircraft.
27 The separation minima shall continue to touchdown for all IFR aircraft not making a visual
28 approach or maintaining visual separation.” For same runway departure separation, paragraph
29 3-9-6 states, “Separate IFR/VFR aircraft taking off behind a heavy jet/B757 departure by 2
30 minutes, when departing.” For same runway arrival separation, paragraph 3-10-3 states, “Issue
31 wake turbulence advisories, and the position, altitude if known, and the direction of flight. The
32 large aircraft to a small aircraft landing behind a departing/arriving large aircraft on the same or
33 parallel runways separated by less than 2,500 feet.”

1 TEAL is the call sign used for the USAF unit of the 53d Weather Reconnaissance Squadron

1 4.6 Impact on Civilian Air Traffic (Public Use and Charter)
2 Services

3 The proposed divert activities and exercises could have minor impacts on small commuter air
4 traffic utilizing GSN or TNI.

5 Potential impacts on small commuter air traffic include:

- 6 • **Aircraft priorities.** Per FAA JO 7110.65T, aircraft operating on IFR flight plans receive
7 priority over VFR aircraft. DOD aircraft would file IFR flight plans. Commuter aircraft
8 transiting between GSN and TNI operate VFR.
- 9 • **Wake Turbulence.** Per FAA JO 7100.65T, small aircraft departing or arriving behind
10 large aircraft i.e. KC-135s, could be delayed for safety precautions (wake turbulence).
11 However, this would be considered a minor impact because current civilian air carriers
12 that operate at GSN utilize large aircraft which cause the same impacts.

5. IFR En-route Operations

5.1 Background

This chapter analyzes the impact that PACAF’s proposed construction and implementation of divert activities and exercises may have on Guam’s ARTCC FIR. Guam ARTCC provides en-route air traffic control service to aircraft operating between departure and destination terminal areas on airways using IFR flight plans within their region. Airways are Class E airspace area established in the form of a corridor, the centerline of which is defined by NAVAIDS. There are several types of airways, but they are normally classified as jet routes or victor airways. A jet route is designed to serve aircraft operations from 18,000 feet mean sea level (MSL) up to and including flight level (FL) 450. Victor airways are Class E airspace from 1,200 feet AGL to 18,000 feet MSL.

5.2 Guam ARTCC

Guam ARTCC is one of 22 FAA en-route air traffic control facilities that support an area comprised of nearly 200,000 square miles of airspace. Guam ARTCC FIR is a 250-NM circle with Guam as its center. The area is based on the radar coverage from the radar site on the northern tip of Guam. Besides providing air traffic services for Guam, the facility’s airspace also encompasses the Northern Mariana Islands of Rota, Saipan, and Tinian. The facility supports approximately 71,000 aircraft operations each year, which includes civilian air traffic and military aircraft. The facility is unique in that it supports a number of large-scale military exercises and special training missions (Guam 2008). The air traffic activity shown in **Table 5-1** is based on information derived from the FAA ATADS.

Table 5-1. Guam ATADs: Standard Report from January through December 2014 (FAA 2015)

Air Carrier	Air Taxi	General Aviation	Military	Local	Total
22,641	3,332	21,106	646	23,503	71,228

Proposed construction and implementation of divert activities and exercises would not impact GUAM ARTCC’s manning, airways within their FIR, nor would it impose any stress on their system. Air traffic within their FIR is down 15 percent due to fuel prices and the economy. Normally aircraft transiting between Guam, Saipan and Tinian utilize airway A221. Aircraft generally had to stay on airways or remain within the standard NAVAID service volumes, but Guam ARTCC supports direct routing when filed. Direct routing occurs when one or both of the route segment endpoints are at a latitude/longitude which is not located at a NAVAID. Also, when equipment, capabilities, and controller workload permit, certain advisory/assistance services may be provided to VFR aircraft.

5.3 Military Training Route (MTR) IR-983

MTRs are aerial corridors across the United States in which military aircraft can operate below 10,000 feet faster than the maximum safe speed of 250 knots to which all other aircraft are

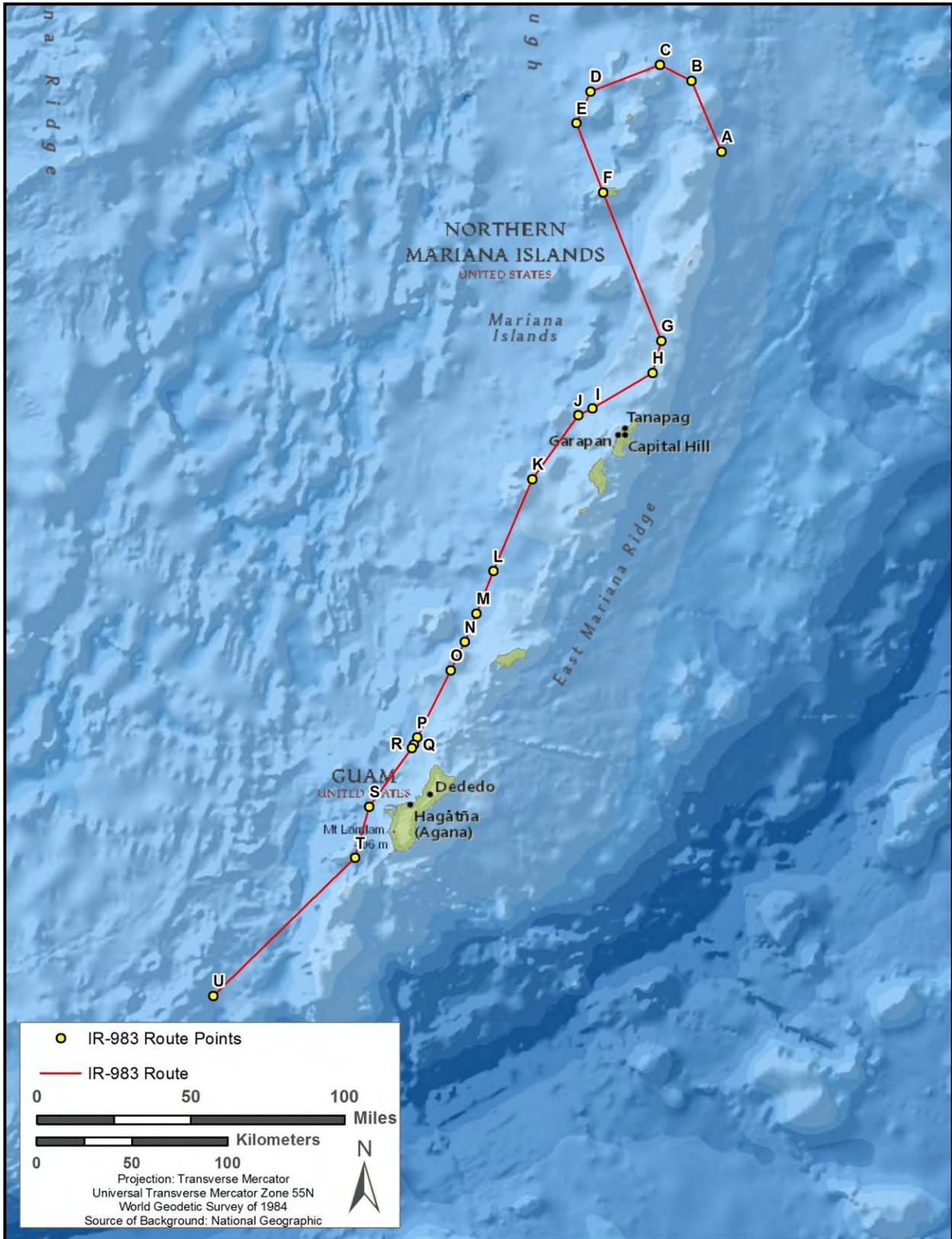
1 restricted (FAA 2012). The routes are the result of a joint venture between the FAA and DOD to
2 provide for high-speed, low-level military activities. MTR IR-983 is aligned west of Guam and
3 the Northern Mariana Islands as shown in **Figure 5-2**. The width is 4 NM either side of
4 centerline from A to O; 9 NM left and 4 NM right of centerline from O to P; 4 NM either side of
5 centerline from P to Q; 2.5 NM left and 4 NM right of centerline from Q to S; and 4 NM either
6 side of centerline from S to U. Aircraft operating within IR-983 are considered MARSAs (Military
7 Assume Responsibility for Separation of Aircraft). Andersen Air Force Base 36th Operations
8 Support Squadron is responsible for scheduling operations within IR – 983 (DOD 2011).

9 5.4 Limiting Factors

10 Guam ARTCC radar coverage is not available below 3,500 feet MSL above Saipan and Tinian.
11 The DOD, its service components, and the FAA radar program office have initiated
12 communications to determine the possibility of adding a radar surveillance system on Saipan
13 which would increase coverage in the area. Currently when an aircraft descends below radar
14 coverage, non-radar procedures are implemented to ensure separation of IFR aircraft.

15 5.5 Impact on IFR En-route Operations

16 Proposed construction and implementation of divert activities and exercises will not impact
17 Guam ARTCC nor IR-983 operations as long as PACAF adheres to the number of aircraft and
18 operations addressed within this document.



1
2 **Figure 5-2. Military Training Route IR-983**

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6. Federal Aviation Regulation (FAR) 49 CFR § 77 Obstacle Evaluations

6.1 Background

This chapter evaluates the impact proposed structures may have on navigable airspace at GSN and TNI. FAR Part 77, titled "Objects Affecting Navigable Airspace," establishes standards for determining obstructions and their potential effects on aircraft operations. Objects are considered to be obstructions to air navigation according to FAR Part 77 if they exceed certain heights or penetrate certain imaginary surfaces established in relation to airport features such as a runway. Objects classified as obstructions are subject to an FAA aeronautical analysis to determine their potential effects on aircraft operations. This evaluation is required on any structure proposed or modified that meets the definition of Part 77.9 (b). FAR Part 77 evaluations were conducted utilizing AIRSPACE® and TERPS® software. This software is registered by trademarks of Federal Airways & Airspace, Copyright © 1989 – 2011. Software outputs described in **Section 6.2** and **6.3** are defined by the following terms:

DNE = Does Not Exceed

NR = Notice Required

NNR = Notice Not Required

PNR = Possible Notice Required

6.2 GSN

The proposed structures are based on accommodating a combination of cargo, tanker, and similar aircraft and associated support personnel and would include periodic flight operations at the airport. The FAR evaluation presented in this section for GSN is for Alternative 1 as shown in **Figure 1-6**. The analysis for Alternative 3 at GSN in **Figure 1-7** would be the same, except it would not include the fuel hydrant system. Proposed structures evaluated include: a maintenance facility, fuel tanks and supporting infrastructure, and a fuel hydrant system as shown in **Figure 1-6**. Also evaluated were four ball-park lighting poles tentatively proposed on the parking apron as shown in **Figure 6-1**, which also portrays the proposed construction at GSN under Alternative 1 in reference to the GSN clearance zones.

6.2.1 Maintenance Facility

PACAF's proposed maintenance facility would be located at latitude 15° 7' 28.8"/longitude 145° 45' 53.4". The site elevation is 211 feet AMSL, and the structure height at the apex of the roof is 25 feet AGL with an overall height of 236 feet AMSL. Below is the evaluation:

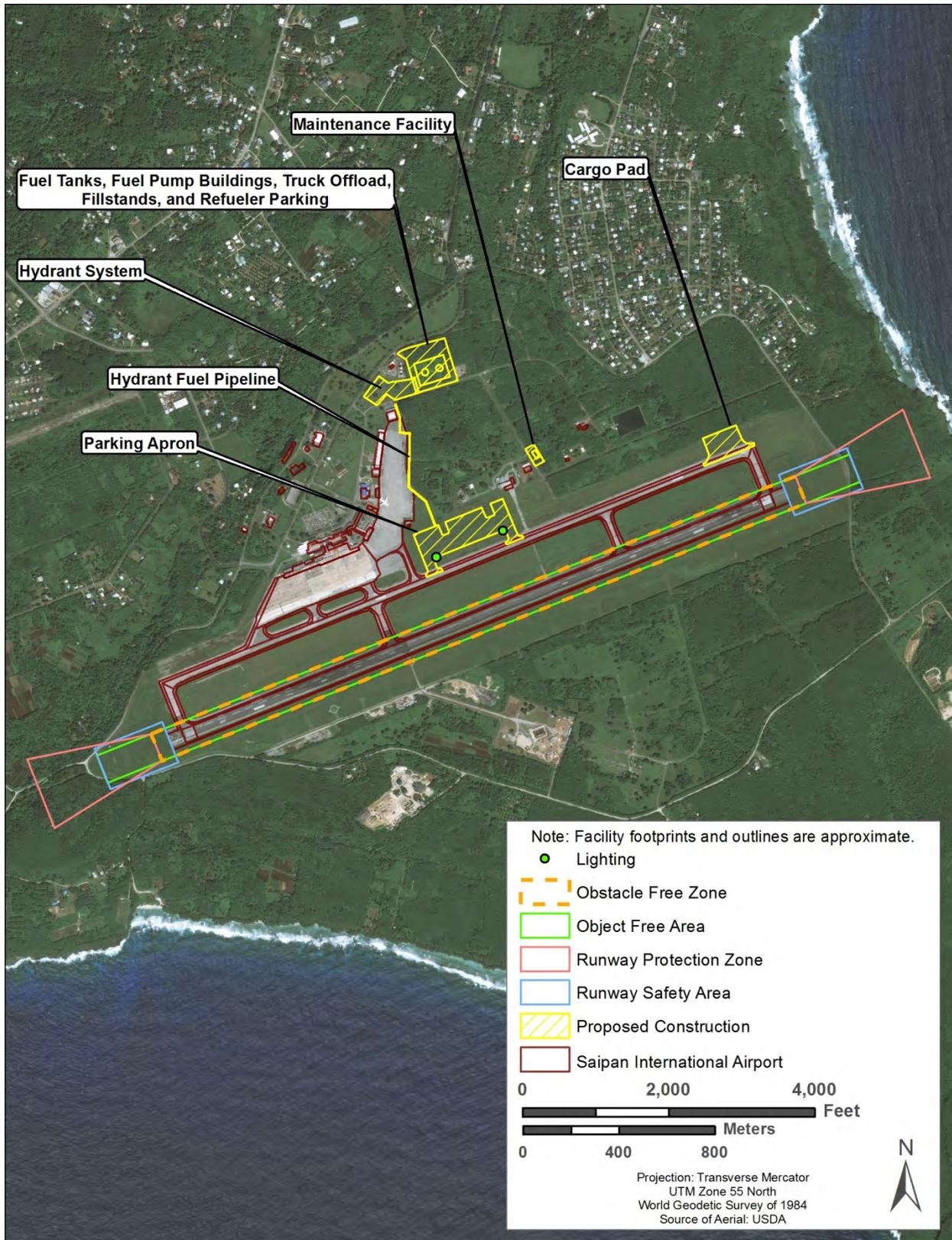
Notice Criteria

FAR 77.9(a): NNR (DNE 200 feet AGL)

FAR 77.9(b): NNR (DNE Notice Slope)

FAR 77.9(c): NNR (Not a Traverse Way)

FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for GSN



1

2 Figure 6-1. GSN Proposed Construction and Primary Surfaces

- 1 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for TNI
- 2 FAR 77.9(d): NNR (Off Airport Construction)

3 **Obstruction Standards**

- 4 FAR 77.17(a)(1): DNE 499 feet AGL
- 5 FAR 77.17(a)(2): DNE - Airport Surface
- 6 FAR 77.19(a): DNE - Horizontal Surface
- 7 FAR 77.19(b): DNE - Conical Surface
- 8 FAR 77.19(c): DNE - Primary Surface
- 9 FAR 77.19(d): DNE - Approach Surface
- 10 FAR 77.19(e): DNE - Transitional Surface

11 **VFR Traffic Pattern Airspace**

- 12 FAR 77.17(a)(1): DNE
- 13 FAR 77.17(a)(2): PNR - Exceeds by 10 feet AGL
- 14 VFR Horizontal Surface: DNE
- 15 VFR Conical Surface: DNE
- 16 VFR Approach Slope: DNE
- 17 VFR Transitional Slope: DNE

18 The structure is within VFR - Traffic Pattern Airspace Climb/Descent Area. However, the VFR
19 traffic pattern is not authorized on the terminal side of the airport.

20 **Terminal Instrument Procedures (TERPS) FAA Order 8260.3**

- 21 Approach Surface: DNE
- 22 Departure Surface: DNE

23 **Minimum Obstacle Clearance Altitude (MOCA)**

- 24 FAR 77.17(a)(4): DNE - No impact to airways.

25 **Private Landing Facilities**

- 26 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.
- 27 There is no impact to TT04, Gualo Ral Heliport.

28 **Air Navigation Electronic Facilities**

- 29 No impact to the Saipan locator middle marker (LMM)/NDB. Does Not Exceed Electromagnetic
30 Interference (EMI) Notice Height Criteria. Maximum height in this area is 311 feet AMSL.

31 **6.2.2 Hydrant System**

- 32 PACAF's proposed hydrant system would be located at latitude 15° 7' 38.2"/longitude: 145° 43'
33 35.4". The site elevation is 211 feet AMSL, and the structure height at the apex is 20 feet AGL
34 with an overall height of 231 feet AMSL. Below is the evaluation:

35 **Notice Criteria**

- 36 FAR 77.9(a): NNR (DNE 200 feet AGL)
- 37 FAR 77.9(b): NNR (DNE Notice Slope)

- 1 FAR 77.9(c): NNR (Not a Traverse Way)
- 2 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for GSN
- 3 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for TNI
- 4 FAR 77.9(d): NNR (Off Airport Construction)

5 **Obstruction Standards**

- 6 FAR 77.17(a)(1): DNE 499 feet AGL
- 7 FAR 77.17(a)(2): DNE - Airport Surface
- 8 FAR 77.19(a): DNE - Horizontal Surface
- 9 FAR 77.19(b): DNE - Conical Surface
- 10 FAR 77.19(c): DNE - Primary Surface
- 11 FAR 77.19(d): DNE - Approach Surface
- 12 FAR 77.19(e): DNE - Transitional Surface

13 **VFR Traffic Pattern Airspace**

- 14 FAR 77.17(a)(1): DNE
- 15 FAR 77.17(a)(2): DNE - Height less than 200 feet AGL
- 16 VFR Horizontal Surface: DNE
- 17 VFR Conical Surface: DNE
- 18 VFR Approach Slope: DNE
- 19 VFR Transitional Slope: DNE

20 **TERPS FAA Order 8260.3**

- 21 Approach Surface: DNE
- 22 Departure Surface: DNE

23 **MOCA**

- 24 FAR 77.17(a)(4): DNE - No impact to airways.

25 **Private Landing Facilities**

- 26 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.
- 27 There is no impact to TT04, Gualo Rai Heliport.

28 **Air Navigation Electronic Facilities**

- 29 No impact to the Saipan LMM/NDB. Does Not Exceed EMI Notice Height Criteria. Maximum
- 30 height in this area is 311 feet AMSL.

31 **6.2.3 Fuel Tanks**

- 32 PACAF's proposed fuel tanks would be located at latitude 15° 7' 40.4"/longitude: 145° 43' 42.5".
- 33 The site elevation is 211 feet AMSL, and the structure height at the apex is 30 feet AGL with an
- 34 overall height of 241 feet AMSL. Below is the evaluation:

35 **Notice Criteria**

- 36 FAR 77.9(a): NNR (DNE 200 feet AGL)
- 37 FAR 77.9(b): NNR (DNE Notice Slope)
- 38 FAR 77.9(c): NNR (Not a Traverse Way)

- 1 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for GSN
- 2 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for TNI
- 3 FAR 77.9(d): NNR (Off Airport Construction)

4 **Obstruction Standards**

- 5 FAR 77.17(a)(1): DNE 499 feet AGL
- 6 FAR 77.17(a)(2): DNE - Airport Surface
- 7 FAR 77.19(a): DNE - Horizontal Surface
- 8 FAR 77.19(b): DNE - Conical Surface
- 9 FAR 77.19(c): DNE - Primary Surface
- 10 FAR 77.19(d): DNE - Approach Surface
- 11 FAR 77.19(e): DNE - Transitional Surface

12 **VFR Traffic Pattern Airspace**

- 13 FAR 77.17(a)(1): DNE
- 14 FAR 77.17(a)(2): PNR- Height exceeds by 10 feet AGL
- 15 VFR Horizontal Surface: DNE
- 16 VFR Conical Surface: DNE
- 17 VFR Approach Slope: DNE
- 18 VFR Transitional Slope: DNE

19 The structure is within VFR - Traffic Pattern Airspace Climb/Descent Area. However VFR traffic
20 pattern is not authorized on terminal side of airport.

21 **TERPS FAA Order 8260.3**

- 22 Approach Surface: DNE
- 23 Departure Surface: DNE

24 **MOCA**

- 25 FAR 77.17(a)(4): DNE - No impact to Airways

26 **Private Landing Facilities**

- 27 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.
- 28 There is no impact to TT04, Gualo Ral Heliport.

29 **Air Navigation Electronic Facilities**

- 30 No impact to the Saipan LMM/NDB. Does Not Exceed EMI Notice Height Criteria. Maximum
31 height in this area is 311 feet AMSL.

32 **6.2.4 Apron Ball-Park Lighting**

- 33 PACAF's proposed apron would have ball-park lighting (see **Figure 6-1**). Two poles located the
34 closest to the active runway for the apron were evaluated. These poles will be located at
35 latitude 15° 7' 16.4"/longitude 145° 43' 39.7"; and latitude 15° 7' 20"/longitude 145° 43' 48.9".
36 The site elevation is 211 feet AMSL, and the structure height at the apex is 40 feet AGL with an
37 overall height of 251 feet AMSL. Below is the evaluation:

1 **Notice Criteria**

- 2 FAR 77.9(a): NNR (DNE 200 feet AGL)
3 FAR 77.9(b): NR (Exceeds Notice Slope, Maximum: 231 feet)
4 FAR 77.9(c): NNR (Not a Traverse Way)
5 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for GSN
6 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for TNI
7 FAR 77.9(d): NNR (Off Airport Construction)

8 Notice to the FAA is required because height exceeds Notice Slope criteria. The maximum
9 height to avoid notice is 235 ft AMSL.

10 **Obstruction Standards**

- 11 FAR 77.17(a)(1): DNE 499 feet AGL
12 FAR 77.17(a)(2): DNE - Airport Surface
13 FAR 77.19(a): DNE - Horizontal Surface
14 FAR 77.19(b): DNE - Conical Surface
15 FAR 77.19(c): NR
16 FAR 77.19(d): DNE - Approach Surface
17 FAR 77.19(e): DNE - Transitional Surface

18 **VFR Traffic Pattern Airspace**

- 19 FAR 77.17(a)(1): DNE
20 FAR 77.17(a)(2): DNE
21 VFR Horizontal Surface: DNE
22 VFR Conical Surface: DNE
23 VFR Approach Slope: DNE
24 VFR Transitional Slope: DNE

25 **TERPS FAA Order 8260.3**

- 26 Approach Surface: DNE
27 Departure Surface: DNE

28 **MOCA**

29 FAR 77.17(a)(4): DNE - No impact to airways.

30 **Private Landing Facilities**

31 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.
32 There is no impact to TT04, Gualo Ral Heliport.

33 **Air Navigation Electronic Facilities**

34 No impact to the Saipan LMM/NDB. Does not exceed EMI Notice Height Criteria. Maximum
35 height in this area is 311 feet AMSL.

36 **6.3 TNI**

37 The proposed structures are based on accommodating a combination of cargo, tanker, and
38 similar aircraft and associated support personnel and would include periodic flight operations at

1 the airport. The FAR evaluation presented in this section for TNI is for Alternative 2 North
2 Option and South Option as shown in **Figure 2-3**. The analysis for Alternative 3 at TNI in
3 **Figure 2-4** would be the same, except the fuel storage location would be smaller. Proposed
4 structures evaluated include: maintenance facility, fuel tanks and supporting infrastructure, a
5 fuel hydrant system, and a fire suppression system (containing water only) as shown in **Figure**
6 **2-3**. Also evaluated were four ball-park lighting poles tentatively proposed on the parking apron
7 as shown in **Figure 6-2**, which also portrays the proposed construction at TNI under Alternative
8 2 in reference to the TNI clearance zones.

9 6.3.1 North Option

10 6.3.1.1 Maintenance Facility

11 PACAF's proposed maintenance facility under the North Option would be located at latitude 15°
12 0' 10.41"/longitude 145° 37' 7.65". The site elevation is 160 feet AMSL, and the structure height
13 at the apex of the roof is 25 feet AGL with an overall height of 185 feet AMSL. Below is the
14 evaluation:

15 **Notice Criteria**

16 FAR 77.9(a):	NNR (DNE 200 feet AGL)
17 FAR 77.9(b):	NNR (DNE Notice Slope)
18 FAR 77.9(c):	NNR (Not a Traverse Way)
19 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for TNI
20 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for GSN
21 FAR 77.9(d):	NNR (Off Airport Construction)

22 **Obstruction Standards**

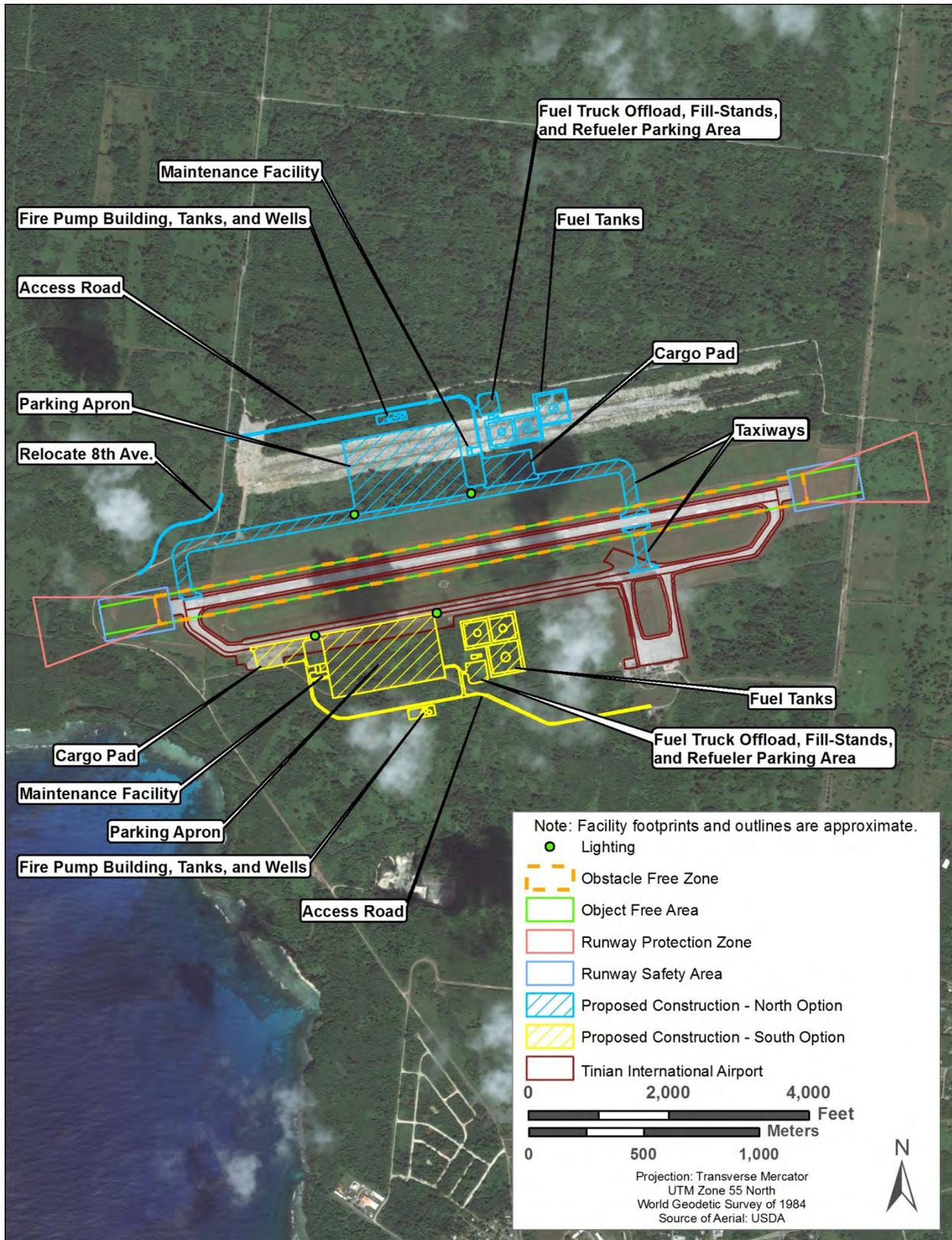
23 FAR 77.17(a)(1):	DNE 499 feet AGL
24 FAR 77.17(a)(2):	DNE - Airport Surface
25 FAR 77.19(a):	DNE - Horizontal Surface
26 FAR 77.19(b):	DNE - Conical Surface
27 FAR 77.19(c):	DNE - Primary Surface
28 FAR 77.19(d):	DNE - Approach Surface
29 FAR 77.19(e):	DNE - Transitional Surface

30 **VFR Traffic Pattern Airspace**

31 FAR 77.17(a)(1):	DNE
32 FAR 77.17(a)(2):	DNE - Height less than 200 feet AGL
33 VFR Horizontal Surface:	DNE
34 VFR Conical Surface:	DNE
35 VFR Approach Slope:	DNE
36 VFR Transitional Slope:	DNE

37 **TERPS FAA Order 8260.3**

38 Approach Surface:	DNE
39 Departure Surface:	DNE



1

2 Figure 6-2. TNI Proposed Construction and Primary Surfaces

1 **MOCA**

2 FAR 77.17(a) (4): DNE - No impact to airways.

3 **Private Landing Facilities**

4 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.

5 There is no impact to TT04, Gualo Ral Heliport.

6 **Air Navigation Electronic Facilities**

7 Nearest NAVAID is Saipan's (LMM/NDB). No impact to facility.

8 6.3.1.2 Fuel Tanks

9 PACAF's proposed fuel tanks under the North Option would be located at latitude 15° 0'
10 11.3"/longitude 145° 37' 10.8". The site elevation is 160 feet AMSL, and the structure height at
11 the apex is 30 feet AGL with an overall height of 190 feet AMSL. Below is the evaluation:

12 **Notice Criteria**

13 FAR 77.9(a): NNR (DNE 200 feet AGL)
14 FAR 77.9(b): NNR (DNE Notice Slope)
15 FAR 77.9(c): NNR (Not a Traverse Way)
16 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for TNI
17 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for GSN
18 FAR 77.9(d): NNR (Off Airport Construction)

19 **Obstruction Standards**

20 FAR 77.17(a) (1): DNE 499 feet AGL
21 FAR 77.17(a) (2): DNE - Airport Surface
22 FAR 77.19(a): DNE - Horizontal Surface
23 FAR 77.19(b): DNE - Conical Surface
24 FAR 77.19(c): DNE - Primary Surface
25 FAR 77.19(d): DNE - Approach Surface
26 FAR 77.19(e): DNE - Transitional Surface

27 **VFR Traffic Pattern Airspace**

28 FAR 77.17(a)(1): DNE
29 FAR 77.17(a)(2): DNE - Height less than 200 feet AGL
30 VFR Horizontal Surface: DNE
31 VFR Conical Surface: DNE
32 VFR Approach Slope: DNE
33 VFR Transitional Slope: DNE

34 **TERPS FAA Order 8260.3**

35 Approach Surface: DNE
36 Departure Surface: DNE

37 **MOCA**

38 FAR 77.17(a) (4): DNE - No impact to airways

1 **Private Landing Facilities**

2 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.

3 There is no impact to TT04, Gualo Ral Heliport.

4 **Air Navigation Electronic Facilities**

5 Nearest NAVAID is Saipan's (LMM/NDB). No impact to facility.

6 6.3.1.3 Fire Suppression System

7 PACAF's proposed fire suppression system under the North Option would be located at latitude
8 15° 0' 15.5"/longitude 145° 36' 58.7". The site elevation is 160 feet AMSL, and the structure
9 height at the apex is 20 feet AGL with an overall height of 180 feet AMSL. Below is the
10 evaluation:

11 **Notice Criteria**

12 FAR 77.9(a): NNR (DNE 200 feet AGL)
13 FAR 77.9(b): NNR (DNE Notice Slope)
14 FAR 77.9(c): NNR (Not a Traverse Way)
15 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for TNI
16 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for GSN
17 FAR 77.9(d): NNR (Off Airport Construction)

18 **Obstruction Standards**

19 FAR 77.17(a)(1): DNE 499 feet AGL
20 FAR 77.17(a)(2): DNE - Airport Surface
21 FAR 77.19(a): DNE - Horizontal Surface
22 FAR 77.19(b): DNE - Conical Surface
23 FAR 77.19(c): DNE - Primary Surface
24 FAR 77.19(d): DNE - Approach Surface
25 FAR 77.19(e): DNE - Transitional Surface

26 **VFR Traffic Pattern Airspace**

27 FAR 77.17(a) (1): DNE
28 FAR 77.17(a) (2): DNE - Height less than 200 feet AGL
29 VFR Horizontal Surface: DNE
30 VFR Conical Surface: DNE
31 VFR Approach Slope: DNE
32 VFR Transitional Slope: DNE

33 **TERPS FAA Order 8260.3**

34 Approach Surface: DNE
35 Departure Surface: DNE

36 **MOCA**

37 FAR 77.17(a)(4): DNE - No impact to airways.

38

1 **Private Landing Facilities**

2 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.

3 There is no impact to TT04, Gualo Ral Heliport.

4 **Air Navigation Electronic Facilities**

5 Nearest NAVAID is Saipan's (LMM/NDB). There is no impact to the facility.

6 6.3.1.4 Apron Ball-Park Lighting

7 PACAF's proposed North Option parking apron would possess ball-park lighting (see **Figure 6-**
8 **2**). Two poles located the closest to the active runway were evaluated. These poles will be
9 located at latitude 15° 0' 1.9"/longitude 145° 36' 51.1" and latitude 15° 0' 5"/longitude: 145° 37'
10 8.1". The site elevation is 160 feet AMSL, and the structure height at the apex is 40 feet AGL
11 with an overall height of 200 feet AMSL. Below is the evaluation:

12 **Notice Criteria**

13 FAR 77.9(a): NNR (DNE 200 feet AGL)
14 FAR 77.9(b): NNR (DNE Notice Slope)
15 FAR 77.9(c): NNR (Not a Traverse Way)
16 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for GSN
17 FAR 77.9(d): NR (On Airport Construction)

18 **Obstruction Standards**

19 FAR 77.17(a)(1): DNE - 499 feet AGL
20 FAR 77.17(a)(2): DNE - Airport Surface
21 FAR 77.19(a): DNE - Horizontal Surface
22 FAR 77.19(b): DNE - Conical Surface
23 FAR 77.19(c): DNE - Primary Surface
24 FAR 77.19(d): DNE - Approach Surface
25 FAR 77.19(e): DNE - Transitional Surface

26 **VFR Traffic Pattern Airspace**

27 FAR 77.17(a)(1): DNE
28 FAR 77.17(a)(2): DNE - Height less than 200 feet AGL
29 VFR Horizontal Surface: DNE
30 VFR Conical Surface: DNE
31 VFR Approach Slope: DNE
32 VFR Transitional Slope: DNE

33 **TERPS FAA Order 8260.3**

34 Approach Surface: DNE
35 Departure Surface: DNE

36 **MOCA**

37 FAR 77.17(a)(4): DNE - No impact to airways.

38

1 **Private Landing Facilities**

2 There is no impact to OTT8, Dynasty Casino Heliport.

3 **6.3.2 South Option**

4 **6.3.2.1 Maintenance Facility**

5 PACAF's proposed maintenance facility under the South Option would be located at latitude 14°
6 59' 40.7"/longitude 145° 36' 46.24". The site elevation is 160 feet AMSL, and the structure
7 height at the apex of the roof is 25 feet AGL with an overall height of 185 feet AMSL. Below is
8 the evaluation:

9 **Notice Criteria**

10 FAR 77.9(a):	NNR (DNE 200 feet AGL)
11 FAR 77.9(b):	NNR (DNE Notice Slope)
12 FAR 77.9(c):	NNR (Not a Traverse Way)
13 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for TNI
14 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for GSN
15 FAR 77.9(d):	NNR (Off Airport Construction)

16 **Obstruction Standards**

17 FAR 77.17(a)(1):	DNE 499 feet AGL
18 FAR 77.17(a)(2):	DNE - Airport Surface
19 FAR 77.19(a):	DNE - Horizontal Surface
20 FAR 77.19(b):	DNE - Conical Surface
21 FAR 77.19(c):	DNE - Primary Surface
22 FAR 77.19(d):	DNE - Approach Surface
23 FAR 77.19(e):	DNE - Transitional Surface

24 **VFR Traffic Pattern Airspace**

25 FAR 77.17(a)(1):	DNE
26 FAR 77.17(a)(2):	DNE - Height less than 200 feet AGL
27 VFR Horizontal Surface:	DNE
28 VFR Conical Surface:	DNE
29 VFR Approach Slope:	DNE
30 VFR Transitional Slope:	DNE

31 **TERPS FAA Order 8260.3**

32 Approach Surface:	DNE
33 Departure Surface:	DNE

34 **MOCA**

35 FAR 77.17(a) (4): DNE - No impact to airways.

36 **Private Landing Facilities**

37 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.

38 There is no impact to TT04, Gualo Rai Heliport.

1 **Air Navigation Electronic Facilities**

2 Nearest NAVAID is Saipan's (LMM/NDB). There is no impact to the facility.

3 6.3.2.2 Fuel Tanks

4 PACAF's proposed fuel tanks under the South Option would be located at latitude 14° 59'
5 46.9"/longitude 145° 37' 6.64". The site elevation is 160 feet AMSL, and the structure height at
6 the apex is 30 feet AGL with an overall height of 190 feet AMSL. Below is the evaluation:

7 **Notice Criteria**

8 FAR 77.9(a):	NNR (DNE 200 feet AGL)
9 FAR 77.9(b):	NNR (DNE Notice Slope)
10 FAR 77.9(c):	NNR (Not a Traverse Way)
11 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for TNI
12 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for GSN
13 FAR 77.9(d):	NNR (Off Airport Construction)

14 **Obstruction Standards**

15 FAR 77.17(a) (1):	DNE - 499 feet AGL
16 FAR 77.17(a) (2):	DNE - Airport Surface
17 FAR 77.19(a):	DNE - Horizontal Surface
18 FAR 77.19(b):	DNE - Conical Surface
19 FAR 77.19(c):	DNE - Primary Surface
20 FAR 77.19(d):	DNE - Approach Surface
21 FAR 77.19(e):	DNE - Transitional Surface

22 **VFR Traffic Pattern Airspace**

23 FAR 77.17(a)(1):	DNE
24 FAR 77.17(a)(2):	DNE - Height less than 200 feet AGL
25 VFR Horizontal Surface:	DNE
26 VFR Conical Surface:	DNE
27 VFR Approach Slope:	DNE
28 VFR Transitional Slope:	DNE

29 **TERPS FAA Order 8260.3**

30 Approach Surface:	DNE
31 Departure Surface:	DNE

32 **MOCA**

33 FAR 77.17(a) (4): DNE - No impact to airways

34 **Private Landing Facilities**

35 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.

36 There is no impact to TT04, Gualo Rai Heliport.

37 **Air Navigation Electronic Facilities**

38 Nearest NAVAID is Saipan's (LMM/NDB). There is no impact to the facility.

1 6.3.2.3 Fire Suppression System

2 PACAF's proposed fire suppression system under the South Option would be located at latitude
3 14° 59' 35.1"/longitude 145° 37' 2.9". The site elevation is 160 feet AMSL, and the structure
4 height at the apex is 20 feet AGL with an overall height of 180 feet AMSL. Below is the
5 evaluation:

6 **Notice Criteria**

7 FAR 77.9(a):	NNR (DNE 200 feet AGL)
8 FAR 77.9(b):	NNR (DNE Notice Slope)
9 FAR 77.9(c):	NNR (Not a Traverse Way)
10 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for TNI
11 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for GSN
12 FAR 77.9(d):	NNR (Off Airport Construction)

13 **Obstruction Standards**

14 FAR 77.17(a)(1):	DNE 499 feet AGL
15 FAR 77.17(a)(2):	DNE - Airport Surface
16 FAR 77.19(a):	DNE - Horizontal Surface
17 FAR 77.19(b):	DNE - Conical Surface
18 FAR 77.19(c):	DNE - Primary Surface
19 FAR 77.19(d):	DNE - Approach Surface
20 FAR 77.19(e):	DNE - Transitional Surface

21 **VFR Traffic Pattern Airspace**

22 FAR 77.17(a) (1):	DNE
23 FAR 77.17(a) (2):	DNE - Height less than 200 feet AGL
24 VFR Horizontal Surface:	DNE
25 VFR Conical Surface:	DNE
26 VFR Approach Slope:	DNE
27 VFR Transitional Slope:	DNE

28 **TERPS FAA Order 8260.3**

29 Approach Surface:	DNE
30 Departure Surface:	DNE

31 **MOCA**

32 FAR 77.17(a)(4): DNE - No impact to airways.

33 **Private Landing Facilities**

34 There is no impact to HI63, Coral Ocean Point Pro-Shop Heliport.
35 There is no impact to TT04, Gualo Rai Heliport.

36 **Air Navigation Electronic Facilities**

37 Nearest NAVAID is Saipan's (LMM/NDB). There is no impact to the facility.

1 6.3.2.4 Apron Ball-Park Lighting

2 PACAF's proposed South Option parking apron would have ball-park lighting (see **Figure 6-2**).
3 Two poles located the closest to the active runway were evaluated. These poles will be located
4 at latitude 14° 59' 48.1"/longitude 145° 37' 3.2" and latitude 14° 59' 44.7"/longitude: 145° 36'
5 45.5". The site elevation is 160 feet AMSL, and the structure height at the apex is 40 feet AGL
6 with an overall height of 200 feet AMSL. Below is the evaluation:

7 **Notice Criteria**

8 FAR 77.9(a):	NNR (DNE 200 feet AGL)
9 FAR 77.9(b):	NNR (DNE Notice Slope)
10 FAR 77.9(c):	NNR (Not a Traverse Way)
11 FAR 77.9:	NNR FAR 77.9 IFR Notice Criteria for GSN
12 FAR 77.9(d):	NR (On Airport Construction)

13 **Obstruction Standards**

14 FAR 77.17(a)(1):	DNE - 499 feet AGL
15 FAR 77.17(a)(2):	DNE - Airport Surface
16 FAR 77.19(a):	DNE - Horizontal Surface
17 FAR 77.19(b):	DNE - Conical Surface
18 FAR 77.19(c):	DNE - Primary Surface
19 FAR 77.19(d):	DNE - Approach Surface
20 FAR 77.19(e):	DNE - Transitional Surface

21 **VFR Traffic Pattern Airspace**

22 FAR 77.17(a)(1):	DNE
23 FAR 77.17(a)(2):	DNE - Height less than 200 feet AGL
24 VFR Horizontal Surface:	DNE
25 VFR Conical Surface:	DNE
26 VFR Approach Slope:	DNE
27 VFR Transitional Slope:	DNE

28 **TERPS FAA Order 8260.3**

29 Approach Surface:	DNE
30 Departure Surface:	DNE

31 **MOCA**

32 FAR 77.17(a)(4): DNE - No impact to airways.

33 **Private Landing Facilities**

34 There is no impact to OTT8, Dynasty Casino Heliport.

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1 7. Saipan/Tinian Pending Proposals

2 7.1 Background

3 This chapter assesses the aeronautical impact pending proposals will have on PACAF's
4 proposed construction and implementation of divert activities and exercises.

5 7.2 Saipan Proposed Aircraft Parking Aprons

6 CPA has two proposed aprons in the same location as the PACAF's proposed parking apron. .

7 ***Impact.*** The proposed aircraft parking apron project may have a beneficial impact on Saipan's
8 proposed master plan if Saipan is chosen. PACAF's proposed parking apron may provide CPA
9 their desired additional parking aprons and could be utilized when DOD divert activities and/or
10 exercises are not occurring. In the Divert Revised Draft EIS, USAF developed revisions to the
11 proposed infrastructure at Saipan International Airport in coordination with CPA and FAA,
12 specifically considering proposed future development at the GSN.

13 7.3 Proposed Surveillance Radar on Saipan

14 Guam ARTCC radar coverage is not available below 3,500 feet MSL above Saipan and Tinian.
15 The DOD, and its service components, and the FAA radar program office have initiated
16 communications to determine the possibility of adding a radar system on Saipan (Cleveland
17 2012).

18 ***Impact.*** The surveillance radar project, if completed may have a beneficial impact on PACAF's
19 proposal. The addition of radar on Saipan means positive control measures by air traffic control
20 personnel can be implemented at GSN and TNI. Positive controls include safety alerts (air
21 traffic advisories) and reduce separation standards which assist in eliminating delays.

22 7.4 Commonwealth of the Northern Mariana Islands Joint 23 Military Training on Tinian

24 The Marine Corps Forces Pacific proposed project, CNMI Joint Military Trainig (CJMT) includes
25 establishing live-fire range and training areas in Tinian. To accommodate the anticipated
26 aircraft training tempo and equipment/cargo needs, taxiways, directly north and adjacent to the
27 runway of TNI, would be constructed to include: (1) one tactical aircraft parking ramp; (2) one
28 cargo aircraft parking ramp; (3) connecting taxiways; (4) ordnance arming and de-arming pads;
29 (5) one hot cargo (i.e., munitions) pad/combat aircraft loading area; (6) fuel tanks and an
30 expeditionary/temporary refueling area; (7) arresting gear pads; (8) munitions holding pads; (9)
31 taxiway crossings; and (10) access roads connecting to the airfield. Construction could also
32 include a fuel pipeline along 8th Avenue to transfer fuel to the bulk storage facility at the airfield.
33 Additionally, approximately 920 rotary aircraft landing zone operations are also planned to occur
34 annually on Tinian (DON 2015).

1 **Impact.** Because USAF Divert and the Marine Corps Forces Pacific CJMT missions have
2 overlapping requirements in the use of the airport at Tinian, the airfield improvement designs for
3 both programs would be coordinated to maximize common use of infrastructure requirements,
4 such as the fuel pipeline and to minimize conflicting operations. Therefore, beneficial impacts
5 on Divert could be expected.

6 7.5 US Navy's Proposed Ground Based Electronic Emitter 7 in CNMI

8 Military training operations often employ emitters to create a realistic electromagnetic
9 environment in which to train (see **Figure 7-1**). Ground-based emitters are proposed for use on
10 Guam and Saipan to train aircrew to detect and respond to simulated threats. The use of these
11 emitters will not impact civil air traffic or ATC systems on Tinian or Saipan as they transmit at
12 specific pre-approved frequencies only. Daily coordination with FAA prior to commencing
13 emitter operations is standard operating procedure (Lynch 2012).



14
15 **Figure 7-1. Ground Based Electronic Emitter System [Lynch 2012]**

16 **Impact.** The U.S. Navy project has the possibility of having a negative impact on PACAF's
17 proposal. The proposed ground-based electronic emitter could cause electromagnetic
18 interference also known as radio frequency interference. The interference may interrupt,
19 obstruct, degrade, or limit the performance of radio transmission on Saipan and Tinian. The
20 impact could range from a simple degradation to a total loss.

1 8. ATC and Airfield Facilities Services 2 Assessment

3 8.1 Background

4 This chapter addresses the FAA, CPA, Saipan's Contracted Air Traffic Control Tower, and Star
5 Marianas Airlines assessment and professional opinion of the impact PACAF's proposed
6 construction and implementation of divert activities and exercises will have on their existing
7 facility operations. This information was obtained during the Data Background Collection
8 meetings in Hawaii, Guam, Saipan, and Tinian.

9 8.2 FAA Airport District Office, Honolulu, Hawaii

10 The FAA Safety Management System (SMS) will be used for full coordination of all phases of
11 proposed construction within the airfield boundaries before construction can begin. An SMS is
12 the formal, top-down business approach to managing safety risk, which includes a systemic
13 approach to managing safety, including the necessary organizational structures,
14 accountabilities, policies and procedures (FAA 2011). An SMS is recommended for each
15 project; if SMS' are combined and one project does not meet the criteria, then all projects may
16 be disapproved. FAA recommends reviewing FAAO 5200.11 for guidance.

17 All grant assurances between FAA and CPA for their airports must meet compliance. CPA
18 receives funds from FAA-administered airport financial assistance programs and they accepted
19 certain obligations (or assurances). These assurances require CPA to maintain and operate
20 their facilities safely and efficiently and in accordance with specified conditions.

21 An Airport Layout Plan (ALP) is a scaled drawing of existing and proposed land and facilities
22 necessary for the operation and development of the airport. The ALP must be updated to show
23 the location of proposed capital investments. The ALP will require FAA internal coordination
24 prior to approval by the Airports Division Office. FAA internal approval will coordinate with the
25 other FAA divisions with input to the proposals such as Flight Standards, facilities, ATC, and
26 others as required. The updated ALP must be coordinated and approved by the CPA prior to
27 FAA approval; the CPA is responsible for keeping the ALP updated.

28 8.3 FAA ARTCC, Guam

29 Guam ARTCC stated that PACAF's proposed activities and exercises would not impact the air
30 route center's manning or airways within their FIR, and not impose any stress on their system
31 as long as it adheres to the information published within the *"Proposed Divert Activities and
32 Exercises, Guam and Commonwealth of the Northern Mariana Islands (CNMI)."* Air traffic within
33 their FIR is down 15 percent due to fuel prices and the economy.

34 DOD air traffic will not receive preferential treatment but will be sequenced per FAA 7110.65
35 along with commercial air traffic. DOD air traffic can expect to transit airway A221 to the initial
36 approach fix for GSN or TNI. However, DOD aircraft may receive direct routing when filed.

1 Guam ARTCC is concerned about the multiple DOD proposed projects in Guam and CNMI.
2 Guam ARTCC has requested that FAA Western Service Area initiate an internal working group
3 to ensure collaborations among all projects.

4 8.4 CPA Leadership

5 The CPA has two proposed aprons in the same location as PACAF's parking apron. These
6 aprons are unfunded proposals and do not expect to receive funding.

7 GSN Fire/Rescue Department is rated Index D and has 500,000 gallons of water available. It
8 meets USAF requirements of the proposal. TNI Fire/Rescue Department is rated Index A and
9 has 60,000 gallons of water available. Tinian ARFF does not meet FAA Index D requirements
10 to support the baseline aircraft in the proposal.

11 8.5 CPA GSN

12 The airfield has ponding (standing water) issues after rainfalls. There were multiple birds on the
13 airfield during our tour; the most obvious were the black noddies. CPA airfield operations
14 personnel stated there is a Wildlife Hazard Mitigation program in-place; however, the bird
15 population increases from October to January.

16 8.6 CPA TNI

17 TNI personnel fear that USAF aircraft operations on Tinian could cause delays to their civilian
18 commercial air traffic and de-certification of their FAA credentials. The necessity to assure the
19 FAA, CPA and the military are all in agreement on necessary procedures and requirements
20 manifested itself during the United States Marine Corps (USMC) exercise at TNI in May 2012.
21 Some examples of miscommunications included the following:

- 22 • The original operation plan as communicated to CPA was that up to four FA-18s and
23 one C-130 would utilize the airport; however, six FA-18s and two C-130s landed for
24 refueling.
- 25 • No set approach and departure routing was agreed upon among the parties resulting in
26 noise complaints from the surrounding housing areas.
- 27 • The USMC airfield coordinator failed to manage ground operations effectively resulting
28 in the delay of civilian aircraft. The delay was caused due to two C-130 aircraft blocking
29 the taxiway because one aircraft did not follow the one-way taxi procedures as agreed to
30 between CPA and USMC. Spill and hazardous material containment had not been
31 coordinated for the event resulting in a C-130 fuel spill. Though it was contained with
32 available portable spill containment kits, there was an obvious residual fuel stain on their
33 parking apron.
- 34 • Two C-130s were nose-to-nose blocking the taxiway.

35 TNI personnel welcomes USAF operations to the airfield as long as they comply with CPA and
36 FAA agreements/regulations and the appropriate operating agreements are executed.

1 8.7 Saipan Air Traffic Control Tower, SERCO Contract

2 The airfield is extremely busy from 0800 until 1100 and 0000 until 0300. During these periods,
3 there are normally two controllers on duty. The airport averages 200 flights daily. A majority of
4 the traffic consists of commuter flights among the Mariana Islands.

5 8.8 Star Marianas Airlines

6 Star Marianas has flights daily between Saipan/Tinian. These flights increase or decrease
7 depending on demand. Occasionally, they provide sightseeing tours around both islands when
8 requested, but can increase with demand. During the May 2012 USMC exercise on Tinian,
9 Freedom Airline and Star Marianas received arrival and departure delays. Star Marianas is
10 concerned that USAF arrival at Saipan and/or Tinian will impact their operations (delays).

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1 9. Proposed Mitigation/Recommendations

2 9.1 Background

3 This chapter provides mitigations and recommendations to successfully implement PACAF's
4 proposed construction and operations. Airport operations in Saipan and Tinian will be impacted;
5 however, the mitigations and recommendations listed below would minimize those impacts.

6 9.2 GSN Proposed Mitigation/Recommendations

7 Below are the impacts and proposed mitigation/recommendations for GSN.

8 **Aircraft Rescue Firefighting (ARFF) Department Line-of-Sight.** Visual line-of-sight is
9 determined by the ability of the average human eye to view an object unimpeded. The parking
10 apron may impede GSN ARFF line-of-sight to the runway. If line-of-sight is impeded,
11 recommendations include: (1) installing a tower on the ARFF facility to increase visibility, (2)
12 adding surveillance cameras on the airfield, (3) requesting a waiver for line-of-sight criteria, or
13 (4) relocating the proposed parking apron.

14 **FAR Part 77.** Any organization intent to sponsor construction or alterations on the airfield must
15 notify the FAA. There are no perceived violations to FAR Part 77 criteria for the proposed
16 constructions. The USAF should file a FAA Form 7460-1, Notice of Proposed Construction or
17 Alteration with the FAA for all proposed construction.

18 **Airport Layout Plan (ALP).** An ALP is a scaled drawing of existing and proposed land and
19 facilities necessary for the operation and development of the airport. The ALP must be updated
20 and approved by CPA and FAA. Approval of modifications to the ALP must be received prior to
21 the issuance of leases and construction commencing.

22 **FAA Safety Management System (SMS).** SMS is the formal, top-down business approach to
23 managing safety risk, which includes a systemic approach to managing safety, including the
24 necessary organizational structures, accountabilities, policies and procedures (FAA 2011). The
25 SMS will be used for full coordination of all phases of construction within the airfield boundaries.
26 The recommendation is to complete a Construction Safety Plan for each construction site which
27 may or may not trigger FAA to conduct an SMS review.

28 9.3 TNI Proposed Mitigations/Recommendations

29 Below are the proposed mitigations/recommendations for TNI.

30 **Airport Layout Plan (ALP).** An ALP is a scaled drawing of existing and proposed land and
31 facilities necessary for the operation and development of the airport. The ALP must be updated
32 and approved by CPA and FAA. USAF should accomplish and receive approval to the ALP
33 prior to construction commencing.

34 **FAR Part 77.** Any organization intent to sponsor construction or alterations on the airfield must
35 notify the FAA. There are no perceived violations to FAR Part 77 criteria for the proposed

- 1 constructions. USAF should file a FAA Form 7460-1, Notice of Proposed Construction or
- 2 Alteration with FAA for all proposed construction.

- 3 **FAA Safety Management System (SMS).** An SMS is the formal, top-down business approach
- 4 to managing safety risk, which includes a systemic approach to managing safety, including the
- 5 necessary organizational structures, accountabilities, policies and procedures (FAA 2011). The
- 6 SMS will be used for full coordination of all phases of construction within the airfield boundaries.
- 7 USAF should complete an SMS for each construction site.

10. REFERENCES

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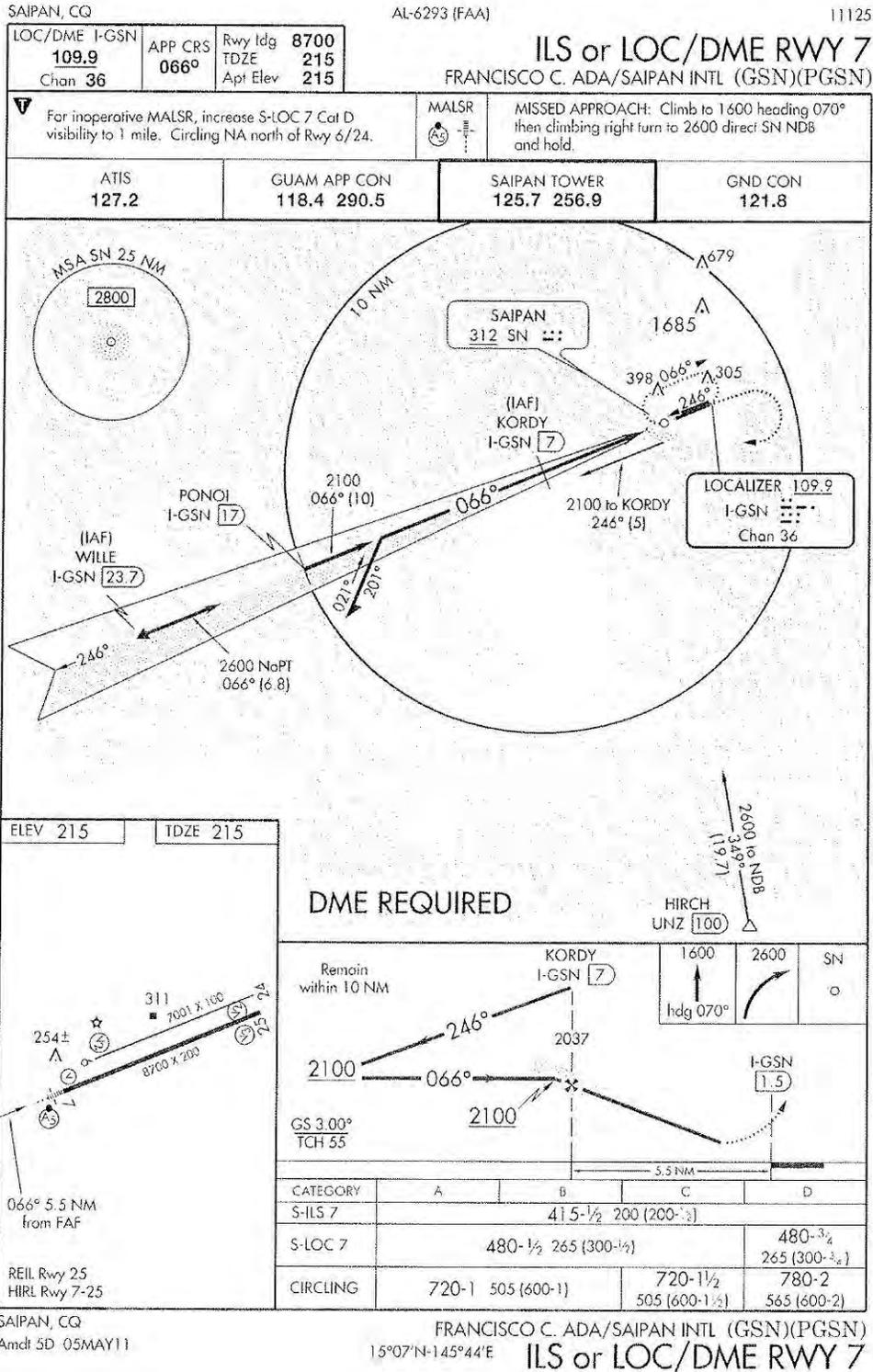


A

GSN Terminal Instrument Approach Procedures



Appendix A: GSN Terminal Instrument Approach Procedures



SAIPAN, CQ

AL-6293 (FAA)

11125

APP CRS	Rwy Idg	8700
066°	THRE	210
	Apt Elev	215

RNAV (GPS) RWY 7

FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)

▼ For inoperative MALSR, increase LNAV Cats C and D visibility to 7/8. When local altimeter setting not received, procedure NA. DME/DME RNP-0.3 NA. Circling NA north of Rwy 6-24.

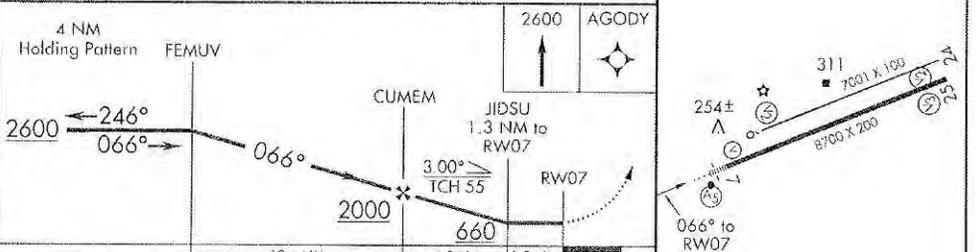
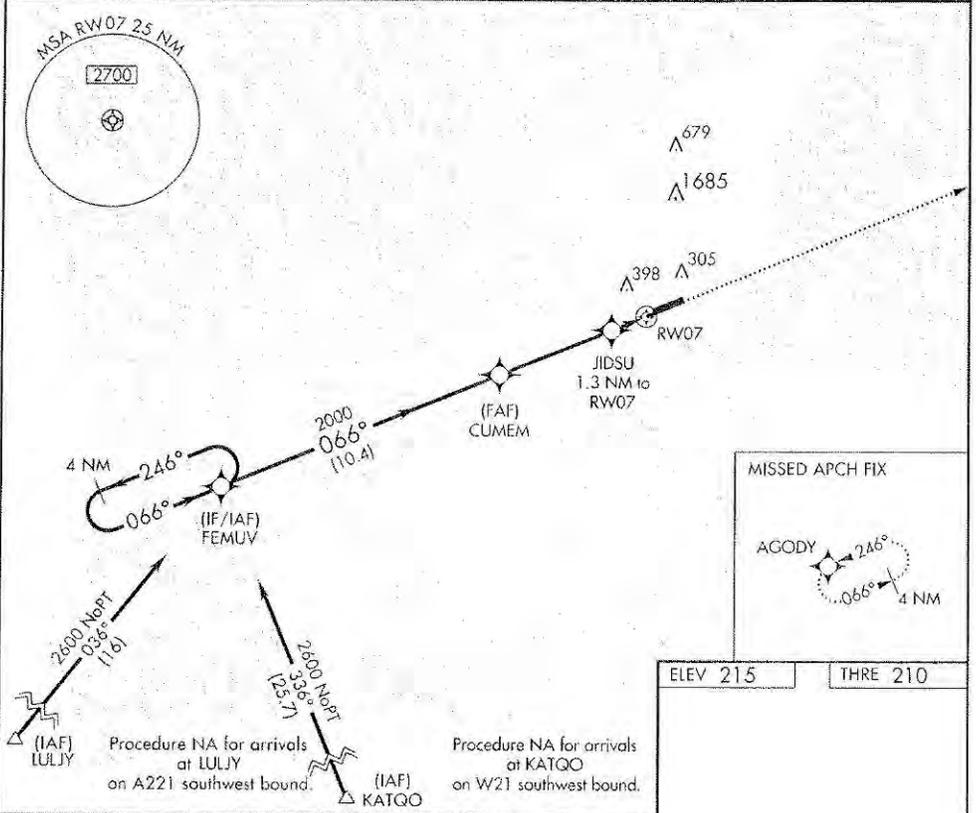


MISSED APPROACH:
Climb 2600 direct
AGODY and hold.

ATIS 127.2	GUAM APP CON 118.4 290.5	SAIPAN TOWER 125.7 256.9	GND CON 121.8
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PAC, 09 FEB 2012 to 05 APR 2012

PAC, 09 FEB 2012 to 05 APR 2012



CATEGORY	A	B	C	D
LNAV MDA	520-1/2 310 (400-1/2)			
CIRCLING	720-1 505 (600-1)	720-1 1/2 505 (600-1 1/2)	780-2 565 (600-2)	

SAIPAN, CQ
Orig-A 05MAY11

FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)
15°07'N-145°44'E

RNAV (GPS) RWY 7

SAIPAN, CQ

AI-6293 (FAA)

11125

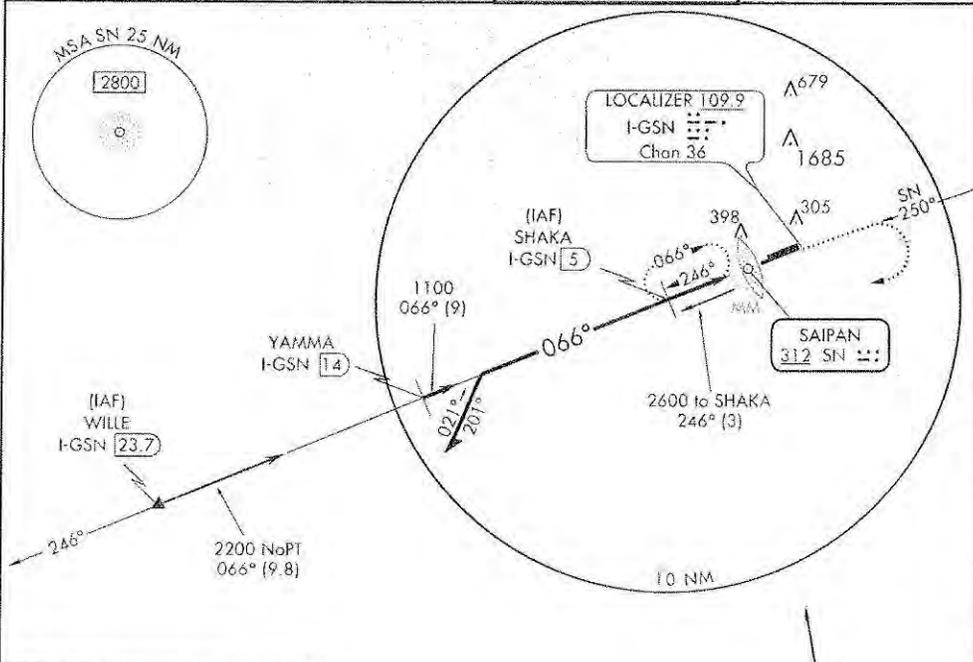
NDB SN 312	APP CRS 066°	Rwy ldg TDZE Apt Elev	8700 215 215
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NDB/DME RWY 7
FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)

▼ Cat C S-7 visibility increased 1/4 mile for inoperative MALS. Circling NA north of Rwy 6-24.

MALS R:  MISSED APPROACH: Climb to 1600 via 070° bearing from SN NDB then climbing right turn to 2600 direct SN NDB then 246° bearing from SN NDB to Shaka 5 DME and hold.

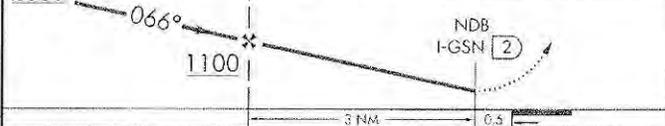
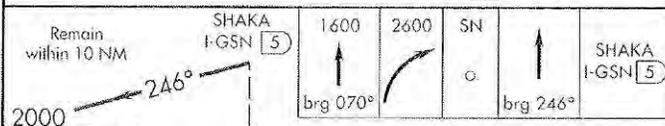
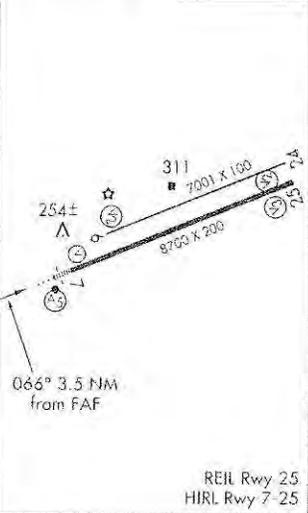
ATIS 127.2	GUAM APP CON 118.4 290.5	SAIPAN TOWER 125.7 256.9	GND CON 121.8
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PAC, 09 FEB 2012 to 05 APR 2012

PAC, 09 FEB 2012 to 05 APR 2012

ELEV 215	TDZE 215
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CATEGORY	A	B	C	D
S-7	560-3/4	345 (400-3/4)		560-1 345 (400-1)
CIRCLING	720-1	505 (600-1)	720-1 1/2 505 (600-1/2)	780-2 565 (600-2)

SAIPAN, CQ
Amdt 3C 05MAY11

FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)
15°07'N-145°44'E
NDB/DME RWY 7

SAIPAN, CQ

AL-6293 (FAA)

11125

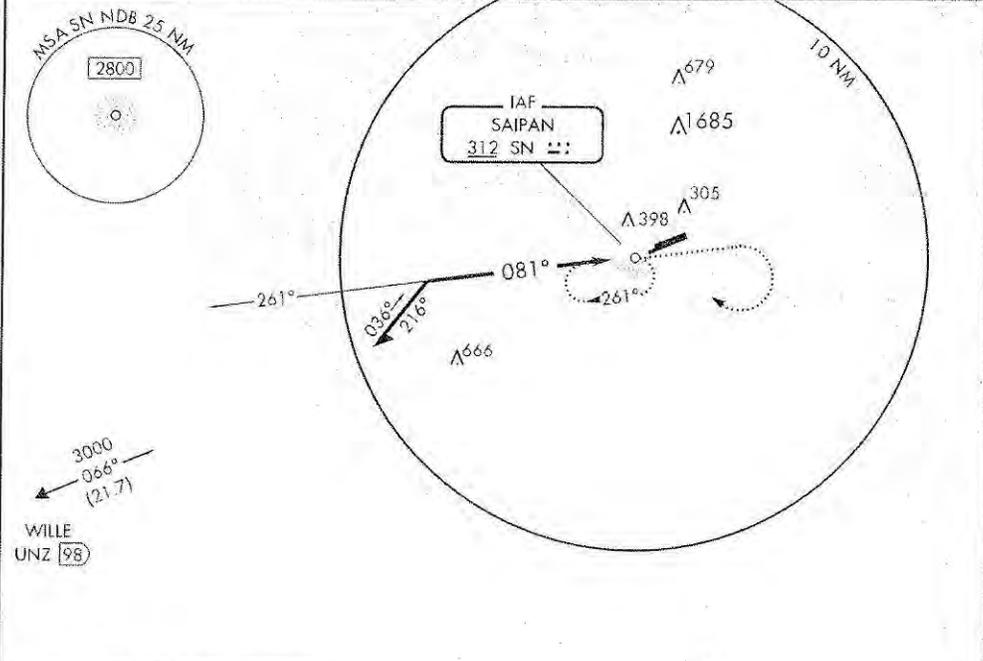
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		TDZE 215
		Apt Elev 215

NDB RWY 7

FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)

▼ For inoperative MALSR, increase S-7 Cats A and B visibility ½ mile, inoperative table does not apply to S-7 cat C and D. Circling NA north of Rwy 6-24.
▲ MALSR MISSED APPROACH: Climb to 2400 then climbing right turn to 3000 direct SN NDB and hold, continue climb-in-hold to 3000.

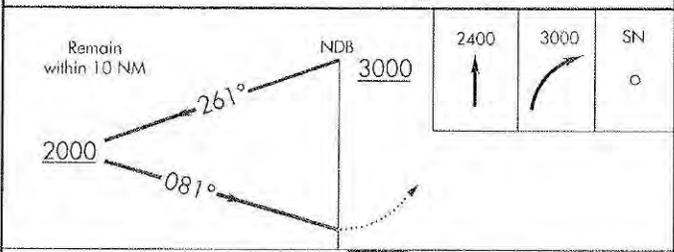
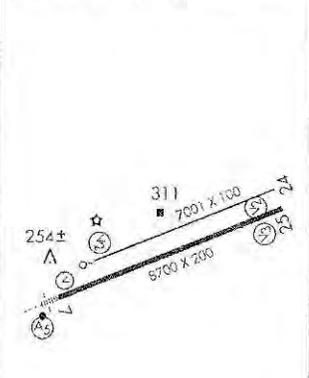
ATIS 127.2	GUAM APP CON 118.4 290.5	SAIPAN TOWER 125.7 256.9	GND CON 121.8
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PAC, 09 FEB 2012 to 05 APR 2012

PAC, 09 FEB 2012 to 05 APR 2012

ELEV 215	TDZE 215
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CATEGORY	A	B	C	D
S-7	900-3/4 685 (700-3/4)		900-2 685 (700-2)	900-2 1/2 685 (700-2 1/2)
CIRCLING	900-1 685 (700-1)		900-2 685 (700-2)	900-2 1/2 685 (700-2 1/2)

SAIPAN, CQ
Amdt 5A 03MAY11

FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)
15°07'N-145°44'E
NDB RWY 7

SAIPAN, CQ

AL-6293 (FAA)

11125

APP CRS	Rwy Idg	8700
246°	THRE	210
	Apt Elev	215

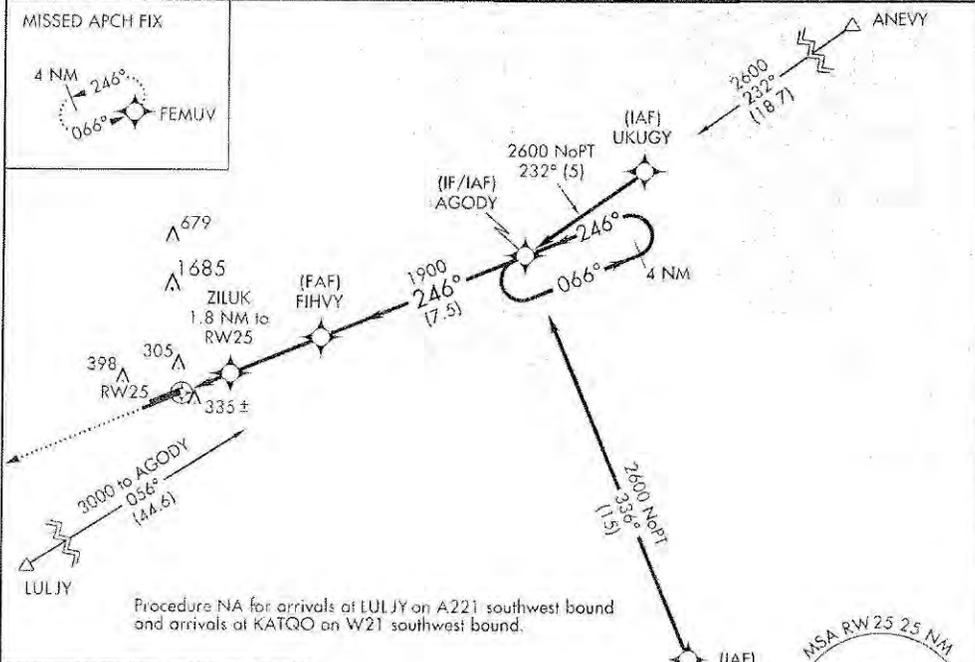
RNAV (GPS) RWY 25

FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)

When local altimeter setting not received, procedure NA.
 DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
 Circling NA north of Rwy 6-24.

MISSED APPROACH:
 Climb to 2600 direct FEMUV and hold.

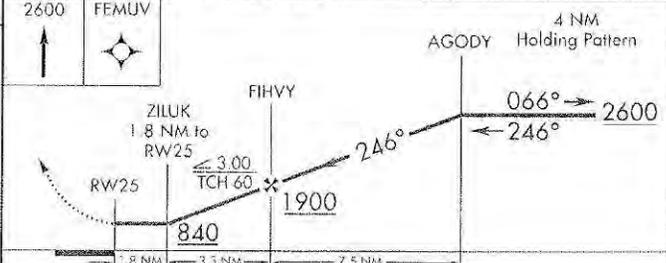
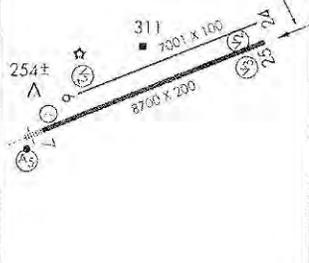
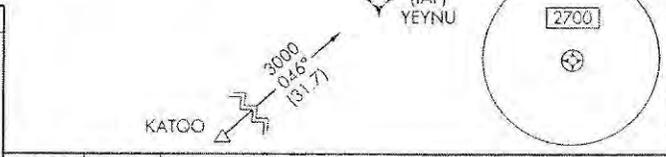
ATIS 127.2	GUAM APP CON 118.4 290.5	SAIPAN TOWER 125.7 256.9	GND CON 121.8
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PAC, 09 FEB 2012 to 05 APR 2012

PAC, 09 FEB 2012 to 05 APR 2012

ELEV 215	THRE 210
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CATEGORY	A	B	C	D
LNAV MDA	600-1	390 (400-1)	600-1½	390 (400-1½)
CIRCLING	720-1	505 (600-1)	720-1½	780-2 565 (600-2)

SAIPAN, CQ
 Orig-A 05MAY11

FRANCISCO C. ADA/SAIPAN INTL (GSN)(PGSN)
 15°07'N-145°44'E
RNAV (GPS) RWY 25



B

TNI Terminal Instrument Approach Procedures

Appendix B: TNI Terminal Instrument Approach Procedures

TINIAN ISLAND, CO

AI-6848 (FAA)

RNAV (GPS) RWY 8 TINIAN INTL (TNI)(PGWT)

APP CRS	Rwy Idg	8600
078°	TDZE	243
	Apt Elev	271

⚠ DME/DME RNP-0.3 NA. Obtain local altimeter setting on CTAF; when not received, use Saipan altimeter setting. VDP NA when using Saipan altimeter setting.

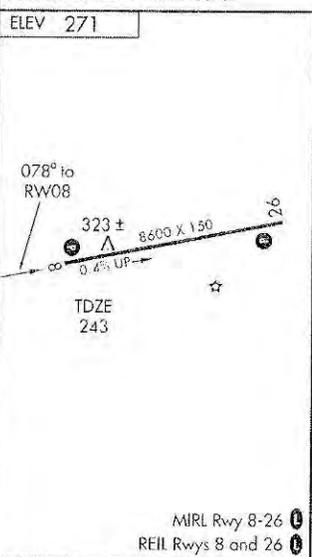
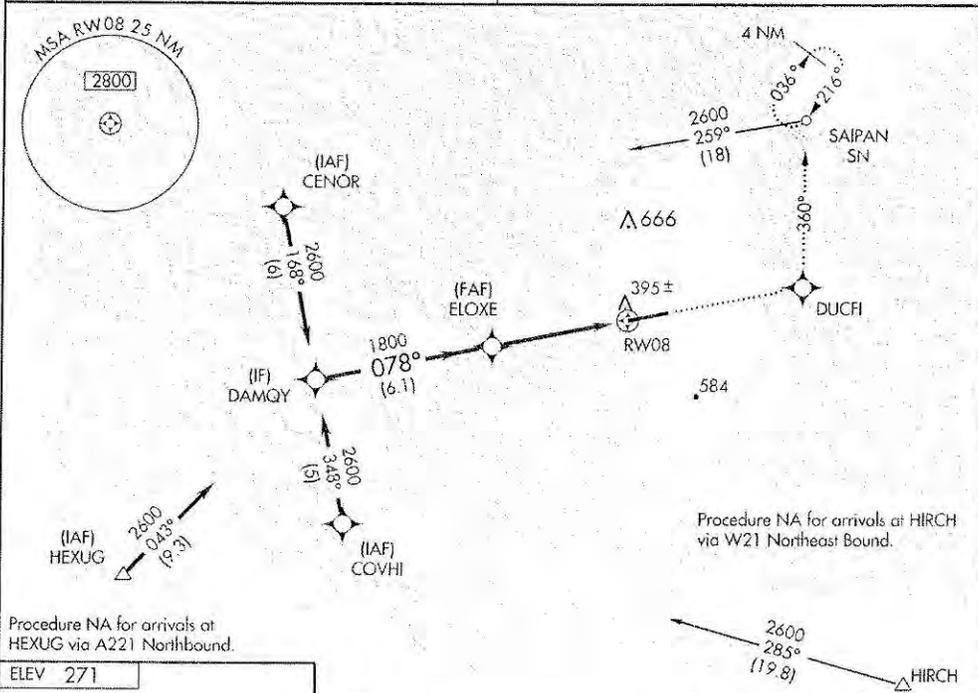
MISSED APPROACH: Climb to 2800 direct DUCFI and via 360° track to SN NDB and hold, continue climb-in-hold to 2800.

GUAM APP CON
118.4 290.5

SAIPAN RADIO
123.6 (CTAF) **0**

PAC, 09 FEB 2012 to 05 APR 2012

PAC, 09 FEB 2012 to 05 APR 2012



	DAMQY	ELOXE	2800	DUCFI	360°	SN
	2600	1800	↑	⊙	Irk	○
Procedure Turn NA	6.1 NM		3.5 NM		1.2 NM to RW08	
	078°		3.04° TCH 45			
CATEGORY	A	B	C	D		
LNAV MDA	660-1	417 (400-1)	660-1½	417 (400-1½)		
CIRCLING	760-1	489 (500-1)	800-1½	960-2½	529 (600-1½)	689 (700-2½)
SAIPAN ALTIMETER SETTING MINIMUMS						
LNAV MDA	680-1	437 (500-1)	680-1½	437 (500-1½)	680-1½	437 (500-1½)
CIRCLING	800-1	529 (600-1)	840-1½	569 (600-1½)	1000-2½	729 (800-2½)

TINIAN ISLAND, CO
Amdt 1 09239

15° 00'N-145° 37'E

TINIAN INTL (TNI)(PGWT) RNAV (GPS) RWY 8

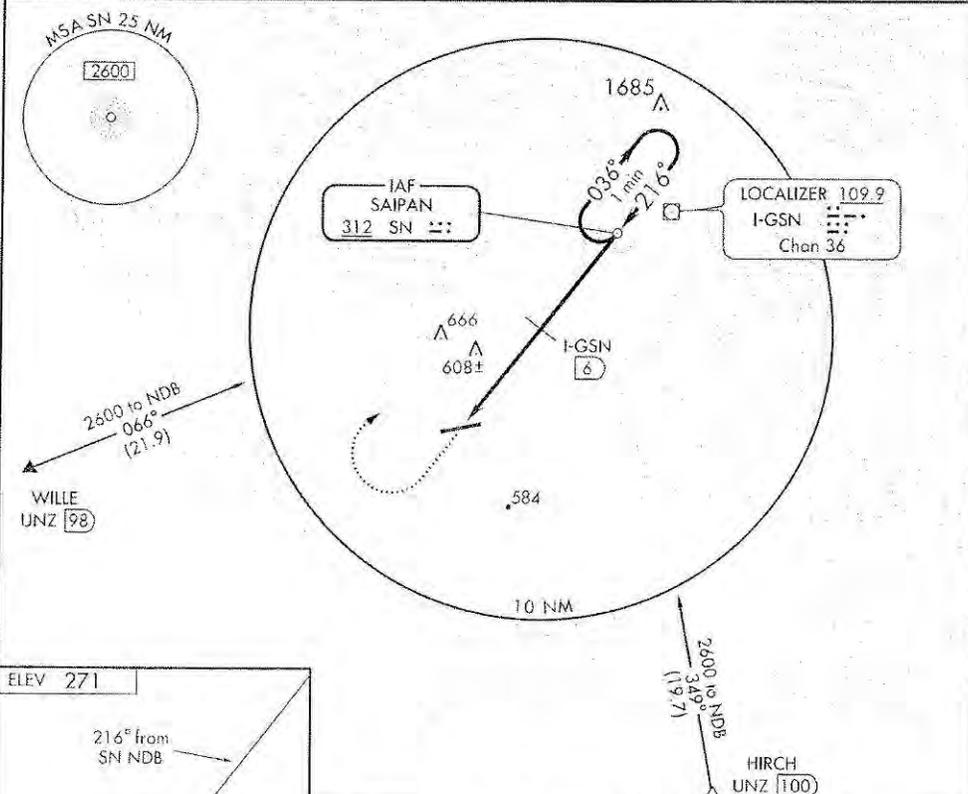
TINIAN ISLAND, CO

AL-6848 (FAA)

SN NDB 312	APP CRS 216°	Rwy Idg TDZE Apt Elev	N/A N/A 271
----------------------	------------------------	-----------------------------	--------------------------

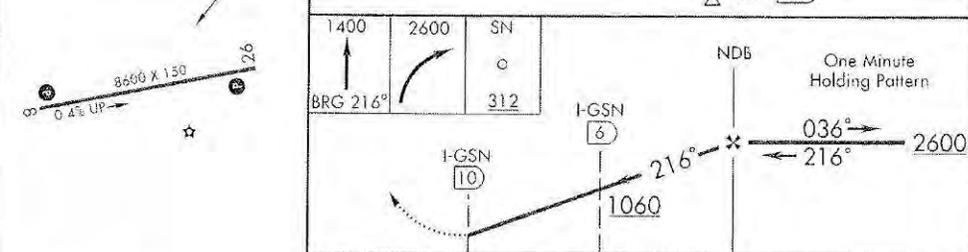
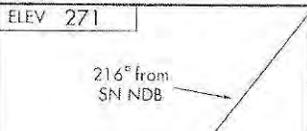
NDB-A
TINIAN INTL (TNI)(PGWT)

<p>▼ ▲</p>	<p>MISSED APPROACH. Climb to 1400 via 216° bearing from SN NDB then climbing right turn to 2600 direct SN NDB and hold.</p>
<p>GUAM APP CON 118.4 290.5</p>	<p>SAIPAN RADIO 123.6 (CTAF) 0</p>



PAC, 09 FEB 2012 to 05 APR 2012

PAC, 09 FEB 2012 to 05 APR 2012



CATEGORY	A	B	C	D
	1060-1 789 (800-1)	1060-1¼ 789 (800-1¼)	1060-2¼ 789 (800-2¼)	1060-2½ 789 (800-2½)
DME MINIMUMS				
CIRCLING	940-1 669 (700-1)		940-2 669 (700-2)	940-2¼ 669 (700-2¼)

TINIAN ISLAND, CO
Amdt 1C 09015

15°00'N-145°37'E

TINIAN INTL (TNI)(PGWT)
NDB-A

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C

Personnel Contacted



Appendix C: Personnel Contacted

Name	Organization	Title
Renaldo Advinula	Star Marianas Airline	Station Manager
John Baraina	TNI (CPA)	Fire/Rescue and Police
Anthony Calvo	FAA ARTCC Guam	Enroute Supervisor
Raymond Carbella	Saipan ATC Tower	Air Traffic Controller
MSgt Wendell Carver	36 th OSS/OSA	Deputy Chief Controller
Eric Cleveland	HDR	Airspace/Airfield Analyst
James Colson	36 th WG/OSS	Airspace Manager
Tim Cornelison	FAA Guam ARTCC	Air Route Center Manager
Gerald Crisostomo	TNI (CPA)	Asst Port Manager
Michelle Cruz	FAA WSA	Via telecom
James Diaz	CPA	Fire Chief (Saipan & Tinian)
James Duke	PACAF/A3O	Airspace Manager
Amjad Farhoud	Freedom Air	Pilot
Carol Gaudette	PACAF/A7P	Requirements Branch Chief
Tim Glickman	PACAF/A3O	Airspace Manager
MSgt Michael Hammond	PACAF/PAX	Plans Division Manager
Rob Henry	FAA WSA	Via telecom
Julie Hong	PACAF/A7P	Booz, Allen, Hamilton
Joaquin Kileleman	GSN (CPA)	Airport Operations Supervisor
Greg Lee	PACAF/A7P	Community Planner
Jeff LeVault	PACAF/A5U	Booz, Allen, Hamilton
Maryann Lizama	CPA	Acting Director/Port Manager
Ed Lynch	HDR	Key Pursuits Leader
Bernard Marcos	PACAF/A7P	Civil Engineer
MSgt Anthony Matthews	36 th OSS/OSA	Deputy Airfield Manager
Ed Mendiola	GSN (CPA)	Airport Manager
Joseph Mendiola	TNI (CPA)	Port Manager
Lt Col William Percival	36 th MRS/DO	Ops Officer Combat Readiness
Steve Pyle	HDR	Project Manager
Terry Pyle	FAA ARTCC Guam	Operations Manager
Nick Sablan	GSN (CPA)	Captain, Fire Department
Jush Sanchez	TNI (CPA)	Fire/Rescue and Police
Ron Simpson	FAA Airport Division	Airport Division Manager
Greg Spencer	PACAF/A7P	Community Planner
TSgt Chad Thompson	36 th OSS/OSA	Air Traffic Controller
John Thompson	36 th CES/CEF	Chief, Fire and Rescue
Stanley Torres	36 th CES/CEF	Deputy Chief, Fire and Rescue

Name	Organization	Title
Maj Peter Toves	PACAF/A5U	Requirements Branch Chief
Cardiff Walker	Freedom Air	Pilot
Lt Col Adrienne Williams	36 th WG/SE	Chief of Safety
Gordon Wong	FAA Airport Division	Airport Specialist
Steve Wong	FAA Airport Division	Airport Specialist
Brian Yamada	FAA Honolulu ARTCC	Via telecom

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APPENDIX G

Revised Draft EIS Public Involvement and Comments



APPENDIX G
PUBLIC INVOLVEMENT AND REVISED DRAFT EIS COMMENTS

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NOTICE OF INTENT



59664

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more beneficiary countries. This preferential treatment is also available for apparel articles assembled in one or more lesser-developed beneficiary sub-Saharan African countries, regardless of the country of origin of the fabric used to make such articles, subject to quantitative limitation. Title VI of the TRHCA 2006 extended this special rule for lesser-developed countries through September 30, 2012.

The AGOA Acceleration Act of 2004 provides that the quantitative limitation for the twelve-month period beginning October 1, 2011 will be an amount not to exceed 7 percent of the aggregate square meter equivalents of all apparel articles imported into the United States in the preceding 12-month period for which data are available. See Section 112(b)(3)(A)(ii)(I) of TDA 2000, as amended by Section 7(b)(2)(B) of the AGOA Acceleration Act of 2004. Of this overall amount, apparel imported under the special rule for lesser-developed countries is limited to an amount not to exceed 3.5 percent of all apparel articles imported into the United States in the preceding 12-month period. See Section 112(b)(3)(B)(ii)(II) of TDA 2000, as amended by Section 6002(a) of TRHCA 2006. Presidential Proclamation 7350 of October 2, 2000 directed CITA to publish the aggregate quantity of imports allowed during each 12-month period in the **Federal Register**.

For the one-year period, beginning on October 1, 2011, and extending through September 30, 2012 the aggregate quantity of imports eligible for preferential treatment under these provisions is 1,877,430,342 square meters equivalent. Of this amount, 938,715,171 square meters equivalent is available to apparel articles imported under the special rule for lesser-developed countries. Apparel articles entered in excess of these quantities will be subject to otherwise applicable tariffs.

These quantities are calculated using the aggregate square meter equivalents of all apparel articles imported into the United States, derived from the set of Harmonized System lines listed in the Annex to the World Trade Organization Agreement on Textiles and Clothing (ATC), and the conversion factors for units of measure into square meter equivalents used by the United States in implementing the ATC.

Kimberly Glas,

Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 2011-24853 Filed 9-26-11; 8:45 am]

BILLING CODE 3410-DS-P

DEPARTMENT OF DEFENSE

Office of the Secretary

Membership of the Defense Contract Audit Agency Senior Executive Service Performance Review Boards

AGENCY: Defense Contract Audit Agency, Department of Defense (DoD).

ACTION: Notice of Membership of the Defense Contract Audit Agency Senior Executive Service Performance Review Boards.

SUMMARY: This notice announces the appointment of members to the Defense Contract Audit Agency (DCAA) Performance Review Boards. The Performance Review Boards provide fair and impartial review of Senior Executive Service (SES) performance appraisals and make recommendations to the Director, DCAA, regarding final performance ratings and performance awards for DCAA SES members.

DATES: *Effective Date:* Upon publication of this notice.

FOR FURTHER INFORMATION CONTACT:

Sandra L. Burrell, Chief, Human Resources Management Division, Defense Contract Audit Agency, 8725 John J. Kingman Road, Suite 2133, Fort Belvoir, Virginia 22060-6219, (703) 767-1039.

SUPPLEMENTARY INFORMATION: In accordance with 5 U.S.C. 4314(c)(4), the following are the names and titles of DCAA career executives appointed to serve as members of the DCAA Performance Review Boards.

Appointees will serve one-year terms, effective upon publication of this notice.

Headquarters Performance Review Board:

Ms. Karen Cash, Assistant Director, Operations, DCAA; chairperson.

Mr. Kenneth Saccoccia, Assistant Director, Policy and Plans, DCAA; member.

Mr. Donald McKenzie, Assistant Director, Integrity & Quality Assurance, DCAA; member.

Regional Performance Review Board:

Mr. David Eck, Regional Director, Mid-Atlantic, DCAA; chairperson.

Mr. Ronald Mullinax, Regional Director, Western, DCAA; member.

Mr. Ronald Meldonian, Regional Director, Northeastern, DCAA; member.

Dated: September 22, 2011.

Aaron Siegel,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2011-24789 Filed 9-26-11; 8:45 am]

BILLING CODE 5001-06-P

DEPARTMENT OF DEFENSE

Department of the Air Force

Notice of Intent To Prepare an Environmental Impact Statement For Divert Activities and Exercises, Guam and Commonwealth of The Northern Mariana Islands

AGENCY: Headquarters Pacific Air Forces, United States Air Force, DoD.

ACTION: Notice of Intent.

SUMMARY: Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321, *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500-1508), and U.S. Air Force (USAF) Environmental Impact Analysis Process (32 CFR part 989), the USAF is issuing this notice to advise the public of its intent to prepare an Environmental Impact Statement (EIS) for Divert Activities and Exercises, Guam and Commonwealth of the Northern Mariana Islands.

The proposed divert activities and exercises would involve airfield improvements designed to provide additional divert capability for various military aircraft operating as part of joint training exercises, humanitarian assistance activities, and disaster relief operations for northeast Asia. The proposed action would include the development and construction of facilities and infrastructure designed to support up to one tanker squadron of 12 KC-135 aircraft and its approximately 500 support personnel. This proposed action includes divert activities and exercises involving a tanker squadron, as well as USAF, U.S. Navy, or other military aircraft operating in the region, and ideally would require a 10,000-foot runway. Components of the proposal include a cargo pad; an expanded runway area; new taxiways, aprons, and shoulders; 6,000-square foot maintenance facility; jet fuel receiving, storage, and delivery capability; and associated pavement markings, lighting, security, and other related infrastructure.

The possible alternatives for the divert airfield capability include the international airports on Saipan, Tinian, Rota, or other reasonable alternatives developed during the scoping process. Guam International Airport, as an existing divert location, will be considered in this EIS, as part of the no action alternative.

The Air Force is in the process of inviting potential Cooperating Agencies to participate in aspects of the EIS development as appropriate or required.

NOTICE OF AVAILABILITY FOR DRAFT EIS



consider to be CBI or otherwise protected through <http://www.regulations.gov> or email. The <http://www.regulations.gov> Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through <http://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the OEI Docket in the EPA Headquarters Docket Center.

FOR FURTHER INFORMATION CONTACT: For information on the federal docket, contact the Office of Environmental Information Docket; telephone: 202-566-1752; facsimile: 202-566-9744; or email: ORD.Docket@epa.gov.

For information on the public listening session, please contact Christine Ross, IRIS Staff, National Center for Environmental Assessment, (8601P), U.S. EPA, 1200 Pennsylvania Avenue NW., Washington, DC 20460; telephone: 703-347-8592; facsimile: 703-347-8689; or email: IRISListeningSession@epa.gov.

If you have questions about the document, contact Audrey Galizia, National Center for Environmental Assessment (NCEA); telephone: 732-906-6887; facsimile: 732-452-6429; or email: FRN_Questions@epa.gov.

Dated: May 24, 2012.

Darrell A. Winner,
Acting Director, National Center for
Environmental Assessment.

[FR Doc. 2012-13825 Filed 6-7-12; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-9003-4]

Environmental Impacts Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564-7146 or <http://www.epa.gov/compliance/nepa/>.

Weekly receipt of Environmental Impact Statements

Filed 05/29/2012 Through 06/01/2012 Pursuant to 40 CFR 1506.9.

Notice

Section 309(a) of the Clean Air Act requires that EPA make public its comments on EISs issued by other Federal agencies. EPA's comment letters on EISs are available at: <http://www.epa.gov/compliance/nepa/eisdata.html>.

SUPPLEMENTARY INFORMATION: EPA is seeking agencies to participate in its e-NEPA electronic EIS submission pilot. Participating agencies can fulfill all requirements for EIS filing, eliminating the need to submit paper copies to EPA Headquarters, by filing documents online and providing feedback on the process. To participate in the pilot, register at: <https://cdx.epa.gov>.

EIS No. 20120172, Final EIS, BLM, WV, East Lynn Lake Coal Lease Project, To Offer Federal Coal in the Coalburg/Winifrede Seam for Competitive Leasing, Wayne County, WV, *Review Period Ends:* 07/09/2012, *Contact:* Chris Carusona 414-297-4463.

EIS No. 20120173, Draft EIS, FHWA, TX, South Padre Island Second Access Project, State Highway 100, Across the Laguna Madre, To Park Road 100, Construction of a New Location Highway Facility, USACE Section 10 and 404 Permits, Cameron County, TX, *Comment Period Ends:* 08/15/2012, *Contact:* Gregory Punske 512-536-5960.

EIS No. 20120174, Final EIS, FHWA, MD, US 50 Crossing Study, Transportation Improvement from MD-611 to MD 378; and 3rd Street to Somerset Street, Funding, USACE Section 10 and 404 Permits, Worcester County, MD, *Review Period Ends:* 07/09/2012, *Contact:* Nicholas Blendy 302-734-2966.

EIS No. 20120175, Draft EIS, USFWS, DE, Prime Hook National Wildlife Refuge, Development of a Comprehensive Conservation Plan, Implementation, Sussex County, DE, *Comment Period Ends:* 08/06/2012, *Contact:* Thomas Bonetti 413-253-8307.

EIS No. 20120176, Second Final Supplement, USN, 00, Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) Sonar Systems, Updated and Additional Information on Employment of Four SURTASS LFA Sonar Systems for Routine Training, Testing, and Military Operation, Implementation, *Review Period Ends:* 07/09/2012, *Contact:* CDR R.A. Dempsey 703-695-8266.

EIS No. 20120177, Draft EIS, USAF, 00, Divert Activities and Exercises, Guam Commonwealth of the Northern Mariana Islands (CNMI), To Improve existing Airport(s) and Associated Infrastructure in the Mariana Islands and To Achieve Divert Capabilities in Western Pacific, Mariana Islands Region, *Comment Period Ends:* 07/23/2012, *Contact:* Jay Nash 703-693-4001.

EIS No. 20120178, Final EIS, APHIS, 00, Glyphosate-Tolerant H7-1 Sugar Beet, Request for Nonregulated Status, United States, *Review Period Ends:* 07/09/2012, *Contact:* Rebecca Stankiewicz Gabel 301-851-3927.

EIS No. 20120179, Final EIS, DOE, CA, Energia Sierra Juarez U.S. Transmission Line Project, Construction, Operation, Maintenance, and Connection of Either 230-Kilovolt or a 500-Kilovolt Electric Transmission Line Crossing U.S.-Mexico Border, Presidential Permit Approval, San Diego County, CA, *Review Period Ends:* 07/09/2012, *Contact:* Brian Mills 202-586-8267.

EIS No. 20120180, Final EIS, USN, HI, Basing of MV-22 and H-1 Aircraft in Support of III Marine Expeditionary Force (MEF) Elements, Construction and Renovation of Facilities to Accommodate and Maintain the Squadrons, HI, *Review Period Ends:* 07/16/2012, *Contact:* 808-472-1196.

EIS No. 20120181, Final EIS, WAPA, AZ, Grapevine Canyon Wind Project, Proposal to Develop a Wind Energy Generating Facility up to 500 Megawatts: (2) a 345 Kilovolt (kV) Electrical Transmission Tie-Line; and (3) a 345-kV Electrical Interconnection Switchyard, Coconino County, AZ, *Review Period Ends:* 07/09/2012, *Contact:* Matt Blevins 800-336-7288.

NEWSPAPER ADVERTISEMENT FOR DRAFT EIS

NOTICE OF AVAILABILITY NOTICE OF PUBLIC HEARING

DRAFT EIS FOR DIVERT ACTIVITIES AND EXERCISES, GUAM AND COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

The U.S. Air Force (USAF) announces the availability of the Draft Environmental Impact Statement (EIS) for Divert Activities and Exercises, Guam and Commonwealth of the Northern Mariana Islands (CNMI) for public review. The Draft EIS is available for download on the project website address listed below.

The USAF requests comments on the Draft EIS and will host open public hearings on the islands of Saipan and Tinian. The proposed action analyzed in the Draft EIS is to improve an existing airport or airports and associated infrastructure in the Mariana Islands region in support of expanding mission requirements and to achieve divert capabilities in the western Pacific. The proposed airfield and infrastructure improvements would be designed to support a combination of cargo, fighter, and tanker aircraft and associated support personnel for divert landings, periodic exercises, and humanitarian assistance and disaster relief activities. Proposed facilities would be used on an as-needed basis and would not be used as a permanent full-time beddown or installation location. Saipan International Airport and Tinian International Airport are considered alternative locations for the proposed action. In accordance with the National Environmental Policy Act, the USAF has prepared a Draft EIS and is providing this documentation to the public for review.

In addition to electronic files that can be downloaded at the project website address listed below, printed copies of the Draft EIS will be available for review until July 23, 2012 at:

- Guam- University of Guam Robert F. Kennedy Memorial Library; Nieves M. Flores Memorial Library; Andersen Air Force Base Library
- Saipan- Saipan Office of the Mayor; Joeten-Kiyu Public Library
- Tinian- Tinian Office of the Mayor; Tinian Public Library
- Rota- Rota Office of the Mayor; Antonio Camacho Atalig Memorial Library.

The public is encouraged to attend the Draft EIS public hearings, which will be held at the following dates, times, and locations:

1. June 25, 2012 - Saipan Multi-Purpose Center, Beach Road, Susupe Village, Saipan, 5:00 p.m.-8:00 p.m.
2. June 26, 2012 - Tinian Elementary School, San Jose Village, Tinian, 5:00 p.m.-8:00 p.m.

Federal agencies, government of CNMI agencies, the public, and other interested parties are encouraged to provide verbal and/or written comments to the USAF for consideration in the Final EIS. Verbal and/or written comments may be submitted at the public hearings or via postal mail. All comments must be submitted or postmarked no later than July 23, 2012.

Mail comments to:

Capt Rebecca Heyse, PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853
ATTN: PACAF Divert Marianas EIS

In addition, comments on the Draft EIS will be accepted via telephone voice recording system by dialing 1-855-200-6734, and via the project website at:

www.PACAFDivertMarianasEIS.com.



NOTICE OF AVAILABILITY FOR REVISED DRAFT EIS



62526

Federal Register / Vol. 80, No. 200 / Friday, October 16, 2015 / Notices

protection. The data and information collected can provide valuable guidance for the Department in determining future policy in these areas.

Dated: October 13, 2015.

Kate Mullan,

Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.

[FR Doc. 2015-26344 Filed 10-15-15; 8:45 am]

BILLING CODE 4000-01-P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 12514-074]

Northern Indiana Public Service Company, Notice of Availability of Draft Environmental Assessment

In accordance with the National Environmental Policy Act of 1969 and the Federal Energy Regulatory Commission's (Commission or FERC's) regulations, 18 Code of Federal Regulations (CFR) Part 380, the Office of Energy Projects has reviewed Northern Indiana Public Service Company's application for amendment of the license for the Norway-Oakdale Hydroelectric Project (FERC Project No. 12514-074), on the Tippecanoe River near the city of Monticello in Carroll and White Counties, Indiana. The project does not occupy any federal lands.

Staff prepared a draft environmental assessment (EA) to analyze the potential environmental effects of implementing the proposed modified definition of abnormal flow conditions, as required by article 405 of the current license (issued October 2, 2007), that would be included in a revised article 403, which defines the operation of the project. Staff concludes that authorizing the amendment, with staff's recommended modification to the definition of abnormal river conditions, would not constitute a major federal action that would significantly affect the quality of the human environment.

A copy of the EA is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site at www.ferc.gov using the "eLibrary" link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at 1-866-208-3676, or for TTY, 202-502-8659.

You may also register online at www.ferc.gov/docs-filing/esubscription.asp to be notified via email of new filings and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

Any comments should be filed within 30 days from the date of this notice. Comments may be filed electronically via the Internet. See 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's Web site at <http://www.ferc.gov/docs-filing/efiling.asp>. Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at <http://www.ferc.gov/docs-filing/ecomment.asp>. You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support. Although the Commission strongly encourages electronic filing, documents may also be paper-filed. To paper-file, mail an original and five copies to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426. For further information, contact Rebecca Martin by telephone at 202-502-6012 or Mark Pawlowski at 202-502-6052.

Dated: October 9, 2015.

Kimberly D. Bose,

Secretary.

[FR Doc. 2015-26384 Filed 10-15-15; 8:45 am]

BILLING CODE 6717-01-P

ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-9023-5]

Environmental Impact Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564-7146 or <http://www2.epa.gov/nepa>. Weekly receipt of Environmental Impact Statements (EISs) Filed 10/05/2015 Through 10/09/2015 Pursuant to 40 CFR 1506.9.

Notice

Section 309(a) of the Clean Air Act requires that EPA make public its comments on EISs issued by other Federal agencies. EPA's comment letters on EISs are available at: <https://cdxnodeng.epa.gov/cdx-nepa-public/action/eis/search>.

EIS No. 20150289, Revised Draft, USAF, GU, Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands, Comment Period

Ends: 11/30/2015, Contact: Mark Petersen 808-449-1078.
EIS No. 20150290, Final, USCG, MABAD, NY, Port Ambrose Deepwater Port Application, Review Period Ends: 11/30/2015, Contact: Roddy C. Bachman 202-372-1451.

Amended Notices

EIS No. 20150231, Draft, USACE, CT, PROGRAMMATIC-Long Island Sound Dredged Material Management Plan, Comment Period Ends: 10/16/2015, Contact: Meghan Quinn 978-318-8179. Revision to the FR Notice Published 08/21/2015; Extended Comment Period from 10/05/2015 to 10/16/2015.

EIS No. 20150253, Draft, USACE, PR, Caño Martín Peña Ecosystem Restoration Project, Comment Period Ends: 11/09/2015, Contact: Jim Suggs 904-232-1018. Revision to the FR Notice Published 09/11/2015; Extending Comment Period from 10/26/2015 to 11/09/2015.

Dated: October 13, 2015.

Karin Leff,

Acting Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 2015-26348 Filed 10-15-15; 8:45 am]

BILLING CODE 6550-50-P

ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-SFUND-2010-0763; FRL-9935-84-OSWER]

Proposed Information Collection Request; Comment Request; Hazardous Chemical Reporting; The Emergency and Hazardous Chemical Inventory Forms (Tier I and Tier II)

AGENCY: Environmental Protection Agency (EPA).
ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) is planning to submit an information collection request (ICR), "Hazardous Chemical Reporting: The Emergency and Hazardous Chemical Inventory Forms (Tier I and Tier II)" (EPA ICR No. 2436.03, OMB Control No. 2050-0206) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act. Before doing so, EPA is soliciting public comments on specific aspects of the proposed information collection as described below. This is a proposed extension of the ICR, which is currently approved through March 31, 2016. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it

NOTICE TO EXTEND PUBLIC COMMENT PERIOD FOR REVISED DRAFT EIS

Federal Register | Notice To Extend Public Comment Period for the Revised Draft Environmental Impact Statement for Divert Activities and Exercises, Commonwealth of The Northern Mariana Islands

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Notice To Extend Public Comment Period for the Revised Draft Environmental Impact Statement for Divert Activities and Exercises, Commonwealth of The Northern Mariana Islands

A Notice by the Air Force Department on 12/07/2015

ACTION Notification Of Extension Of Public Comment Period.

SUMMARY

The U.S. Air Force is issuing this notice to advise the public of an extension to the public comment period on the revised draft Environmental Impact Statement. The initial Notice of Availability was published in the **Federal Register** on October 16, 2015 (Vol. 80, No. 200/Notices/62526), and established a public comment period from October 16, 2015 through November 30, 2015. The Air Force has extended the deadline for submitting public comments to December 14, 2015. All substantive comments received by December 14, 2015 will be addressed fully considered and made a part of Final EIS and administrative record.

Point of Contact: Please direct any written comments or requests for information to Mr. Mark Petersen, 25 E Street, Suite C-130, Joint Base Pearl Harbor-Hickam, HI 96853, ATTN: PACAF Divert Marianas EIS.

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Henry Williams,
*Acting Air Force Federal Register Liaison Officer, Civ,
DAF.*

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Publication Date:
Monday, December 07, 2015

Agencies:
Department of Defense
Department of the Air Force

Entry Type:
Notice

Action:
Notification of extension of public comment period.

Document Citation:
80 FR 76000

Page:
76000 -76001 (2 pages)

Document Number:
2015-30767

Shorter URL:
<https://federalregister.gov/a/2015-30767>

<https://www.federalregister.gov/articles/2015/12/07/2015-30767/notice-to-extend-public-comment-period-for-the-revised-draft-environmental-impact-statement-for>[12/11/2015 10:16:41 AM]

NEWSPAPER ADVERTISEMENT FOR REVISED DRAFT EIS

NOTICE OF AVAILABILITY NOTICE OF PUBLIC MEETINGS

REVISED DRAFT EIS FOR DIVERT ACTIVITIES AND EXERCISES, COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

The U.S. Air Force (USAF) announces the availability of the Revised Draft Environmental Impact Statement (EIS) for Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands for public review. The USAF requests comments on the Revised Draft EIS, which is available for download on the project website address listed below. Hard copies may be reviewed at the locations listed below.

The Revised Draft DEIS analyzes potential environmental impacts of modified versions of the alternatives originally presented in the June 2012 Draft EIS. Since June 2012, the USAF determined the policies and objectives of National Environmental Policy Act (NEPA) would be best served by preparing a Revised Draft EIS, and seeking additional comments on changes made as a result of comments received on the 2012 Draft EIS. Based on public and agency input into the 2012 Draft EIS, the USAF removed the following elements from each of the three modified alternatives in the Revised Draft EIS: runway extension; permanent navigational aids; aircraft hangar; munitions storage facilities; arm/disarm pad; tent lodging; and fighter aircraft operations.

The Proposed Action is to improve an existing airport or airports and associated infrastructure in support of expanding mission requirements and to achieve divert capabilities in the western Pacific. Under this action, the USAF proposes to construct facilities and infrastructure at an existing airport or airports to support a combination of cargo, tanker, and similar aircraft and associated support personnel for divert operations, periodic exercises, and humanitarian assistance and disaster relief.

Proposed facilities would be used on an as-needed basis and would not be used as a permanent full-time beddown or installation location. Saipan International Airport and Tinian International Airport and small areas near the respective seaports are considered alternative locations for the Proposed Action. In accordance with NEPA and the USAF regulations for implementing NEPA in 32 CFR Part 989.19(e), the USAF prepared the Revised Draft EIS and is providing it to the public for review.

Electronic files can be downloaded from the project website address listed below. In addition, printed copies of the Revised Draft EIS will be available for review at the following locations:

Saipan: Saipan Office of the Mayor; Joeten-Kiyu Public Library

Tinian: Tinian Office of the Mayor; Tinian Public Library

Two Revised Draft EIS public meetings are scheduled, one in Saipan and one in Tinian. The public meetings will be open house format with poster stations. USAF representatives will be available to provide information and answer questions about the Revised Draft EIS, and comments will be accepted at the meetings. The open house meetings will be held in accordance with the following schedule:

Saipan: Wednesday, November 4, 2015, 5:00 p.m. to 8:00 p.m., Building D-1; Northern Marianas College, Susupe

Tinian: Thursday, November 5, 2015, 6:00 p.m. to 8:00 p.m., Tinian Elementary School Cafeteria

The public is encouraged to provide written comments to the USAF for consideration in preparing the Final EIS. Written comments may be submitted via postal mail, email, or the project website. All comments must be submitted or postmarked no later than November 30, 2015 EDT/December 1, 2015 ChST.

Mail comments to:

Ms. Ashley Conner, PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853
ATTN: PACAF Divert Marianas EIS

Email comments to pacaf.paops@us.af.mil, or submit comments on the project website at:

www.PACAFDivertMarianasEIS.com.



COMMENTS RECEIVED ON THE REVISED DRAFT EIS

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Divert Activities and Exercises Revised Draft Environmental Impact Statement Public Review Period Comment Form



Location: San Juan

Date: Wed 11/5

The U.S. Air Force invites you to participate in the public review period for the Divert Activities and Exercises Revised Draft Environmental Impact Statement (EIS).

Comments must be postmarked or received online by November 30, 2015 EDT/December 1, 2015 ChST for consideration in the Final EIS and the Record of Decision. Comments may be submitted at the public meetings using this form, via the project website at www.PACAFDivertMarianasEIS.com, via email at pacaf.paops@us.af.mil, or via U.S. Postal Service at the address below.

Privacy Notice: Public comments on this Revised Draft EIS are requested pursuant to the National Environmental Policy Act (42 U.S.C. 4321 et seq.). All comments received during the comment period will be made available to the public and considered during Final EIS preparation. The provision of private address information with your comment is voluntary. However, this information is used to compile the mailing list for Final EIS distribution, and failure to provide such information will result in your name not being included on the list. Private address information will not be released for any other purpose unless required by law.

Please Print

First Name: Anastasia

Last Name: Scott

Organization/Title (if any): Ø

Address: [Redacted]

City: [Redacted] State: [Redacted] Postal Code: [Redacted]

Primary Phone Number: [Redacted]

Primary Email Address: [Redacted]

Comments:

A1-

I'd like to see stricter flight paths to prevent divert flight paths over heavily populated areas of San Vicente, Dandan, Koberville, etc. I'm concerned about increased military presence ~~in~~ in the CNMI and the destruction of natural caves as carved up by personnel, as well as the poor behavior of the personnel towards our people when drunk. I'm very concerned about military fuel tanks creating a greater target to enemies in time of war. Im concerned (cont'd)

-A2

-A3

-A4

-A5

Please continue on reverse side...

Please hand this form in or mail by November 30, 2015 to:

Ashley Conner, PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853-4512
ATTN: PACAF Divert Marianas EIS

A6-

about further taking of land that belonged to indigenous families which our government gave away without compensation to said families.

A1-

I'm mainly against fuel planes flying close to populated areas ~~at~~ where ~~at~~ work (from home).



Divert Activities and Exercises Revised Draft Environmental Impact Statement Public Review Period Comment Form



Location: Northern Marianas College - Saipan Date: 11/4/15

The U.S. Air Force invites you to participate in the public review period for the Divert Activities and Exercises Revised Draft Environmental Impact Statement (EIS).

Comments must be postmarked or received online by November 30, 2015 EDT/December 1, 2015 ChST for consideration in the Final EIS and the Record of Decision. Comments may be submitted at the public meetings using this form, via the project website at www.PACAFDivertMarianasEIS.com, via email at pacaf.paops@us.af.mil, or via U.S. Postal Service at the address below.

Privacy Notice: Public comments on this Revised Draft EIS are requested pursuant to the National Environmental Policy Act (42 U.S.C. 4321 et seq.). All comments received during the comment period will be made available to the public and considered during Final EIS preparation. The provision of private address information with your comment is voluntary. However, this information is used to compile the mailing list for Final EIS distribution, and failure to provide such information will result in your name not being included on the list. Private address information will not be released for any other purpose unless required by law.

Please Print

First Name: Frances "Max" Last Name: Garcia

Organization/Title (if any): [REDACTED]

Address: [REDACTED]

City: [REDACTED] State: [REDACTED] Postal Code: [REDACTED]

Primary Phone Number: [REDACTED]

Primary Email Address: [REDACTED]

Comments:

B1- Should specify that comparison of KC-135 and B-767 is for military to commercial aircraft. Public might think it lands/take off from Saipan/Tinian, but in reality, it only passes through the islands. Need to clarify.

B2- Also include doubts for noise pollution questions.

Please continue on reverse side...

Please hand this form in or mail by November 30, 2015 to:

Ashley Conner, PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853-4512
ATTN: PACAF Divert Marianas EIS



Divert Activities and Exercises Revised Draft Environmental Impact Statement Public Review Period Comment Form



Location: _____ Date: 11/04/15

The U.S. Air Force invites you to participate in the public review period for the Divert Activities and Exercises Revised Draft Environmental Impact Statement (EIS).

Comments must be postmarked or received online by November 30, 2015 EDT/December 1, 2015 ChST for consideration in the Final EIS and the Record of Decision. Comments may be submitted at the public meetings using this form, via the project website at www.PACAFDivertMarianasEIS.com, via email at pacaf.paops@us.af.mil, or via U.S. Postal Service at the address below.

Privacy Notice: Public comments on this Revised Draft EIS are requested pursuant to the National Environmental Policy Act (42 U.S.C. 4321 et seq.). All comments received during the comment period will be made available to the public and considered during Final EIS preparation. The provision of private address information with your comment is voluntary. However, this information is used to compile the mailing list for Final EIS distribution, and failure to provide such information will result in your name not being included on the list. Private address information will not be released for any other purpose unless required by law.

Please Print

First Name: Frances Last Name: Mura

Organization/Title (if any): _____

Address: _____

City: _____ State: _____ Postal Code: _____

Primary Phone Number: _____

Primary Email Address: _____

Comments: I'm in favor and I believed that we the people of Saipan should all agree and give the land and improve the Airport. We need the US Military to protect us. In God we trust.

C1-

Please continue on reverse side...

Please hand this form in or mail by November 30, 2015 to:
Ashley Conner, PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853-4512
ATTN: PACAF Divert Marianas EIS



Divert Activities and Exercises Revised Draft Environmental Impact Statement Public Review Period Comment Form



Location: Saipan

Date: 11/4/15

The U.S. Air Force invites you to participate in the public review period for the Divert Activities and Exercises Revised Draft Environmental Impact Statement (EIS).

Comments must be postmarked or received online by November 30, 2015 EDT/December 1, 2015 ChST for consideration in the Final EIS and the Record of Decision. Comments may be submitted at the public meetings using this form, via the project website at www.PACAFDivertMarianasEIS.com, via email at pacaf.paops@us.af.mil, or via U.S. Postal Service at the address below.

Privacy Notice: Public comments on this Revised Draft EIS are requested pursuant to the National Environmental Policy Act (42 U.S.C. 4321 et seq.). All comments received during the comment period will be made available to the public and considered during Final EIS preparation. The provision of private address information with your comment is voluntary. However, this information is used to compile the mailing list for Final EIS distribution, and failure to provide such information will result in your name not being included on the list. Private address information will not be released for any other purpose unless required by law.

Please Print

First Name: Jason

Last Name: Wakeham

Organization/Title (if any): _____

Address: _____

City: _____ State: _____ Postal Code: _____

Primary Phone Number: _____

Primary Email Address: _____

D1- Comments: I am concerned that this proposal to use Saipan
for expanded military actions would put our
island at higher risk as a military target. I am
also worried that the fighter planes would
be loud and unattractive to tourists.
People come here to see beautiful peaceful

Please continue on reverse side...

Please hand this form in or mail by November 30, 2015 to:

Ashley Conner, PACAF/PA

25 E Street, Suite G-108

Joint Base Pearl Harbor-Hickam, HI 96853-4512

ATTN: PACAF Divert Marianas EIS

D2- island and not to spend vacation on a
military base. Please use the island you
D3- already have rights to (Tinian) and leave
Saipan for the tourists and locals to
enjoy!

From: [REDACTED]
To: [REDACTED]
Subject: FW: PACAFComment - Jude Hudson
Date: Sunday, November 29, 2015 7:18:50 PM

From: Cognito Forms
Sent: Sunday, November 29, 2015 8:18:44 PM (UTC-06:00) Central Time (US & Canada)
To: [REDACTED]
Subject: PACAFComment - Jude Hudson

HDR

PACAF Divert Activities and Exercises EIS Comment

[View full entry at CognitoForms.com.](http://CognitoForms.com)

Entry Details

FIRST NAME	Jude
LAST NAME	Hudson
TITLE	Concerned Citizen

ADDRESS

[REDACTED]

EMAIL

[REDACTED]

COMMENTS

E1-

I'm seriously concerned about the AirForce DIVERT proposal. You speak like slick snakeskin oil salesmen.

E2-

AND you speak/write ONLY in English – not a word of the other two official CNMI languages.
How are some of our people supposed to be able to read this? I asked and was told questions in Chamorro would be answered in Chamorro.



So how would someone know that IF they

- struggle through this voluminous document in their second language and IF they submit some questions in Chamorro they will be answered in same?
- E2-** I think DoD has an obligation to REQUIRE that every EIS be submitted in all the languages of the indigenous people they will impact. This single action reeks highly of prejudice toward indigenous people of the CNMI and poses a significantly negative impact on the people of Tinian and Saipan.
- E3-**
-

You are receiving this email because you selected the receive email notifications option on your form in Cognito Forms.

From: [REDACTED]
To: [REDACTED]
Subject: FW: PACAFComment - Jude Hudson
Date: Sunday, November 29, 2015 8:29:15 PM

From: Cognito Forms
Sent: Sunday, November 29, 2015 9:29:10 PM (UTC-06:00) Central Time (US & Canada)
To: [REDACTED]
Subject: PACAFComment - Jude Hudson

HDR

PACAF Divert Activities and Exercises EIS Comment

[View full entry at CognitoForms.com.](http://CognitoForms.com)

Entry Details

FIRST NAME

Jude

LAST NAME

Hudson

TITLE

Concerned Citizen

ADDRESS

[REDACTED]

EMAIL

[REDACTED]

COMMENTS

F1-

Another comment on the AirForce Divert EIS :
THE REAL INTENT:
The EIS actual intent is alarming.
I think the 'divert' here is the DoD trying to divert our attention from their real purposes which can only be ferreted out and understood in context of all 5 (known) EIS plans (in place or pending) for this area
↓ - GUAM relocation,

- MITT,
 - MIRC,
 - CJMT &
 - DIVERT.
- F1-** This DIVERT plan seems merely a small portion of that overall take-over of the entire NW Pacific that DoD proposes. It supports and even paves the way for other portions.
WHO will participate? See the following lines.
"5 Lead Agency U.S. Air Force (USAF)
6 Cooperating Agencies U.S. Navy, U.S. Marine Corps,
7 Federal Aviation Administration."
- F2-** No matter what they call it, this is NOT an AirForce Plan it is a Multi Military Branches Plan! with FAA participation expected. Nor is it a TIQ/SPN plan only!
"8 Affected Location: Mariana Islands region."
AND later on the true intent!:
"30 Accommodate future increases in operational tempo and associated training"
Clearly this is planning for expanded activities in the future.
NOT just Tinian
NOT just Saipan
NOR even just the two combined
BUT the ENTIRE REGION!
- F3-** I asked at the first meeting how this would impact the CJMT and was told it would definitely pave the way and be helpful for those plans!
- F4-** Divert here seems to mean
- 'divert attention from the whole picture.'
- 'divide and conquer'. Or
- 'present it in bits and pieces so locals don't catch on'.
And this is NOT for just a couple of small operations a year but paving the way for future expansion and increased tempo.
- F5-** I think the DoD has an obligation to present their ENTIRE intent in one coordinated simplified document not in bits and pieces (humongous though those bits are) as they have been doing.

F5- This 'agenda masking' is a major negative significant impact of this EIS and the whole group of EISs!

You are receiving this email because you selected the receive email notifications option on your form in Cognito Forms.

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
1	1-20	10-12	1.7.2 3.5.1	<p>Sections 1.7.2 and 3.5.1 appear to be in conflict with each other. Please verify whether this project requires a Section 401 certification.</p> <p>The statement is made that “<i>No permit under the CWA, whether under Section 401, 402, or 404 (b) (1), is required under the Proposed Action.</i>”</p> <p>However, the CNMI administers a CWA Section 401 Water Quality Certification Program through provisions contained within the WQS Regulations. A Section 401 certification is required for every federal permit which may result in a discharge of pollutants to waters of the CNMI (all marine, fresh water bodies, and ground water in the Commonwealth) (<u>Commonwealth of the Northern Mariana Islands Water Quality Standards</u>). This includes EPA General NPDES Permits, such as that for discharges from construction sites larger than 1 acre. This is noted later in Section 3.5.1.</p> <p>Short-term, direct, minor adverse impact on surface water resources are identified under Alternative 1, and short- and long-term, minor to moderate adverse impacts on groundwater resources “could occur under Alternative 1 (page 4-57); impacts are identified under Alternative 2 and 3.</p>	K. Matolcsy	G1

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
2	3-39 3-40 3-41	17-25 6-8 23-24	3.5.2.1 3.5.2.2	<p>The <u>CNMI 305(b) And 303(d) Integrated Water Quality Assessment Report</u> reports that almost all coastal marine waters are not attaining at least one designated use.</p> <p>Since coastal waters are impaired, how will compliance with the Water Quality Standards (WQS) during construction and implementation be assured; also demonstrate how the WQS will not be negatively impacted due to proposed activities. (Note: WQS are being updated.)</p> <p>The DEIS reports that “<i>Class A waters include the coastal waters of the West Takpochau (North) watershed in the area around the commercial Port of Saipan. These Class A waters are downgradient of the proposed Port of Saipan fuel site.</i>”</p> <p>The DEIS reports that “<i>...coastal waters surrounding Tinian serve as the ultimate discharge area for all surface runoff from the island...The coastal waters of the Puntan Daipolamanibot and Masalok watersheds are impaired (Category 5) due to orthophosphate pollution... The coastal waters of the Makpo Watershed are impaired (Category 5) ...caused by onsite treatment systems and urban runoff...All the nearshore waters surrounding Tinian are designated Class AA...The coastal waters of the Makpo Watershed, the location of the proposed fuel site at the Port of Tinian, are designated as Class A marine waters...</i>”</p> <p>All Alternatives identify that “<i>Long-term, direct and indirect, minor, adverse impacts on groundwater would be expected as a result of sheet runoff or petroleum spills from fuel storage and aircraft-refueling activities.</i>”</p>	K. Matolcsy	G2

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
3	3-36 4-216 3-87	23-25 7-9	3.4.2.2 Table 4.16.2 3.10.3.1	<p>The statement is made that: “Per the Northern Mariana Islands Administrative Code Chapter 65-30, Earthmoving and Erosion 23 Control Regulations, no person shall commence or continue grading, filling, or vegetation-24 clearing activities without first obtaining a permit from the CNMI DEQ.”</p> <p>Yet, under construction phase for “Geologic Resources and Soils” the statement is made that “<i>A U.S. Environmental Protection Agency (USEPA) Construction General Permit and a CNMI DEQ Noncommercial Earthmoving permit <u>might</u> need to be submitted prior to the start of any construction activities.</i>”</p> <p>Since erosion and sedimentation are associated with soils, identify need for permit here rather than under “Water Resources” (or both sections).</p> <p>Please provide the regulatory reference for the following statement: “<i>Before work begins on any project to be located wholly or partially within an APC, a valid coastal permit is required. This is not applicable to Federal-lease lands or federally owned submerged lands.</i>”</p> <p>[§ 1513. Coastal Resources Management Program: Territorial Jurisdiction § 15-10-1 Exceptions to CRM Permit Requirements]</p>	K. Matolcsy	G3

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
4	3-116	19-23	3.14.2	With respect to the “area of impact” and “primary effect area”, would this not include negative economic impacts as well?	K. Matolcsy	G4
5	4-1		4.1	Please include a table showing the number of residences (if any) affected by noise above 65DNL	G. Wong	G5
6	4-20	19-21	4.2.1.1 (and elsewhere as appropriate)	Please correct reference to 25,000 metric tons of carbon dioxide (CO2) equivalent (CO2e).	K. Matolcsy	G6
7	4-57	20-22	4.5.1.1	Amend to add “due to development <u>and implementation</u> of a an SWPPP...”.	K. Matolcsy	G7

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
8	4-58	16-18	4.5.1.1	<p>Both refer to construction activities. Please clarify that proper implementation of the SWPPP should prevent contaminated stormwater runoff.</p> <p>Section states that: <i>“Due to the development of an SWPPP, the vegetated surrounding area of Saipan International Airport and the Seaport, and the high infiltration rates of the island, the impacts would not be significant.”</i></p> <p>Next page says: <i>“Additionally, indirect impacts may result from an increase in impervious areas, which may increase the potential for contaminated storm water runoff to infiltrate the groundwater.”</i></p>	K. Matolesy	G8
9	4-60	28-34	4.5.2.1.1	<p>How will water during heavy rain events be managed if not stored within these depressions; diverted by some means?</p> <p>The Revised DEIS states <i>“Flood Zones. No impacts on floodplains would be expected from the construction activities proposed under the Alternative 2 North Option. Although the area designated as Flood Zone A within the proposed taxiway would need to be filled, no impacts on flood hazard would be expected. Because these flood zone areas are only designated as such due to their potential to hold water during heavy rain events and because these are not associated with floodplains of surface water bodies, these areas would not be protected under EO 11988, Floodplain Management.”</i></p>	K. Matolesy	G9
10	4-62	1-2	4.5.2.2	<p>The fire suppression system will use water only, no AFFF; correct?</p>	K. Matolesy	G10

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
11	4-78	12-18	4.7.1.1	<p>Coastal water quality issues include damage to coral reefs (including sedimentation); according to the CWA 305(b) reports for CNMI, coastal waters are most significantly impacted by sedimentation and nutrients.</p> <p>How minor is minor? Can maintenance/non-exceedance of current WQS due to runoff be assured?</p> <p>With regards to: <i>“No construction would occur in the marine waters surrounding Saipan. As such, no impacts on marine biological resources would occur under the Construction Phase of Alternative 1. As discussed in Section 4.5.1.1, DOD policies, compliant with Federal and CNMI regulations, would be followed to minimize erosion and sedimentation during construction and to manage storm water runoff after construction. By implementing those policies, adverse impacts of sedimentation and runoff would be minor. Therefore, EFH, coral species, and other nearshore resources are not discussed in this section because indirect or direct impacts are not expected.”</i></p>	K. Matolcsy	G11

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
12	4-124	24-29	4.12.1.1	<p>According to the Revised DEIS: “Contractors would be responsible for the storage, handling, and disposal of hazardous wastes in accordance with Federal, CNMI, and USAF hazardous waste management regulations. As such, Saipan International Airport’s RCRA SQG status would not be affected. Because only limited quantities of hazardous wastes would be generated during construction of Alternative 1, the additional hazardous wastes would not be expected to exceed the capacities of existing hazardous waste disposal streams available to Saipan.”</p> <p>Please clarify whether contractors will be considered generators of hazardous waste during construction activities; as such contractor would be required to assume all generator responsibilities including obtaining a RCRA generator ID. Multiple contractors may be challenging to manage. Will USAF assume responsibility for an accumulation point?</p> <p>Is the intent to deliver hazardous wastes to Saipan International Airport for ultimate disposal? Or will hazardous wastes generated during construction be stored at a satellite accumulation point prior to delivery to the Airport main accumulation point? Will the contractors or the USAF be then considered a co-generator? Does the Airport’s RCRA status allow for this? Is the Airport willing to assume the liability?</p> <p>Who will be the generator during the implementation phase; USAF? Or a co-generator with the Airport?</p>	K. Matolcsy	G12

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
13	4-124	20-22	4.12.1.1	<p>In accordance with the CNMI Administrative Code 65-50, Part 200, <u>Standards Applicable to Importers of Hazardous Materials</u>, hazardous materials have specific import requirements/notifications. In addition to the discussion of other permits that may or may not be required during construction and implementation, please discuss the applicability of the requirements and notification for importing hazardous materials.</p> <p><i>“All hazardous materials would be stored and handled in accordance with applicable Federal, CNMI, and USAF hazardous materials management regulations.”</i></p>	K. Matolcsy	G13
14	4-124 4-125	36-38 8-14	4.12.1.1 4.12.1.1	<p>What are estimated quantities of oil products that will be stored during construction? Will an SPCC Plan be required? Please discuss the need for an SPCC Plan for the HRS and associated fuel storage tanks.</p>	K. Matolcsy	G14
15	4-125	Start at Line 21	4.12.1.1 Existing Contaminati on Areas	<p>Check with CNMI BECQ Site Assessment and Remediation Branch for information on locations of existing contaminated areas or Brownfield areas. A visual survey may not identify contaminated areas or UXO areas. Review of as-builts, historical records, and current (remediation) reports would provide better insight as to probability of encountering these sites.</p>	K. Matolcsy	G15

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
16	4-125	28-33	4.12.1.1 Existing Contaminati on Areas	<p>The statement is made that if environmental contamination is encountered, site plans should be revised to avoid contamination or remediate them as practicable. Are funds available to remediate any contaminated sites?</p> <p>Suggest reversing the order of actions upon discovery. Stop work first, report discovery and implement safety measures. THEN revise plans etc. as appropriate.</p>	K. Matolcsy	G16
17	4-125	36-42	4.12.1.1	<p>How would Alternative 1 be unlikely to affect identified contaminated areas because “<i>they are primarily soil contamination sites</i>”? If disturbed, there is a possibility of erosion and sedimentation offsite. Or contaminating clean soils and transfer of contaminated material via vehicles and equipment. Would these areas be delineated so there is no chance of disturbance?</p>	K. Matolcsy	G17
18	4-125	36-42	4.12.1.1	<p>Although the Puerto Rico Dump may not impact Alternative 1, activities associated with Alternative 1 may add to existing groundwater contamination from the Dump (assuming flow direction is the same). The discussion in the paragraph is unclear as to whether Alternative would or would not impact groundwater. The paragraph first make a declarative statement that there is an impact to the Puerto Rico Dump; then the discussion implies that activities associated with Alternative 1 would not impact groundwater at the Puerto Rico Dump and further downstream.</p>	K. Matolcsy	G18

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
19	4-126		ACM and LBP	Visual surveys may not identify areas of ACM or LBP. Review of as-builts and other historical records would provide better insight as to probability of encountering these materials. If ACM is encountered, warning signs are required (also for LBP). Are funds available for remediation?	K. Matolsy	G19
20	4-127	6-7	4.12.1.1	Sentence states that no impacts on pesticides would be expected. Do you mean no cumulative impacts from increased use of pesticides? Or minimal increase and frequency of pesticide application?	K. Matolsy	G20
21	4-127	22-23 27-29 31-23	4.12.1.2	Please see comment 9.		G21
	4-133	35-41	4.12.2.2		K. Matolsy	
22	4-127 4-128	37-41 1-4	4.12.1.2	Please discuss offloading and surface transportation safeguards during fuel transport. Quantity stored at Port; require SPCC Plan?	K. Matolsy	G22
23	4-128	6-8	4.12.1.2	Mention is made of increased vehicular traffic. Will there be a requirement for use of ULSD? How will air quality be impacted? Surface deposition of particulates could be carried and deposited via runoff.	K. Matolsy	G23
24	4-128	13-19	4.12.1.2	Will there be a Hazardous Materials Management Plan and/or SPCC Plan to address spills, leaks and other releases or storage of incompatible materials?	K. Matolsy	G24
25	4-128	31-33	4.12.1.2	Please see comments 12 and 13.	K. Matolsy	G12, G13

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
26	4-129	21-23 28-30	4.12.2.1.1	Please see comments 9 and 20.	K. Matolesy	G9, G25, G26
27	4-130	3-15	4.12.2.1.1	Please see comments 9, 10, 11, and 18.	K. Matolesy	G9, G10, G11, G18
28	4-130 4-132	28-35 22-28	4.12.2.1.1 4.12.2.1.2	Please see comments 12 and 13.	K. Matolesy	G12, G13
29	4-131 4-132	2-5 21-22 34-39	4.12.2.1.1 4.12.2.1.2	Please see comment 15.	K. Matolesy	G15
30	4-134 4-138	Start at Line 4 Start at Line 8	4.12.2.2 Petroleum Products 4.12.3.1.2.2 Petroleum Products	Please see comments 10, 11, 18 and 19.	K. Matolesy	G10, G11, G18, G19
31	4-148	32-40	4.13.2.1.1	Please see comments 10, 11, 18 and 19.	K. Matolesy	G10, G11, G18, G19
32	General		Bulk Fuel Storage	Please verify whether fuel storage facilities will require an Industrial Stormwater NPDES permit(s) and associated SWPPP as a Sector P facility (ies) (petroleum bulk oil stations and terminals).	K. Matolesy	G27
33	General		Bulk Fuel Storage	Please verify (and discuss) whether the to-be-constructed vessel off-loading terminal(s) would require a marine transfer facility plan and approval from the U.S. Coast Guard.	K. Matolesy	G28

Comment Response Matrix

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19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
34	General			Please define “short-term” as in short-term effects. Does this refer to temporary, i.e., impacts considered to have reversible effects, or time as in the Construction Phase lasting 3 years (“short-term” use). Irreversible effects could occur during the 3 year construction phase.	K. Matolcsy	G29
35	General		Section 106 Historic Properties	Will the outcome will be discussed in the Final EIS and the PA included in an appendix? Under Section 106 of the National Historic Preservation Act (NHPA), the USAF is formally consulting with the CNMI Historic Preservation Office (HPO) and other parties such as the Advisory Council on Historic Preservation (ACHP). The USAF will complete Section 106 consultation prior to implementing any actions in this EIS, resulting in an agreement document among the consulting parties. As a result, the design of proposed construction projects on Saipan or Tinian will include all possible planning to minimize the risk of potential harm to Section 4(f) resources resulting from the USAF’s use of Saipan International Airport or Tinian International Airport.	K. Matolcsy	G30
36	General		Maintenance Facility	Please discuss the maintenance activities anticipated – corrosion control, etc.; mainly to address anticipated hazardous materials and wastes.	K. Matolcsy	G31
37	General		Airspace	Coordination with commercial airlines is referred to in the text. Will there be (or is there) a section that explicitly describes how commercial airlines will be affected?	G. Wong	G32
38	General		Airport	FAA requires submission of the ALP by CPA for review and approval.	G. Wong	G33

Comment Response Matrix

**Revised Draft EIS for Proposed Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) October 2015
19 October 2015**

#	Location			Comment	Reviewer	Response/Resolution
	Page	Line	Section			
39	General		Cultural Resources	Section 106 consultation is ongoing. CNMI SHPO's 26Oct2015 letter did not concur with finding of "no direct effect"	G. Wong	G34



Commonwealth of the Northern Mariana Islands
OFFICE OF THE GOVERNOR

Bureau of Environmental and Coastal Quality
DEQ: P.O. Box 501304, DCRM: P.O. Box 10007, Saipan, MP 96950-1304
DEQ Tel: (670) 664-8500/01; Fax: (670) 664-8540
DCRM Tel: (670) 664-8300; Fax: (670) 664-8315
www.deq.gov.mp and www.crm.gov.mp



Eloy S. Inos
Governor

Ralph DLG. Torres
Lt. Governor

Frank M. Rabauliman
Administrator

Frances A. Castro
Director, DCRM

November 25, 2015

HQ PACAF/PA
ATTN: PACAF Divert Marianas EIS
25 E Street, 39 Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853

Dear Department of Defense:

The Commonwealth of the Northern Mariana Island's (CNMI) Bureau of Environmental and Coastal Quality (BECQ) has reviewed the Revised Draft Environmental Impact Statement (DEIS) for Divert Activities and Exercises.

BECQ is composed of:

Department of Environmental Quality (DEQ) mandated to administer programs and mitigate contamination related to water quality, air quality, hazardous materials, earthmoving and erosion in the CNMI (PL 3-23);

Division of Coastal Resources Management (DCRM) mandated to regulate activities impacting coastal resources of the CNMI by providing interagency collaboration, permitting and enforcement, monitoring, outreach and education, and restoration (PL 3-47).

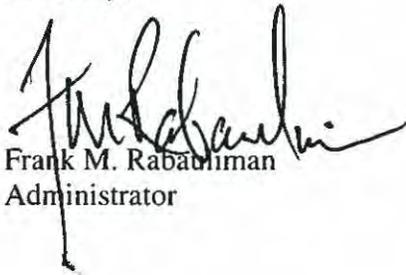
As outlined in the attached comments, if the Divert Activities and Exercises go forward, BECQ's preferred alternative is Alternative 2 – Modified Tinian Alternative. BECQ encourages PACAF to continue working with all of the CNMI environmental agencies to ensure military projects are conducted with minimal impact to the environment.

-H71

-H72

BECQ is available to work with the Department of Defense to inform and improve the Divert Activities and Exercises. Please contact us with any questions.

Sincerely,


Frank M. Rabauliman
Administrator

**BUREAU OF ENVIRONMENTAL AND COASTAL QUALITY
DIVISION OF ENVIRONMENTAL QUALITY
DIVISION OF COASTAL RESOURCES MANAGEMENT**

**Comments on the Revised Draft
Environmental Impact Statement for
Divert Activities and Exercises,
Commonwealth of the Northern Mariana Islands**

November 2015

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Preferred Alternative

If the Divert Activities and Exercises (henceforth ‘Divert Activities’) move forward, BECQ’s Preferred Alternative is “Alternative 2 – Modified Tinian Alternative”. As outlined in the sections below, BECQ is of the opinion that the Divert Activities would have fewer impacts on Tinian than in Saipan.

-H73

BECQ advises against placing the Divert Activities on Saipan for the following reasons:

- More people would likely be affected by construction and aircraft noise
- Noise could affect tourism and recreation at Coral Ocean Point and southern beaches
- Impacts to the nightingale reed-warbler and black noddy rookery near the airport
- Impacts to the Aslito/Isley Field NHL

-H74

The Divert Activities would have many similar impacts whether placed on Saipan or Tinian. BECQ outlines its concerns in the comments below. If the Divert Activities move forward, the United States Air Force (USAF) should propose further mitigation to offset effects to noise receptors, air quality, terrestrial resources, and socioeconomic impacts.

-H75

Noise

BECQ is very concerned that increased noise could have a detrimental impact to the people and wildlife on Saipan and Tinian. More information on the baseline noise levels and number of people likely to be affected by the Divert Activities should be included in the FEIS.

-H1

For example, the Noise chapter of the DEIS notes the increase in *acres* that will be affected by the Divert Activities but not the increase in *people* to be affected. Later in the DEIS, it is noted that “a population of less than 12 would be exposed to the 65 dBA noise level on Saipan.” (p.4-97). The DEIS also later notes that, “a noise level of 67–71 dBA could be intermittently heard at the border of the village of Dandan” (4-172). The Noise chapter should clearly lay out how many people will be affected by how much noise, how often, and where.

-H2

Information on the number of acres and people affected should also be given for the Average Busy Day (ABD), currently only acres affected for the Average Annual Day (AAD) is noted. This information would be especially useful for Tinian as the ABD contours are much larger and overlap shorelines. There would likely be more ‘noise receptors’ on Tinian under the ABD.

-H3

The DEIS uses 65-70 dB contour lines on its noise maps. This is likely under the assumption that 12-22% of people would be ‘highly annoyed’ within the 65-70 dBA contour (p. 4-1) as described by Finegold et al (1994). However, as noted earlier in the DEIS, a ‘Residential area in a small town or quiet suburban area’ typically experiences levels of 50 dBA. BECQ suggests using 50dBA as its baseline for comparisons. Residents and visitors to Saipan and Tinian put a

-H4

premium on peace and quiet in the area. Loud noises will likely cause a higher rate of annoyance on the islands. The American National Standards Institute (ANSI) notes that Finegold et al set a standard in 1994 and this standard remains relevant today. However there are now qualifications to the dose-response function set by Finegold et al. For example:

- “In newly created situations, especially when the community is not familiar with the sound source in question, higher community annoyance can be expected. This difference may be equivalent to up to 5 dB.
- Research has shown that there is a greater expectation for and value placed on "peace and quiet" in quiet rural settings. In quiet rural areas, this greater expectation for "peace and quiet" may be equivalent to up to 10 dB.
- The above two factors are additive. A new, unfamiliar sound source sited in a quiet rural area can engender much greater annoyance levels than are normally estimated by relations like equation (F.1). This increase in annoyance may be equivalent to adding up to 15 dB to the measured or predicted levels.” (ANSI 2005)

BECQ recommends PACAF use the updated ANSI qualifications in its analysis for Saipan and Tinian. Illustrating the change in the 50dBA contour line from the current baseline to the Divert Activities’ AAD and ABD would be informative.

BECQ also recommends using Best Available Technology to reduce noise impacts. This should include regular maintenance, on-the-ground monitoring, and reporting of noise (ambient and peak) to BECQ when requested.

Given that Saipan is a more populated island and the noise effects would be greater on Saipan, BECQ recommends Tinian as the preferred alternative.

Table 1: Comparison of Noise Effects Between Three Alternatives

	Saipan	Tinian	Hybrid
closest residences to the construction sites	700 ft from airport 300 ft from Port	5,200 ft from airport 700 ft from Port	Noise would be “less frequent”
increase in acres within the 65 to 80+ dBA DNL noise contours	21 acres	18 acres	S – 21 acres T – 18 acres

S: Saipan, T: Tinian

Air Quality

BECQ is concerned that the Divert Activities will have a negative impact on the CNMI’s air quality. As noted in the DEIS, “PACAF will coordinate with CNMI DEQ to obtain the necessary stationary source permits prior to commencing construction of any potential stationary source, to include the bulk fuel storage areas” (pp. 4-20, 4-28, 4-36). BECQ looks forward to working with

PACAF to ensure stationary sources of air emissions comply with CNMI regulations. BECQ also encourages efforts be taken to reduce emissions of air pollutants wherever possible, including non-stationary sources during the implementation phase. -H8

The DEIS states that “significance criteria thresholds are not expected to be reached for either phase [Construction or Implementation]” for all Alternatives (pp. 4-27, 4-34, 4-42). However, CO² emissions in the Implementation Phase “would reach the threshold of 25,000 metric tonnes described in guidance issued by the EPA...EPA guidance does not propose this as an indicator of a threshold of significant effects.” (pp. 4-27, 4-34, 4-42). The proposed CO² emissions of 166,305 metric tonnes per year greatly exceed the EPA’s reporting threshold. Further, these emissions would be concentrated to a span of 8 weeks rather than spread out over a year. BECQ recommends monitoring of air quality and health impacts over the course of operations. -H9

BECQ would also like to see more information on how emissions estimates were calculated. -H10

Currently, Appendix E does not provide sufficient details. Several acronyms, reports, and models are cited in this section but not explained or referenced further. Particularly confusing is the calculation of PM₁₀ and PM_{2.5}. On page E-3 the “Total Project Annual Emission Rates” are listed as 0.44 tons for PM₁₀ and 0.43 tons for PM_{2.5}, while on page E-4 the project emissions are listed as 48.52 tons PM₁₀ controlled and 3.88PM_{2.5} controlled. More explanation on how the numbers on page E-3 relate to those on page E-4 would be appreciated. -H11

It also appears that 1996 data was used for construction activities modeling PM₁₀ (p. E-4) – is this the latest modeling data available? Moreover, the EPA’s National Emissions Inventory documentation was applied for PM in nonattainment areas. Modeling documentation that reflects the fact that this area is considered an “in-attainment” zone should be used to ensure there is no degradation of existing air quality. -H12

-H13

Further, on page E-6 there is a calculation for “Construction/Staff Commuter Emissions”. It is assumed that 1500 staff will travel 40 miles daily on Saipan under Alternative 1. However in the DEIS it states that “It is estimated that the number of construction workers associated with Alternative 1 would not exceed 500 at any given time.” (p.4-108). The Appendix assumes 2000 people and 40 miles daily travel for Tinian under Alternative 2, but the DEIS states that the construction workers under Alternative 2 “would not exceed 750 at any given time” (p.4-111) for the North Option and “would not exceed 500” (p.4-113) under the South Option. The FEIS should explain why an alternate number was used in the Appendix. -H14

Also, the DEIS notes that workers could come from Guam or the Federated States of Micronesia, or be transported from Tinian or Rota (p.4-170). The commute from other islands should be included in calculations, especially if workers would be commuting daily from Tinian or Rota to Saipan. -H15

Construction emissions should be adjusted to include emissions from anticipated travel for each proposed action. -H16

BECQ is concerned that air emissions are averaged over a year rather than over the 8 weeks of operations. Emissions from operations should be averaged over 8 weeks to show the localized increases over that time frame.

-H17

BECQ recommends PACAF use Best Available Technology to reduce air quality impacts, including requirements for high MPG vehicles, regular maintenance, installation of buffers and HEPA filters, and on-the-ground monitoring and reporting of air quality to BECQ when requested (w/in 24hrs of request). Implement idling restrictions for operating vehicles, especially large equipment (during construction) and fuel vehicles (during implementation).

-H18

Airspace and Airfield Environment

BECQ defers to the Commonwealth Port Authority for comments on the Airspace and Airfield Environment. BECQ would appreciate more information on the following claim: “beneficial impacts would be expected because the fueling system would provide a more efficient fueling operation.” (p.4-45).

-H76

-H19

Are there any restrictions to commercial airlines using military fuel tanks? To what extent could commercial planes use the military fuel tanks?

-H20

-H21

Geological Resources and Soils

As noted in the DEIS, the Divert Activities could lead to excessive erosion and compaction of soils during the construction phase and “compaction of soil, degradation in soil productivity, alteration of storm water drainage and the percolation of rainwater” (p. 4-53) during the implementation phase. The DEIS proposes to handle these impacts largely through BMPs. The DEIS does state that: “All construction BMPs would follow the guidelines provided in Federal and CNMI permitting processes and regulations; a USEPA Construction General Permit and a CNMI DEQ Noncommercial Earthmoving permit might need to be submitted prior to the start of any construction activities under Alternative 1.” (p. 4-53) BECQ is concerned by the inclusion of the word ‘might’ and encourages PACAF to apply for a Noncommercial Earthmoving permit to improve communication between the CNMI and DoD, and to ensure all environmental impacts are avoided or minimized. Stormwater management facilities that will address frequent heavy rain events must be installed.

-H22

-H23

Table 2: Comparison of New Impervious Surfaces Between Three Alternatives

	Saipan	Tinian	Hybrid
new impervious surfaces/ construction footprint	1,245,382 ft ²	TN: 4,483,194 ft ² TS: 2,832,615 ft ²	S: 388,557 ft ² TN: 3,569,972 ft ² TS: 1,935,772 ft ²

S: Saipan, TN: Tinian North, TS: Tinian South

Water Resources

Surface Water

According to the DEIS, “Impacts on surface water could result from a reduction in water quality, increased storm water runoff, and altered hydrologic conditions.” (p. 4-56) Under Alternative 2 North and South Option “impacts on surface water resources would be similar to, but greater than, Alternative 1 due to the larger construction footprint” (pp. 4-59, 4-60). Impacts would largely be dealt with by implementing sediment and erosion controls and storm water management BMPs. The DEIS says construction BMPs would follow CNMI DEQ Earthmoving and Erosion Control Regulations and permit, and the CNMI DEQ/GEPA Stormwater Management Manual. We look forward to working with USAF on their permit.

-H24

Storm Water

According to the DEIS, “a temporary increase in storm water runoff, erosion, and sedimentation would be expected during the proposed construction activities.” (p. 4-57) On Saipan, this increase will be dealt with by developing a Storm Water Pollution Prevention Plan (SWPPP). Further, the DEIS says “Storm water management and infiltration features should be designed in accordance with the CNMI DEQ/GEPA Stormwater Management Manual” (4-57). BECQ looks forward to working with USAF on the development of their stormwater management plan.

-H25

In the DEIS, storm water for Alternative 2 is handled under the ‘Surface Water’ heading. The DEIS notes that predevelopment site hydrology will be maintained to the maximum extent technically feasible. According to the DEIS, “This would likely require the existing storm water management features at Tinian International Airport to be resized or supplemented to accommodate the increase in storm water runoff from the improved areas.” (4-60). BECQ offers its expertise to USAF to ensure water quality is maintained.

-H26

Groundwater

BECQ is very concerned that the Divert Activities could negatively impact groundwater on Saipan or Tinian. According to the DEIS,

- “Under Alternative 1, replacement of pervious surfaces with impervious surfaces could result in depletion of groundwater resources and increased salt water intrusion to drinking water wells.” (4-58)
- “Due to the high permeability of the limestone on Saipan, the Mariana Limestone Aquifer could be very susceptible to contamination.” (4-58)
- Under Alternative 2, “the underlying aquifer could be very susceptible to contamination. Therefore, storm water directed from these areas could require substantial pre-treatment and filtering prior to infiltration to protect the quality of groundwater resources.” (4-60, 4-61)

-H27

Any contamination to the groundwater lens would be considered more than a “moderate” impact. If the Divert Activities move forward, USAF should take all steps possible to reduce the threat of

groundwater or surface water contamination. The DEIS does note that, “One of the key BMPs required under the SPCC is the use of secondary containment systems to contain spills and leaks. “ (p. 4-58) BECQ recommends installing monitoring wells and ensuring BMPs are in place to report and contain any fuel leaks or spills. Leaks or spills must be reported to BECQ’s DEQ, and the monitoring and reporting plan should be shared with the agency to ensure compliance with local and national requirements.] -H28

BECQ looks forward to working with USAF in addressing these impacts under the DEQ Earthmoving Permit. BECQ recommends installing monitoring wells and ensuring staff are trained in spill prevention and clean-up to reduce threats of negative impacts to water resources.] -H29

Terrestrial Biological Resource

The primary impacts appear to be the possible introduction of the brown treesnake, the removal of habitat for construction, and noise impacts during operations.] -H77

The DEIS notes that six species were proposed for listing as endangered in October 2014, however, “None of those species would occur in the mowed field, tangantangan forest, park, disturbed or paved areas, or agricultural vegetation communities found at and surrounding Saipan International Airport” (p.4-68) It is unclear how USAF came to this conclusion.] -H30
Were surveys conducted for these species? What is known about the habitat of these species? The FEIS should include specifics on why these newly listed endangered species would not be affected.] -H31
] -H32

BECQ is particularly concerned about possible effects to the nightingale reed-warblers surrounding the Saipan International Airport. As the DEIS notes, “the USAF has concluded that this alternative [Alternative 1] is likely to adversely affect nightingale reed-warblers” (p. 4-68) In addition to the mitigation measures currently proposed, BECQ recommends only clearing in Saipan outside the main nesting season for reed-warblers and conducting surveys prior to clearing to ensure no birds are present or have moved since the last survey.] -H33

In the previous DEIS, USAF offered to purchase a credit in the Saipan Upland Mitigation Bank prior to any construction of the east parking apron. The east parking apron is no longer proposed for the revised DEIS. Will USAF consider purchasing a credit in the Saipan Upland Mitigation Bank prior to other construction surrounding Saipan International Airport?] -H34
Although reed-warblers were not detected in the 2012 surveys in the areas for the proposed fuel tanks, maintenance facility, hydrant system and cargo pad, birds do move around. Reed-warbler territories were detected “partially within or adjacent to the proposed location of the fuel tanks.” (p. 4-68) As territories do move, BECQ recommends surveying the area prior to clearing and purchase of a credit in the Saipan Upland Mitigation Bank.] -H35

Chapter 3.6 notes that “biologists located a black noddy (*Anous minutus*) rookery at Saipan International Airport” (p. 3-49), however this rookery is not addressed in Chapter 4.6. The black noddy is listed in the Migratory Bird Treaty Act (MBTA) and should be addressed. -H36

Under Alternative 2, the Tinian Monarch could be affected by Divert Activities. As the DEIS notes, “Although this bird species was federally delisted in 2004 (69 FR 56367), and delisted by the CNMI government in 2009, this endemic species could be threatened by habitat loss.” (p. 4-72) There appear to be no mitigation measures proposed for the protection of the Tinian Monarch. Activities should ensure any habitat is disturbed to the least extent possible. -H37

BECQ is also concerned about the possibility of airstrikes to migratory birds. The DEIS notes that this is a possibility (pp. 4-69, 4-73, 4-76). BECQ recommends that airstrikes be reported to DFW for improved communication, monitoring, and response. -H38

Marine Biological Resources

The DEIS states that: “No construction would occur in the marine waters surrounding Saipan. As such, no impacts on marine biological resources would occur under the Construction Phase of Alternative 1.” (p.4-78) The same is stated for Tinian (p. 4-80). -H39

Although there is no in-water construction proposed for this project, run off from construction on land could have impacts in marine waters. The DEIS previously addresses having erosion and stormwater controls. Such controls must be implemented and monitored to protect marine resources.

The DEIS further mentions that “military aircraft would also conduct training over the ocean within the MIRC. ... These training exercises are covered under the Programmatic Biological Opinion on military readiness activities the U.S. Navy proposes to conduct within the MIRC and the MITT” (p. 4-79). Multiple Department of Defense projects are occurring or proposed for the CNMI (MIRC, MITT, CJMT, Guam Relocation, Divert Activities, etc). It is very confusing how these various projects connect and overlap. A clear description of *all* Department of Defense activities and how they overlap would be appreciated. -H40

This section of the DEIS repeatedly says the “U.S. Navy proposes to conduct within the MIRC and the MITT from August 2015 to August 2015” (pp. 4-78, 4-80, 4-81, 4-82) Are these dates correct? -H41

Cultural Resources

BECQ defers to the Historic Preservation Office (HPO) for comments on Cultural Resources. As the DEIS notes, Alternative 1 would be near Aslito/Isley Field NHL and could “alter the viewshed of nearby historic structures. Such visual intrusions could impact integrity of, setting -H42

and feeling of those historic structures and the NHLD as a whole” (4-86). Meanwhile, the “construction at Tinian International Airport under the Alternative 2 North and South Options could impact one archaeological site, TN-6-0030 (also sometimes referred to as Site 3005), the American administration-period West Field” (p. 4-86)

-H42

The DEIS goes on to say that “The Implementation Phase of Alternative 2 would have no impact on cultural resources”. (p.4-87) BECQ suggests that Tinian is a small island, all of which is culturally important to the people that have called it home for centuries. Increased military air traffic could also represent a visual intrusion to an island that values peace and tranquility.

Recreation

According to the DEIS, the main effects to recreation include increased travel times due to the number of vehicles on the road during the construction phase, and noise, traffic, and decreased lodging for tourists during the implementation phase.

-H78

For Alternative 1, the DEIS notes that “Military exercises would generally be conducted on land designed for that purpose, and previous military exercises throughout the region have not precluded fishing or recreational use, even during peak fishing season.” (p. 4-91) This is a misleading sentence as the land (current airport) has *not* been designed for military exercises but would be modified for the Divert Activities should they go forward. Further, while previous military exercises may not have precluded recreational use, they may have and could affect the quality of recreational use.

-H43

-H44

The DEIS notes that the “noise levels at Coral Ocean Point Golf Course and Ladder Beach would increase to 60–64 and 55–59 dBA DNL, respectively” (p. 4-91). As noted in the Noise chapter of these comments, a 50dBA baseline should be used for comparisons given the quiet nature of the CNMI and preference for tranquility at tourist resorts.

-H45

The DEIS states that “Fewer recreational resources are found in the immediate vicinity of Tinian International Airport” (p.4-92) and thus impacts from construction and implementation would be negligible. No mention is made of the planned Plumeria Resort by the Alter City Group and how the Divert Activities could affect future tourism on the island. The FEIS should note potential affects to the Plumeria Resort and to future tourism in general.

-H46

Land Use

The DEIS notes that “it is assumed that a population of less than 12 would be exposed to the 65 dBA noise level on Saipan” (p.4-97) and “There are no schools that would be exposed to noise levels at or above 65 dBA DNL and, therefore, no impacts on children’s health or learning would be expected. “(p. 4-99) BECQ recommends in its Noise comments above that a lower threshold be used given the CNMI’s tranquil nature. Fortunately, Table 4.10-1 “Alternative 1 Noise Levels at

-H47

Noise-Sensitive Locations around Saipan” puts nearby schools at below the 50dBA level. Noise mitigation would still be appreciated to maintain tranquility around Coral Ocean Point and Ladder Beach. -H47

In its “Climate Change” section, the DEIS states that: “coastal flooding due to sea level rise could have an adverse impact on proposed fuel tanks located near the seaports of Saipan and Tinian. If a rise were to occur suddenly, fuel tanks could become inundated, and this could lead to a release of fuel into the environment” (p.5-43). USAF should work with BECQ, CPA, and other agencies to ensure that storm surge and sea level rise models are considered when planning locations of facilities in order to minimize risks and ensure long-term sustainability. -H48

Under Alternative 2, the DEIS says: “While the CPA owns some north of Tinian International Airport on which construction would occur, additional acres of LBA land would be required. This LBA land is currently used for cattle grazing, and agriculture/grazing leases and permits might need to be terminated. This permit revocation and the displacement of ranches would create an economic hardship on the affected ranchers” (pp. 4-177 – 4-178). This is of particular concern as the CJMT has also proposed moving ranchers. Is there enough space for all the displaced ranchers? Where will they be moved to? What is the quality of the new grazing land? -H49

Transportation

Impacts to traffic from construction and implementation should be avoided. BECQ suggests USAF work with the Department of Public Works to conduct traffic surveys to identify problem intersections and address congestion. This will have the added benefit of reducing associated emissions from unnecessary idling. Wherever possible USAF should coordinate transportation of personnel to non-“high use / rush hour” periods. -H50

Hazardous Materials and Wastes

The DEIS notes that “additional hazardous wastes would not be expected to exceed the capacities of existing hazardous waste disposal streams” (pp. 4-124, 4-129); however, these streams are not identified in the DEIS. The FEIS should identify what hazardous waste disposal streams the USAF intends to use. -H51

If necessary, USAF should work with BECQ-DEQ, Tinian’s Mayor’s Office, and Department of Public Works to determine if hazardous wastes can be stored at the Tinian Transfer Station or if the military needs to construct its own hazardous waste management facility. -H52

In regards to the storage of petroleum products, the DEIS says: “Contractors would obtain an AST Permit to Install and an AST Permit to Operate from the CNMI DEQ for all ASTs needed to support construction.” (4-124) BECQ-DEQ is prepared to work with USAF and its contractors should the Divert Activities move forward. -H53

Infrastructure and Utilities

The DEIS states that there could be negative impacts to fuel supplies, electrical systems, communications systems, and sewer systems. Negative impacts should be avoided and interruptions should be coordinated with CPA and CUC. Examples of impacts include:

- Any buried utility lines on the site [Saipan and Tinian Ports] of the proposed fuel tanks would have to be permanently relocated. (pp. 4-142, 4-148, 4-151)
- ...extension of electrical lines to and the relocation or upgrading of any buried electrical lines.... These short-term impacts could include potential power disruptions when new facilities and lighting systems are connected to the power grid (pp. 4-142, 4-147, 4-151)
- temporary shutoff of sewer lines during the connection of a 6-inch sewer line from the proposed maintenance facility to the sewer main line. (pp.4-143, 4-149)
- Short-term, direct, negligible, adverse impacts on the communications system would occur as the permanent facilities at Saipan International Airport are connected to the existing telephone line system at the airport (p.4-145)

-H54

BECQ is particularly concerned about the disposal of construction waste. Currently the DEIS proposes to dispose of un-recyclable waste at the Marpi Landfill under Alternatives 1 and 3, or to ship waste off island under Alternatives 2 and 3. It is unclear where waste would actually be shipped to under Alternatives 2 and 3. The FEIS should have a clear plan and state where

-H55

construction debris will shipped off to. Further, the islands are small with limited space. Filling the Marpi landfill with an “estimated 1,025 tons over a period of approximately 3 years” (4-145) is more than a minor impact. More information on how USAF plans to reduce and recycle waste would be appreciated.

-H56

This chapter contains a section on storm water, noting “An SWPPP approved by the DEQ would be required and must contain an NPDES permit declaration.” (p.4-144) This chapter also notes that septic systems will be used for personnel on Tinian under Alternative 2. The DEIS states: “One or more septic systems would need to be constructed to handle up to 265 personnel for Alternative 2 North Option. An Individual Wastewater Disposal System Permit Application from CNMI DEQ would be obtained for each septic system.” (4-149) The same would be done for the Alternative 2 South Option.

-H79

BECQ-DEQ is prepared to work with USAF on its SWPPP and Individual Wastewater Disposal System Permit Application should the Divert Activities go forward.

-H57

Socioeconomics and Environmental Justice

BECQ is concerned that the Divert Activities could have disproportionate impacts on minority and low-income populations. As the DEIS notes, “Approximately 98 percent of the population of Saipan is considered a minority, and approximately 53 percent of the population is low-income.” (4-172), and “Approximately 98 percent of the population of Tinian is considered a minority, and 44 percent of the population is low- income.” (p. 4-180)

-H58

BECQ is particularly concerned about noise effects. As the DEIS points out:



- Disproportionately high and adverse impacts could occur on minority and low income populations during implementation of Alternative 1 due to noise generation. (p. 4-175)
- Elevated noise levels could be experienced in the vicinity of the construction activities, but a noise level of 67–71 dBA could be intermittently heard at the border of the village of Dandan (p. 4-172)
- Noise from exercises could result in minor impacts on the island’s general tranquility and standard of living, but only in the areas that fall within the 65 dBA DNL contour and higher. (p. 4-175)

-H58

As pointed out in our Noise section above, the CNMI has a greater sensitivity to noise impacts. The ANSI standards should be used, taking into account the expectation for and value placed on "peace and quiet" in quiet rural settings. We recommend using a 50dBA contour and quantifying how many people will be impacted and how often, at that level for all Alternatives.

The DEIS states that 500 workers would be required for construction under Alternative 1 on Saipan and 750 under Alternative 2 on Tinian. Different numbers (1500 people on Saipan, 2000 on Tinian) are listed in Appendix E for construction/commuter emissions. This inconsistency should be addressed. As housing and employment are issues on Saipan and Tinian, USAF should work with the Mayors’ Offices and the CNMI Department of Commerce to ensure as many local workers are hired as possible.

-H59

-H60

On Tinian, “some construction would occur on land within the LBA, and require the termination of agriculture/grazing leases and permits in the LBA west and north of Tinian International Airport” (p. 4-179). The DEIS says that, “This impact could be minimized by providing the affected ranchers leases elsewhere in the LBA” (4-182). This is not mentioned in the “Mitigation Measures” chapter or in the “Cumulative and Other Effects” chapter. Given that the CJMT has also proposed terminating grazing leases, this issue should be given more attention by the DoD.

-H61

The DEIS also notes that Divert Activities could affect the provision of public services, measures should be taken to avoid negative impacts to the residents of Saipan and Tinian should the Divert Activities go forward.

-H62

Human Health and Safety

This chapter largely addresses construction hazards and the importance of fencing. Are there any environmental impacts that could lead to health hazards? The FEIS should note whether air pollution could affect residents – using data that is averaged over 8 weeks rather than a year. Air pollution impacts should also address the effects of increased levels of particulate pollution including ultrafine particles (UFP).

-H63

-H64

-H65

Mitigation Measures

Currently the “Mitigation Measures” chapter of the DEIS only lists measures for Terrestrial Biological Resources and notice that Cultural Resources will be handled under the Section 106 consultation process.

-H66

BECQ recommends USAF consider further mitigation measures to offset impacts to Saipan and Tinian residents should the Divert Activities go forward. In particular, USAF could do more to offset Noise Impacts and impacts to Terrestrial Resources as outlined above.

The Mitigation Measures chapter describes extensive reporting to USFWS. BECQ recommends that the annual reports to USFWS be shared with the CNMI natural resource agencies and that the CNMI natural resource agencies also be invited to annual coordination meetings with the DoD. BECQ would like to see increased coordination and communication with the DoD.

-H67

BECQ-DEQ looks forward to working with USAF with its earthmoving permit, stormwater management plan, and stationary source air pollution permit.

-H68

Cumulative Impacts

There are currently multiple Department of Defense projects occurring or proposed for the CNMI (MIRC, MITT, CJMT, Guam Relocation, Divert Activities, etc). Compared to the other proposed projects, the Divert Activities are relatively small. However, this does not mean that the added cumulative effect of the Divert Activities is unimportant.

As noted above in the Marine Biology section, BECQ recommends the Department of Defense issue clear documentation of the many ways in which these projects overlap and inter-connect. In what way are the Divert Activities connected to the MITT? As the DEIS notes- “military aircraft would also conduct training over the ocean within the MIRC. ... These training exercises are covered under the Programmatic Biological Opinion on military readiness activities the U.S. Navy proposes to conduct within the MIRC and the MITT” (p. 4-79).

-H69

It is not clear how the many projects of the Department of Defense overlap in the CNMI. BECQ looks forward to continued communication in order to protect the CNMI’s natural resources.

-H70

References

ANSI. (2005). “Quantities and Procedures for Description and Measurement of Environmental Sound – Part 4: Noise Assessment and Prediction of Long-Term Community Response.” American National Standards Institute and Acoustical Society of America. ANSI S12.9-2005/Part 4. <
http://archive.leg.state.mn.us/docs/2015/other/150681/PFEISref_1/ANSI%202005.pdf>.



Commonwealth of the Northern Mariana Islands

Office of the Governor

Department of Lands and Natural Resources

Caller Box 10007

Saipan, Northern Mariana Islands 96950

Cable Address:

Gob. NM I Saipan

Telephone: 322-9830/ 9834

Fax: 322-2633

November 30, 2015

HQ PACAF/PA
25 E Street, 39 Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853

Dear Headquarters Pacific Airforce:

The Department of Lands and Natural Resources is pleased to submit our comments on the Revised Draft Environmental Impact Statement (DEIS) for Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI).

We trust our comments will aid in the preparation of a final Environmental Impact Statement that thoroughly addresses the impacts on the CNMI's natural resources, and include effective minimization, mitigation, and avoidance of environmental impacts to the maximum extent possible.

Sincerely,

Handwritten signature of Richard B. Seman in blue ink.

RICHARD B. SEMAN
Secretary
Department of Lands and Natural Resources
Wildlife

Handwritten signature of Manuel M. Pangelinan in blue ink.

MANUEL M. PANGELINAN
Director
Division of Fish and



COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

DEPARTMENT OF LANDS AND NATURAL RESOURCES

**Comments on the Revised Draft Environmental
Impact Statement for Divert Activities and
Exercises, Commonwealth of the Northern
Mariana Islands**

November 2015

Need (Section 1.3.2)

- Ensure airfield accessibility if access to Andersen AFB or other western Pacific airfields is limited or denied.
- Provide for contingency operations to include humanitarian relief efforts.
- Accommodate future increases in operational tempo and associated training.
- Achieve and sustain readiness.

-11

The USAF has not identified a preferred alternative. Section 2.6 states “The USAF has not identified a preferred alternative at this time. Upon completion of the EIS, the USAF decisionmaker will use the EIS to support the decision about how best to satisfy the stated purpose and need within mission constraints. The final decision will be documented in the ROD.” Does the no-action alternative meet these needs?

The maps of the Saipan and Tinian airports are misleading

The maps depicting Saipan International Airport and Tinian International Airport only show the footprint of the runways, taxiways, parking aprons and some buildings etc, but claim that these footprints represent the boundaries of “Saipan International Airport” and “Tinian International Airport. This is misleading. These maps need to show the actual boundaries of the airports, not just the footprints of structures and runways.

-12

The DEIS must specify maximum number of operations per day

The DEIS must indicate the maximum number of operations per day, not just state there will be up to 720 annual operations. The true environmental impact will result from the maximum number of operations per day, not the annual amount over a year.

-13

Surveys of wildlife in project areas are insufficient

The wildlife surveys of the project area were insufficient. The DEIS relies heavily on “incidental observations” from “reconnaissance surveys” conducted in 2011 (Tables 3.6-2 and 3.6-5) of terrestrial fauna for Saipan and Tinian airports, with no description of the survey methods to determine the presence/absence of species, nor who did the surveys.

-14

The “reconnaissance surveys” were only conducted over 2 days on Tinian: October 7-8 2011, and 3 days on Saipan: October 4-6 2011. Additional information on wildlife species present at Saipan airport is taken from the 2012 Nightingale reed-warbler surveys (MES 2012). We are unable to gauge the completeness of Tables 3.6-2 and 3.6-5 in terms of ESA-listed species, MBTA-listed species, CNMI DFW-listed species and species of conservation concern, particularly for Tinian. Two days of “reconnaissance surveys” on Tinian is vastly insufficient for determining the species that will be impacted by these activities.

-15

In addition, apart from the 2012 Nightingale reed-warbler surveys on Saipan, there were no surveys specifically targeting ESA-listed species.

-16

Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included

The DEIS needs to depict the locations of detected Nightingale reed-warblers, as well as their estimated home ranges, in relation to areas to be cleared. Figures 4.3 and 5.1 in the DEIS

-17

Volume II (from MES 2012) shows where individuals were detected during the 2012 surveys, but does not depict the home range of each individual detected. Section 5.1.1 of Volume II of the DEIS states “The area used by reed-warblers within those territories during the surveys was calculated by measuring the minimum-sized convex polygon encompassing all observations”. However these territories are not shown as polygons anywhere in the DEIS Volume I or II figures.

Section 4.6.1.1 states that *Two of the territories detected in 2012 are partially within or adjacent to the proposed location of 1 the fuel tanks. About 3.7 acres of the 8.6-acre site where the fuel tanks would be installed has been cleared and was used as a materials storage area during past construction at Saipan International Airport. Because a portion of that site has been cleared, and the remaining vegetated area does not appear to be used, or is used infrequently, by nightingale reed-warblers, there would be no or minimal direct effects on those territories.* It is very possible that this site has regrown to a point where it now contains suitable habitat for Nightingale reed-warblers. The partially revegetated habitat within the 3.7 acres may offer feeding areas for Nightingale Reed-warblers. We do not accept that there will be no or minimal effects on these birds.

Although Nightingale Reed-warblers were not detected within the areas to be cleared in the revised DEIS during 2012 surveys, (MES 2012), Nightingale Reed-warblers were detected in vegetation directly opposite the proposed fuel storage clearance area in both Alternatives 1 and 3, across a narrow road, as close as 20m away from the area to be cleared. The figures in Volume II depicting Nightingale Reed-warbler observations do not indicate the boundaries of each home range. Given the home range of the Nightingale Reed-warbler is estimated at 4.4 ha (Mosher 2006), it would be reasonable to expect that individuals might use the fuel storage area that is to be cleared, even if they were not detected within that area during the 2012 surveys.

Section 4.16.1.1.1 states that “The USAF will purchase one credit in the Saipan Upland Mitigation Bank prior to any construction of the east parking apron if that apron is to be constructed”. Although the revised DEIS excludes the east parking apron, DLNR asserts that Nightingale Reed-warbler habitat will still be cleared and credits are still required. The revised DEIS Alternative 1 includes 6.57 acres of tangantangan forest, and 4.18 acres of “cleared and partially revegetated” habitat at the Saipan International Airport, both potentially used by adjacent the Nightingale Reed-warblers . Again, it is impossible to tell unless the home ranges of these birds are depicted.

The south portion of the fuel storage area (4.17 acres) is described in the Revised DEIS as "disturbed/mowed" (Table 4.6-1 of the EIS) or "cleared and partially revegetated" (Section 4.6.1.1 of the EIS). It is not indicated in the EIS when the clearing took place. This revegetated area could be used by the Nightingale Reed-warbler, especially since individuals were detected only 20 m away across the road (MES 2012). The remaining 6.6 acres on the north portion of the proposed fuel storage area to be cleared had no Nightingale Reed-warbler detections within it in

2012, but a Nightingale Reed-warbler was detected only 50 m to the east, in similar habitat to that which is to be cleared. This is well within the distance a bird might fly for foraging.

-I14

The DEIS does not adequately avoid and minimize impacts of vegetation clearing on Nightingale Reed-warblers. Section 4.16.1.1 states “*Clearing of vegetation at the east parking apron will only occur between October through December or April through June, when nightingale reed-warbler nesting activity is not at its peak*”. This should apply to all clearing activities in the construction phase for Saipan Alternatives 1 and 3 (fuel storage area, hydrant system, maintenance area and cargo bay), not just the clearing for the east parking apron which was not part of the revised DEIS, since all clearing sites that feature tangantangan and revegetated areas are potential habitat for the Nightingale Reed-warbler.

-I15

The DEIS must state that all clearing around Saipan Airport will occur outside Nightingale Reed-warbler peak breeding season as an impact minimization measure.

-I16

In addition, the USAF must conduct surveys immediately prior to clearing to determine whether Nightingale Reed-warblers are present. Nightingale Reed-warblers can fly, and cannot be expected to be in the exact same locations as they were recorded in the MES 2012 survey.

-I17

Due to Super typhoon Soudelor in August 2015, the habitat around the Saipan International Airport has been severely altered, and it can be expected that territories have shifted as a result. The USAF needs to specify these avoidance and minimization strategies in Table ES-2 and elsewhere as appropriate.

-I18

Other ESA-listed species were not surveyed for

Section 4.6.1.1 states that “*Six species that were proposed for listing as endangered in October 2014 currently occur on Saipan or have been documented there in the past (Table 3.6-1). None of those species would occur in the mowed field, tangantangan forest, park, disturbed or paved areas, or agricultural vegetation communities found at and surrounding Saipan International Airport (Section 3.6.3.1). Thus, there would be no adverse effects to these proposed species from construction or other planned activities on Saipan.*”

-I19

These proposed species have now been listed under the Endangered Species Act (DOI 2015). Surveys have not yet been conducted within the Saipan or Tinian project areas for these now-listed species. Tables 3.6-2 and 3.6-6 states there is no suitable native forest habitat near Saipan or Tinian International Airport. However, these species are not restricted to native limestone forest. Humped Tree Snail and *Dendrobium guamense* has been found in non-native and secondary forest on Saipan and Rota. The USAF must conduct actual surveys by qualified biologists to determine if these species are present within the areas to be cleared, instead of assuming their absence, for Alternatives, 1, 2 and 3.

The DEIS does not address impacts on MBTA-listed species

There is no description of the impacts on the MBTA-listed species in Section 4 that are described in Sections 3.6.3.1 or 3.6.3.2 even though the MBTA is referenced at Section 1.7.2. The impacts of all MBTA-listed species that are known to occur in the project area of all three alternatives must be identified and presented. In particular, the USAF needs to fully address the adverse impacts and provide avoidance/minimization/mitigation strategies on the Black Noddy rookery at Saipan International Airport, an MBTA-listed species.

-I20

Brown Tree Snake and other invasive species Interdiction and Response

The USAF needs to provide funding to Division of Fish and Wildlife’s Brown Tree Snake Program for prevention, early detection and rapid response to Brown Treesnakes on Saipan and/or Tinian. This needs to include detector dog programs, and monitoring of prey bases around the airports. The proposed activities in the DEIS will increase the risk of Brown Treesnakes and other invasive species entering the CNMI, and to minimize the risk, the USAF must provide such interdiction measures within the CNMI. The USAF needs to also provide funding for Brown Treesnake research in the CNMI.

-I21

-I22

Table 1.5-1

Table 1.5-1 claims “*The Proposed Action would not have a significant impact on migratory birds*”. There is no analysis of the significance of the impact on MBTA-listed species, so we cannot accept this claim. Even the species lists are not complete (see comments on Tables 3.6-2 and 3.6-5 below). For example, the MES 2012 survey indicates the presence of a black noddy rookery within the project area, but the impacts of the proposed action alternatives on this rookery are not presented anywhere in the Draft EIS.

-I23

Table 3.1-1

Table 3.1-1 does not give indications of potential harm ie temporary or permanent hearing damage to people or wildlife.

-I24

Section 3.3.3.1 Saipan

This section needs updating. Freedom Air no longer operates, but new airline Arctic Circle Air provides charter and cargo between Saipan and Rota. Star Marianas continues to operate passenger and cargo services from Saipan to both Tinian and Rota.

-I25

Figure 3.6-1

What is the source of the information for the vegetation maps in Figure 3.6-1? Was this a referenced source -if so the USAF needs to cite the source of the information for verification. Is the map developed from on-ground surveys – if so the USAF needs to provide details on who did the surveys and what methods were used. Conclusions of species presence and impacts rely heavily on claims about vegetation types, so it is essential that we are able to verify the accuracy of this information.

-I26

-I27

Figure 3.6-3

What is the source of the vegetation mapping data in Figure 3.6-3? It is not stated in the map or text. These data appears very different in the CNMI Joint Military Training Draft Environmental Impact Statement (DON 2015) figure 3.9-1, which depicts the following vegetation communities in the Tinian International Airport: tangantangan, mixed introduced forest, beach strand, and herbaceous-scrub, and is a much finer scale depiction. The USAF needs to include the most up-to-date and accurate information on vegetation communities for both Figures 3.6-3 and 3.6-1.

-I28

-I29

Table 3.6-2

Table 3.6-2 indicates Mariana Common Moorhen was observed at the Saipan International Airport project area. However elsewhere in the document it is stated that this species, which is federally listed, is not present and will not be impacted. If the species was observed there, then the impacts must be presented and evaluated.

-I30

It is not clear where these Table 3.6-2 “reconnaissance surveys” occurred. The text indicates these were at the Saipan International Airport and harbor. The table itself needs to clearly indicate where these surveys took place. In addition, there needs to be more information on where they surveys were conducted in relation to the construction sites, how these surveys were performed, who performed them, and whether they are sufficiently trained and experienced in endangered/threatened/migratory species surveys.

-I31

-I32

The DEIS needs to use the most up-to-date accepted names for species to avoid confusion. The Collared Kingfisher has been known as *Todiramphus chloris* (not *Halcyon chloris* as appears in Table 3.6-2) for many years now. The species has had a recent name change to *Todiramphus albicilla* or Mariana Kingfisher (Anderson et al. 2015).

-I33

The Black-necked Stilt (Table 3.6-2) is extremely unlikely to occur in the Mariana Islands. The species has never been recorded here. This record is most likely a result of misidentification of the Black-winged Stilt. Again we question who did these surveys, and whether they qualified to conduct wildlife surveys in the CNMI.

-I34

Table 3.6-2 indicates that the surveys occurred in February through March 2012. However the text describing the table indicates January through April 2012 – which is it? The MES 2012 report itself states that the Nightingale Reed-warbler surveys at the Saipan International Airport were conducted during 10–29 March 2012 only, while the water catchment survey was completed between 28 January and 24 March 2012. These dates need to be clarified as timing is important in biological surveys.

-I35

-I36

Table 3.6-2 indicates that some of these observations resulted from Nightingale Reed-warbler surveys conducted in Feb-Mar 2012 (or Jan-Apr 2012 – information is conflicting). Yet the Nightingale Reed-warbler is not included in this table. Nightingale Reed-warblers were definitely observed during the Nightingale Reed-warbler surveys (see MES 2012). This species is a federally endangered species and its omission from the table needs to be corrected.

-I37

Both Table 3.6-2 and 3.6-5 includes Rufous fantail *Rhipidura rufifrons saipanensis*. If using subspecies here, then the table also need to do the same for the Micronesian Honeyeater (for Table 3.6-2 only), Bridled White-eye and Micronesian Starling for consistency.

-I38

Table 3.6-2 omits the following MBTA-listed species detected in the primary survey area by MES (2012): Eurasian Wigeon, Northern Shoveler, Green-winged Teal, Little Egret, Peregrine Falcon, and Wood Sandpiper (Table 5, MES 2012). Table 3.6-2 also excludes numerous other MBTA-species that Section 3.6.3.1 shows occur in the study area: including Wood Sandpiper, Sharp-tailed Sandpiper, Mongolian Plover, Rufous-necked Stint, Black-bellied Plover, Cattle Egret, Little Egret, Intermediate Egret, Great Egret, Tufted Duck, and Northern Pintail.

-I39

Tables 3.6-3 and 3.6-6.

The USAF needs to update these tables as these proposed species have now been listed as of November 2015 (DOI 2015).

-I40

Table 3.6-5

Again, it is not clear exactly where these “incidental observations” from “reconnaissance surveys” were performed. The table only states “Tinian” but the text describing this table says “Project Area”. The USAF needs to specify exactly where these surveys were conducted in relation to the proposed construction sites. The USAF also needs to provide details on who did the surveys, and whether they were experienced and trained to perform biological surveys in the Mariana Islands, particularly in endangered/threatened/migratory species surveys.

-I41

-I42

We cannot accept “incidental observations” over a 2-day period as a reliable tool in determining project impacts on wildlife and plant species on Tinian. A two-day set of incidental observations is a grossly inadequate biological survey for an environmental impact statement of this nature.

-I43

There needs to be standard methodology used, and the biologists must be trained and experienced in both the methods and the species that they are surveying for. -I43

Table 3.6-5 lists the Collared Kingfisher twice – once as *Halcyon chloris* and once as *Todiramphus chloris*. These are the same species -please remove one and use the most recent accepted name, *Todiramphus albicilla* (Mariana Kingfisher). -I44

Table 3.6-5 excludes numerous MBTA-species that Section 3.6.3.5 states occur in the study area: Cattle Egret, Little Egret, Intermediate Egret, Great Egret and Black Noddy. -I45

Section 3.6.3.1 Saipan

The USAF needs to indicate location of black noddy rookery (an MBTA-listed species) on maps and assess the impacts on this MBTA-listed species. -I46

“Migratory Birds” subsection

This subsection is very confusing. It describes migratory birds but in same section discusses non-native birds and forest birds, which are not migratory. The USAF needs to correct this – separate the non-native bird and forest birds discussion into their own titled subsections from the Migratory Birds subsection. -I47

Section 3.6.3.2 Tinian

Again, this has a subsection titled “Migratory Birds” but this subsection confusingly discusses all bird species including resident non-native and native forest birds here. The USAF needs to separate migratory bird subsection from the other bird groups included here. -I48

Section 4.1.1.2 and 4.1.2.2 Implementation Phase

To estimate the AAD, the total number of operations was divided by 365 days, which equals 3 5.26 operations per day with the KC-135. -I49

This is extremely misleading. The training will occur within an 8-week period. The operations will not occur evenly spread out over a 365-day period. This section needs to be reanalyzed using the average operations over an 8-week period, not a 52-week period. It should also include an indication of the maximum number of operations per day that could be expected within the 8- -I50

week period. 720 take-offs per year over 8 weeks = 12.8/day. How concentrated are these? If all 720 occur in 1 day, impact would be far more extreme than if they were spread out evenly. It is impossible to assess the impacts of the proposed action unless this is clarified. -I51

Section 4.6.1 Saipan

Section 4.6.1 contains no analysis of impacts or discussion of avoidance/minimization/mitigation strategies on the MBTA-listed species that are present within the proposed action areas.

-I52

Section 4.6.1.1 Saipan

“All the terrestrial species listed in Table 3.6-5 have the have the potential to be present in the Project Area”.

-I53

Table 3.6-5 refers to species in the Tinian project area, not the Saipan project area. This should reference Table 3.6-2, not 3.6-5.

Without a detailed description of how the surveys for Table 3.6.2 were conducted, including the 2011 reconnaissance surveys, it is impossible to say how complete these surveys were and what additional species might also occur in the project area.

-I54

Table 3.6-2 indicates the Mariana Common Moorhen, a federally listed species under the ESA, was observed inside the project area, yet there is no discussion of impacts on this species.

-I55

Table 4.6-1

I56- How were the cleared areas calculated? The “Disturbed” vegetation category is not indicated on Figure 3.6-1 – only tangantangan, mowed, park, unmowed and agriculture/grazing. This table indicates 8.6 acres of “disturbed/unmowed” area will be cleared. In Section 4.6.1.1 above it is indicated that this “disturbed/unmowed” area includes “an additional 4.17 acres where the airport fuel tanks and hydrant system would be located was cleared in the past and is partially revegetated”. However there is no indication about when the area was cleared. Satellite images and Google Earth indicates that this area is regrown tangantangan. It is highly likely that this 4.17 acres is suitable for the Nightingale Reed-warbler.

-I57

Section 4.6.2 Tinian

“All of the terrestrial bird species listed in Table 3.6-2 have the potential to be present in the Project Area.”

-I58

This should refer to Table 3.6-5, not 3.6-2.

“Those areas are not suitable habitat for the Mariana fruit bat, Micronesian megapode, Mariana moorhen, or any proposed species that have potential to occur on Tinian.”

-I59

These species are not restricted to native limestone forest, as claimed in table 3.6-2 and Table 3.6-6. For example, the *Dendrobium guamense* known to occur on Tinian is in tangantangan

vegetation. The USAF must conduct surveys to determine the presence or absence of these species, and not just assume their absence.

]-160

Section 4.6.2 contains no analysis of MBTA-listed species impacts, nor of avoidance/minimization/mitigation strategies.

]-161

Section 4.6.3 Saipan and Tinian hybrid alternative

“As described in Sections 4.6.1 and 4.6.2, no other terrestrial threatened, endangered, or 24 proposed species would be adversely affected by construction on Saipan or Tinian”.

The USAF cannot claim this until surveys for these species are completed. MES 2012 only appeared to survey for federally-listed and candidate species, not (then) proposed species and MBTA-listed species. The MES 2012 report did not include surveys for listed snails, lizards, butterflies or plants.

]-162

Section 4.6.3 contains no analysis of MBTA-listed species impacts.

]-163

Appendices

The MES 2012 report needs to be included in the Appendices, as well as the reports from the “reconnaissance survey” conducted in 2011.

]-164

References

Andersen, M.J., H.T Shult, A. Cibois, J-C Thibault, C.E. Filardi, and R.G. Moyle. 2015 Rapid diversification and secondary sympatry in Australo-Pacific kingfishers (Aves: Alcedinidae: *Todiramphus*). *R. Soc. open sci.* **2**: 140375.

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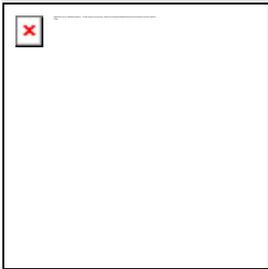
Mosher, S. M. 2006. Ecology of the endangered Nightingale Reed-Warbler (*Acrocephalus luscini*) on Saipan, Micronesia. MSc Thesis. University of Idaho

From: Zaji Zajrdhara [REDACTED]
Sent: Sunday, November 29, 2015 4:05 PM
To: PACAF/PAOPS
Subject: RE: SAIPAN /CNMI... UPCOMING NATIONAL SECURITY THREAT

Follow Up Flag: Follow up
Flag Status: Flagged

THIS IS MY COMMENT ON THE TENTATIVE AIRFIELD ON SAIPAN.
IF UNCLE SAM DOES NOT TAKE SERIOUS, AND I DO MEAN SERIOUS STEPS TO PLACE PLACE A MILITARY PRESENCE HERE. THEN WE MIGHT AS WELL LET THESE PEOPLE SELL THIS PLACE TO THE CHINESE AND FILIPINOS AND CALL IT A DAY.
I'M SURE THAT YOU ARE WELL AWARE BY NOW THAT THESE "LOCAL" POLITICIANS ARE NOTHING BUT MOUTHPIECES FOR THEIR CHINESE PATRONS / INVESTORS..
I'M SURE THAT YOU KNOW BY NOW THAT THE LARGER PICTURE CALLS FOR THE PLACE TO BECOME A 5TH LINE OF DEFENSE FOR THE CHINESE. THIS PLACE IS ALREADY 60% CHINESE AND FILIPINO NEITHER OF WHICH HAVE ANY LOYALTY TO OUR WAY OF LIFE.
WHY ARE WE BICKERING WITH THESE TRAITORS, PERIOD.
WHY DON'T WE UTILIZE DIRECTIVE OR ITS RECENT BILL? WE SHOULD NOT WAIT UNTIL ITS TOO LATE, WE NEED THIS PRESENCE NOW, BEFORE WE CANT SAVE THESE ISLANDS FOR OUR USE.. : [S.1059 - 106th Congress \(1999-2000\): National Defense Authorization Act for Fiscal Year 2000](#)

-J1



**S.1059 - 106th Congress (1999-2000)
: National Defense...**

Summary of S.1059 - 106th Congress (1999-2000):
National Defense Authorization Act for Fiscal Year
2000

View on www.congress.gov

Preview by Yahoo



ALTERNATIVE ZERO COALITION

PMB 326 Box 10001
Saipan, MP 96950
December 7, 2015

ATTN: Ashley Conner, PACAF Public Affairs
25 E Street, Suite G-108
Joint Base Pearl Harbor- Hickam, HI 96853

Re: Public Comment Submission: revised Divert Activities and Exercises Revised Draft Environmental Impact Statement (EIS)

Ladies and Gentlemen:

Here are our comments on the above-captioned matter.

The revised draft EIS fails to meet EIS public outreach requirements.

The purpose of the National Environmental Protection Act (NEPA) is to promote informed decision-making by federal agencies by making "detailed information concerning significant environmental impacts" available to both agency leaders and the public. The proposed Divert Activities and Exercises are to take place in the Commonwealth of the Northern Mariana Islands (CNMI) where English is a second language for the majority of the public. The majority of the permanent local population are ethnic Chamorro and Refaluwasch (Carolinians). Yet, the revised draft EIS is provided only in the English language. This is despite numerous calls in recent years and even recent months for the agencies under the DOD to provide EIS documents in Chamorro and Carolinian languages. The USAF failed to fulfill its requirement under NEPA to inform the public by not providing translations of the EIS in local languages. The consequences of this failure is that many people in the community--those who cannot read English or who have difficulty reading and comprehending materials written in English-- cannot understand and evaluate the implications and impacts of the proposed activities. They are effectively disenfranchised and excluded from the NEPA process. The EIS must be redone in local languages with implementation of an effective outreach program designed with measures in place to ensure success.

-K1

The intent and spirit of NEPA's public outreach requirements is to ensure the local government and public's full understanding of the nature and impacts of proposed activities and to encourage their participation in the decision-making process by providing their perspectives and concerns. It is contrary to this intent and spirit for the USAF to present information in such a way as to be misleading and to make their intent obscure. The USAF states in ES 5. Preferred Alternative, "The USAF does not identify or determine a preferred

-K2

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<i>PMB 326, Box 10001</i>	<i>P.O. Box 500370</i>	<i>P.O. Box 180</i>	<i>P.O. Box 506645</i>	<i>144 Aspinal Avenue, Suite 201</i>	<i>P.O. Box 502914</i>
<i>Saipan, MP 96950</i>	<i>Saipan, MP 96950</i>	<i>Tinian, MP 96952</i>	<i>Saipan, MP 96950</i>	<i>Hagåtña, GU 96910</i>	<i>Saipan, MP 96950</i>

alternative in this Revised Draft EIS.” This statement is misleading. It implies that the USAF does not have a preferred alternative when, in actuality, based on the public discussions held at the USAF open house on Saipan, it is clear that the USAF prefers Alternative 1 – Modified Saipan Alternative and Alternative 3 – Hybrid Modified Alternative in that order. By not stating a preferred alternative in the revised draft EIS, the USAF both avoids a more detailed discussion in the EIS as to why it prefers the Saipan alternatives and leads CNMI government leaders and the public to the false assumption that the USAF will accept the local community’s strong preference for Alternative 2 – Modified Tinian Alternative. As a result, it can be expected that there will be less apparent public opposition to the USAF plans both in public debate and comments submitted. Whether this is intentional manipulation or not, the result is the same. The seriousness of the impacts to the CNMI community is downplayed when attention is diverted away from those alternatives that the community does not support. The USAF’s choice of an alternative in its Record of Decision will be based in part on this community response. To comply with NEPA’s intent and spirit, the EIS must be redone with the USAF’s preferred alternatives clearly named and the reasons for the preference fully discussed.

-K2
-K3
-K4

The U.S. military has intentionally broken its large-scale development of the Mariana Islands and surrounding waters into the world’s largest live-fire training range into multiple proposals with the resulting effect of misleading the public and minimizing apparent impacts.

Prior to the approval of the Mariana Islands Range Complex (MIRC) proposal in 2010, the U.S. military already held and occupied extensive areas of the Marianas. This includes fully half of the northern third of Guam along with huge areas in the south, including the Island’s only lake, most of the land around Apra Harbour, and numerous other large areas of Guam that, together, make up a third of Guam’s entire land mass. Here in the CNMI, they held a long-term lease on two-thirds of Tinian, land around Tanapag Harbour and the entire island of Farallon de Medinilla (FDM).

The MIRC created a half-million-square nautical mile live-fire training range that surrounds Guam, Rota, Tinian, Saipan and all but the furthest islands to the north. The MIRC authorized live-fire on and in the land, air, and sea throughout the training range. It also expanded the small-arms scope of the Tinian ranges into four range complexes inclusive of artillery, grenade, and high-impact zones.

On July 30, 2015, the U.S. Navy announced its Record of Decision for another proposal—the Mariana Islands Training and Testing Area (MITT) that doubled the area of the MIRC to nearly a million square nautical miles. It also greatly increased the level of the Navy’s deadly sonar and live-fire ordnance testing and training in CNMI waters. The MITT plan allows the Navy to damage or kill over 6 square miles of endangered coral reefs plus an additional 20 square miles of coral reef around FDM through the use of highly explosive bombs. It ups the rate of explosive bombing from 2,150 bombs per year to over 6,000 bombs per year, increasing the Navy’s bombing of FDM by roughly 300%.

-K5

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|---|---|---|--|---|--|
| <i>PaganWatch</i>
PMB 326, Box 10001
Saipan, MP 96950 | <i>Guardians of Gani</i>
P.O. Box 500370
Saipan, MP 96950 | <i>Fanacho Marianas</i>
P.O. Box 180
Tinian, MP 96952 | <i>MINA</i>
P.O. Box 506645
Saipan, MP 96950 | <i>Oceania Resistance</i>
144 Aspinal Avenue, Suite 201
Hagåtña, GU 96910 | <i>UNIA</i>
P.O. Box 502914
Saipan, MP 96950 |
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On September 2, 2015, the Navy signed the Record of Decision for another proposal, the Guam and CNMI Military Relocation proposal, approving a new Marine Base in Guam, a new Live-Fire Training Range Complex, or LFTRC, and a separate hand-grenade range.

Another separate proposal is the CNMI Joint Military Training (CJMT) proposal that would allow the military to use two-thirds of Tinian for their second highest level of live-fire training range and to take the entire island of Pagan and use it for their highest level of live-fire training.

-K5

Taken together, these proposals surround the CNMI with live-fire ranges; in Guam to the south; Tinian in the west, FDM and Pagan to the north, and all around us on and in the ocean.

The proposed Divert Activities and Exercises is another US Military expansion. Its primary purpose is training. It will move more land and airspace from the CNMI government's jurisdiction to the USAF.

The Divert Activities and Exercises EIS is presented independent of other training-related proposed and recently approved activities. Yet, it is clearly and intimately related to them, particularly the MERC and MITT that will involve nearly a million square miles of ocean around the Marianas, large patches of airspace above and near CNMI islands, and live-fire aerial bombardment of FDM. In fact, while the EIS ignores this relationship, it inadvertently reveals this relationship when the EIS refers readers who want to understand how the Divert Activities and Exercises proposal affects other military training operations to the EIS documents of the MERC/MITT proposals.

-K6

The MIRC, MITT, Guam and CNMI Relocation, LFTRC, CJMT and Divert Activities and Exercises all contribute to the creation of the world's largest live-fire training range. Breaking them into separate activities with their own independent EIS disclosures has, for all intents and purposes, allowed the Navy, Air Force and Marines to circumvent the intent of the NEPA process. Public and government stakeholders were unaware of the full extent of the military's intentions. The cumulative impacts were thereby obscured. Decision makers in the U.S. military who approve each proposal do so based in part upon the feedback and comments of stakeholders – in this case, under-informed stakeholders.

The Divert Activities and Exercises must be abandoned and a new proposal drafted that accurately describes the U.S. military's large-scale live-fire training expansion in the Marianas so that stakeholders may understand and comment on the cumulative impacts as required by NEPA.

-K7

The proposed activities will have a negative impact on the local tourist industry.

The main economic engine of the CNMI is its tourist industry. Tourists come to the CNMI to see a group of Micronesian islands and to experience its land, waters and people. In many ways, the tourist experience is our product and its value depends upon a continuing positive visitor experience from the moment a tourist arrives in the CNMI to the moment that that tourist boards a plane home. Tourists choose their destinations

-K8

PaganWatch
PMB 326, Box 10001
Saipan, MP 96950

Guardians of Gani
P.O. Box 500370
Saipan, MP 96950

Fanacho Marianas
P.O. Box 180
Tinian, MP 96952

MINA
P.O. Box 506645
Saipan, MP 96950

Oceania Resistance
144 Aspinal Avenue, Suite 201
Hagåtña, GU 96910

UNIA
P.O. Box 502914
Saipan, MP 96950

based on many factors. We know from 40 years of interactions with our tourists that our history is important to them; i.e., our ancient history, our colonial period history, and our World War II history where our islands played a prominent role in Japanese and American history.

-K8

Anything that diminishes our image as a small Micronesian island damages our tourist product. Anything that destroys or diminishes our historic properties damages our tourist product.

The proposed activities will result in loss and damage to World War II historic areas, artifacts, landmarks, and buildings. They will change the initial impressions of tourists as they arrive at Saipan International Airport. The drive from the airport is currently along a green belt dotted with historic buildings. Visitors “feel” like they’ve arrived on a small Micronesian island. The Japanese buildings and bunkers provide a glimpse of World War II. The two alternatives that involve the use of land around Saipan’s airport will change this aspect and initial experience.

-K9

K11- We will lose green areas to paved tarmac and parked military aircraft. We will lose peace and quiet to jet noise from military training exercises. Tourists will also suffer delays and added air travel time and expense as a result of commercial flights having to accommodate regular military aircraft use of our airport and airspace.

-K10

-K12

The proposed activities will not only damage our historic assets, but they are contrary to the intent of Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The CNMI community is overwhelmingly ethnic minorities and the CNMI is a low-income community with one of the highest levels of poverty in the United States. The proposed activities will put an unfair burden on our community.

-K13

Because the proposed activities will damage our historic properties and otherwise have a negative impact on the tourist experience when tourism is our primary industry and our main source of self-generated income, the proposed activities should not move forward.

-K14

The Tinian lease area is incorrectly excluded from consideration.

The northern two-thirds of Tinian currently under lease to the DoD was excluded from consideration as a potential divert airfield location because it lacks “existing infrastructure.” This requirement of existing infrastructure is arbitrary. Infrastructure can be built by the USAF. Furthermore, use of the lease area for the divert airfield is an appropriate, productive use of the Tinian lease area. The area obviously has merit for use as an airfield since it includes the old World War II airfields. If the reason for the requirement of existing infrastructure is the cost of building such infrastructure, then it begs the question, “how important can the divert airport be for the USAF if it is not willing to pay the costs of renovating and providing infrastructure?” If it is not important enough to spend the money, then asking the CNMI to give up land for the divert project seems unreasonable. It is essentially asking the CNMI government to subsidize a USAF project that is not important enough for the USAF to spend its own, far greater financial resources on.

-K15

-K16

-K17

PaganWatch
PMB 326, Box 10001
Saipan, MP 96950

Guardians of Gani
P.O. Box 500370
Saipan, MP 96950

Fanacho Marianas
P.O. Box 180
Tinian, MP 96952

MINA
P.O. Box 506645
Saipan, MP 96950

Oceania Resistance
144 Aspinal Avenue, Suite 201
Hagåtña, GU 96910

UNIA
P.O. Box 502914
Saipan, MP 96950

Alternative sites outside the CNMI are arbitrarily excluded.

The revised draft EIS states that a divert airfield is needed "...in the event of a disruption of operational capabilities at Andersen AFB or other western Pacific locations." This implies that there are other airfields in other western Pacific locations. The EIS needs to list all other Pacific locations, including non-USA locations and explain why each cannot meet the need. The EIS should also consider new alternative airfields that could potentially be built on foreign soil.

-K18
-K19

The USAF's justification for the Divert Activities and Exercises project is not compelling as most of the needs cited are already met. The project appears to be a desired but unnecessary expansion of existing capability.

-K20

- Emergency response justification should be removed entirely. FAA Airport Sponsor Assurance C. 27 already authorizes the use of any of the CNMI's commercial airports in an emergency.
- Divert landings already occur at A.B. Won Pat International Airport, Guam; Saipan International Airport, and Rota International Airport.
- Currently, planned joint military exercises occur within the MIRC and Mariana Islands using Andersen AFB and the surrounding airspace and range area. It is unclear why it is necessary to also provide support from Saipan or Tinian.
- Humanitarian airlift staging can already occur at Andersen AFB or A.B. Won Pat International Airport, Guam. FAA Airport Sponsor Assurance C. 27, allows for use of Saipan International Airport and Tinian International Airport as well.
- The DoD has 30 million acres that it currently uses for training purposes*. It is difficult to imagine that they need to take additional land from the CNMI to meet its training land needs. The CNMI only has 177 square miles of land. Of this, the US Military already controls 30.4 square miles. This is in addition to the 1/3 of Guam's entire landmass that is under military control.

-K21
-K22
-K23
-K24

The CNMI is a poor choice of location for staging a humanitarian aid effort.

While the need to support emergency humanitarian efforts is cited as justification for establishing a divert airfield in the CNMI, the CNMI has few local resources to support any significant emergency humanitarian aid effort. Guam, where there are far more of the materials, supplies and resources required and on hand for such an effort, is a far better choice. The CNMI can offer only limited support and, in fact, Rota, Tinian and Saipan airports are already available for humanitarian assistance via FAA Airport Sponsor Assurance C. 27.

-K25

Furthermore, the CNMI government is highly unlikely to deny use over the limits of C. 27 in a true emergency.]-K26

Sincerely,

Peter J. Perez

Peter J. Perez
Co-founder, PaganWatch
Member, Alternative Zero Coalition

Cinta M. Kaipat

Cinta M. Kaipat
Co-founder, PaganWatch
Member, Alternative Zero Coalition

*source: <https://www.serdp-estcp.org/Program-Areas/Resource-Conservation-and-Climate-Change/Natural-Resources>

PaganWatch
PMB 326, Box 10001
Saipan, MP 96950

Guardians of Gani
P.O. Box 500370
Saipan, MP 96950

Fanacho Marianas
P.O. Box 180
Tinian, MP 96952

MINA
P.O. Box 506645
Saipan, MP 96950

Oceania Resistance
144 Aspinal Avenue, Suite 201
Hagåtña, GU 96910

UNIA
P.O. Box 502914
Saipan, MP 96950



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Pacific Islands Regional Office
1845 Wasp Blvd., Bldg 176
Honolulu, Hawaii 96818
(808) 725-5000 • Fax: (808) 725-5215

Mark K. Petersen, P.E.
AFIMSC Det 2/CEB (PACDET)
25 E Street, Suite C-310
Joint Base Pearl Harbor-Hickam, HI 96853-5427
Attn: PACAF Divert Marianas EIS

November 24, 2015

Dear Mr. Petersen,

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) Pacific Islands Regional Office, Habitat Conservation Division (PIRO HCD) has reviewed the October 2015 "Revised Draft Environmental Impact Statement (RDEIS) for Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands" prepared for United States Air Force, Headquarters, Pacific Air Forces (USAF). We offer the following comments in accordance with the Essential Fish Habitat (EFH) provision of the Magnuson-Stevens Fishery Conservation and Management Act (MSA 50 C.F.R § 600.905 – 930), the National Environmental Policy Act (NEPA 42 U.S.C 4321 et seq.), the Fish and Wildlife Coordination Act (FWCA 16 U.S.C § 662(a)), the Coral Reef Executive Order 13089, and the Clean Water Act (CWA 33 U.S.C. § 1251 et seq.). Due to the many project level changes in the RDEIS, comments provided here supersede those provided by NMFS during the 2012 DEIS comment period.]-L1

The purpose of the proposed action is to assure that a divert airfield location to Andersen Air Force Base (AAFB) exists and can support operational divert requirements, joint military training and exercises, and humanitarian relief operations within a reasonable distance to AAFB and the Philippine Sea. The proposed action includes development and enhancement of an existing civilian airfield in the Commonwealth of the Northern Mariana Islands (CNMI), specifically on Saipan or Tinian, to support one aircraft squadron and its support personnel for periodic exercises and humanitarian assistance. The proposed action would improve the existing airfields on either



one or both islands to accommodate an estimated 720 military aircraft take-offs and landings per year and the facilities needed to park, fuel and maintain those aircraft.

When compared to the June 2012 DEIS, the 2015 RDEIS proposes: 1) a marked reduction in proposed take-offs and landings from 1,920 to 720 per year; and 2) omission of a runway extension, navigational aids, an aircraft hangar, munitions storage facilities, an arm/disarm pad, tent billeting (lodging) or fighter aircraft operations.

The USAF is considering three alternatives for the Proposed Action:

Modified Saipan Alternative: Saipan International Airport

Modified Tinian Alternative: Tinian International Airport

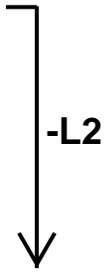
Hybrid Modified Alternative: Saipan and Tinian International Airports

The Modified Saipan Alternative would include the development of: a maintenance facility, jet fuel receiving, storage and distribution system with 4.2 million gallons of fuel contained in two 50,000 barrel (bbl) capacity tanks, a 250,470 square feet (ft²) cement cargo pad and a 502,682 ft² cement parking apron and a total increase in impervious surface of 1,245,382 ft². Fuel will be transported in vessels to the seaport and from the seaport to the airport facility in trucks where it will take six fuel trucks (10,000 gallons each) 14 days working approximately 10 hours per day initially to fill the fuel storage tank at the airport.

The Modified Tinian Alternative consists of three different options where construction activities would occur either on the North only, the South only, or both the North and South portions of the airport. The Tinian options would require construction of similar facilities to those needed for Saipan but with much more infrastructure required including an increase in impervious surface by a total of 4,483,194 ft² for the North Option and 2,832,615 ft² for the South Option. This would require more than 10,000 cement truck trips per year over 3 years to complete the North and South Option, which is a good indicator for the scale of the project.

The Hybrid Modified Alternative would split development between Saipan and Tinian resulting in a smaller overall impervious footprint on each island. Saipan's footprint would drop to 388,557 ft², Tinian North would drop to 3,569,972 ft² and Tinian South would drop to 1,935,772 ft².

Although the RDEIS did not propose a preferred alternative, the USAF stated at the November 4, 2015, public meeting on Saipan that \$29.3 million dollars appropriated by Congress for this project in 2014 is only authorized for improvements on Saipan. The CNMI Delegate has been unable to get the funding expanded to cover Tinian. The fact that these funds remain unavailable for Tinian suggests that the preferred alternative needs to include improvements on Saipan, limiting the options to either the Modified Saipan or Hybrid Modified Alternatives (Saipan



Tribune, November 5th 2015). If funding availability is important for defining the preferred alternative, then we recommend this item be more clearly explained in the FEIS.

-L2

The Magnuson-Stevens Fishery Conservation and Management Act (16 USC § 1855(b)(2)) requires federal agencies to consult with NMFS on “any action authorized, funded, or undertaken, or proposed to be authorized, funded or undertaken, by such agency that may adversely affect any essential fish habitat identified under the Act.” All three alternatives are located within the coastal zone, within close proximity to nearshore marine resources, including Essential Fish Habitat (EFH) and support various life stages for the management unit species (MUS) identified under the Western Pacific Regional Fishery Management Council’s Pelagic and Marianas Fishery Ecosystem Plans (FEPs). The MUS and life stages specifically include: eggs, larvae, juveniles and adults of Coral Reef Ecosystem MUS (CRE-MUS), Bottomfish MUS (BMUS), Crustacean MUS (CMUS) and juveniles and adults of Pelagic MUS (MPMUS).

-L3

The high volume of fuel being transferred and stored on site, the potential inadequacy of harbor infrastructure on Tinian, and scale of the proposed construction activities all create clear threats to EFH. The USAF has determined that no impacts will occur to EFH provided all federal and CNMI regulations are followed when developing and implementing best management practices (BMPs) for stormwater and land-based runoff. However, NMFS highlights three issues that may adversely affect EFH unless additional measures are taken:

1. *Stormwater:* The increase in impermeable surfaces associated with this proposed action could lead to EFH impacts due to stormwater discharges. Non-point source pollution is a significant contributor to coral reef degradation in the Mariana Islands and should be considered in the development of the proposed alternatives. The USAF should use stormwater BMPs during both construction and operation phases of the proposed action, and incorporate stormwater controls into infrastructure designs as outlined in the RDEIS. The BMPs are intended to ensure that no increase in volume of stormwater discharge or degradation of coastal water quality results from this project. It is often overlooked that increases in freshwater discharges are considered pollutants that are known to negatively impact coral reefs. We strongly recommend the USAF develop and implement a monitoring program that: 1) adequately assesses baseline conditions, post-construction flow, and sediment transport; and 2) confirms the effectiveness of catchment and retention measures for prevention of increased stormwater volume and any contaminants (particulates or chemical pollutants) onto the reef. Local and federal partners, including NOAA, should be included on correspondence related to pertinent findings and updates from this ongoing monitoring effort. NOAA is available to provide technical assistance as needed.

-L4

2. *Spill control:* A failure of the Saipan Airport ramp hydrant system in 2000 resulted in the release of 7,000 gallons of aviation fuel that is reported to have moved extremely quickly

-L5

through the karst topography near the airport and into nearshore waters at Ladder Beach. Given the volume of fuel proposed for storage both on Saipan and Tinian additional redundancies should be developed to both prevent and capture fuel in the event of a leak or spill resulting from a failure within the system. To address this concern, we recommend the USAF perform a fate and transport of pollutants study to better understand and manage for future spill impacts from the storage tanks and during surface pumping activities. Findings from this study should then be used to develop a monitoring program for groundwater and nearshore waters that are likely to be impacted by spill events. This study should be included in the FEIS and updates from ongoing monitoring efforts should be shared with all local and federal partners, including NOAA who can be also provide technical assistance as needed.

-L5

3. *Tinian Harbor*: During the scoping meetings for this project it was noted that significant harbor improvements may be required to support the development, enhancement, and operations of a divert airfield location. The RDEIS backs away from this need and states the following:

Therefore, Tinian has a limited capability to accept fuel shipments at the port. Although not ideal, Tinian meets the requirements of this selection standard to a limited extent as multiple ship off-loads would be required unless improvements to the harbor were made permitting larger vessels to safely transit into the harbor. (2.3.2.3 – line 28)

Ships currently supplying the Tinian harbor are not fully loaded and have extra fuel capacity available. Therefore, no new trips would be needed to accommodate the additional fuel; as such, shipping would not increase in Tinian harbor beyond historic levels under this alternative and no impacts on sea turtles would be expected. (4.7.1.2 – line 23 and others)

-L6

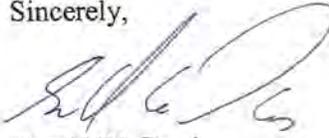
These paragraphs seem to contradict the information shared at the scoping meetings, and they seem to contradict each other. In one you state that “Tinian has limited capability to accept fuel shipments at the port” creating operational challenges and in the next you say that “no new trips would be needed to accommodate the additional fuel”. A feasibility study should be performed and presented here detailing the shipping requirements that will be created for both construction and fuel supplies for this project, the current capability at Tinian harbor and limitations that may emerge resulting from the cumulative usage of this harbor created by the CNMI Joint Military Training and other pending Department of Defense actions. The findings from this study should then be shared within the FEIS.

NMFS PIRO recommends the USAF, complete EFH consultation prior to the completion of the NEPA process and coordinate ESA consultation with PIRO Protected Resources Division as early as possible prior to project implementations.

-L3

Thank you for the opportunity to comment on this proposed action. Should you have any questions, please contact Steve McKagan at the CNMI Field Office steven.mckagan@noaa.gov or 670-234-0004.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. W. Davis', written in a cursive style.

Gerald W. Davis
Assistant Regional Administrator
Habitat Conservation Division



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, CA 94104

IN REPLY REFER:
(ER 15/0578)

Filed Electronically

09 December 2015

Capt. Kimberly Bender
PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853

ATTN: PACAF Divert Marianas EIS

Subject: Department of Defense (DOD), Review of the Revised Draft Environmental Impact Statement (DEIS) for U.S. Air Force Divert Activities Guam and Commonwealth of the Northern Mariana Islands

Dear Captain Kimberly Bender,

Thank you for the opportunity to review and comment on the Department of Defense, Review of the Revised Draft Environmental Impact Statement (DEIS) for U.S. Air Force Divert Activities Guam and Commonwealth of the Northern Mariana Islands.

National Park Services (NPS) Comments

The National Park Service (NPS) manages two park units in the Marianas: War in the Pacific National Historical Park on Guam, which honors the bravery and sacrifices of all those who participated in the Pacific Theater of World War II; and American Memorial Park on Saipan, which honors the American and Marianas people who gave their lives during the Marianas Campaign of World War II. In addition to their cultural and historic significance, these sites preserve the most diverse coral reef system within the National Park System, habitat for threatened sea turtles, and the only federally managed wetland on Saipan.

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The NPS also represents the Secretary of the Interior for the National Natural Landmarks (NHL) program, and is charged by the Secretary with the administration of the Historic Preservation Fund Grants program in Micronesia.

-M1

For a more complete explanation of the NPS mission and responsibilities in the Marianas, please refer to our comments dated February 20, 2012, concerning ER-09/1197: Guam and Commonwealth of the Northern Mariana Islands Military Relocation.

The Divert alternatives located on Saipan would have direct impacts to the cultural resources that contribute to the Aslito/Isley Field NHL. The Divert alternatives located on Tinian also would have direct negative effects to the historic property at the former West Field, which is a site eligible for inclusion on the National Register of Historic Places (Dixon et al. 2014). As all alternatives are located within somewhat developed areas of current airports and at active ports, NPS is concerned primarily with the impact to cultural and historic resources.

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Section 110(f) of the National Historic Preservation Act (NHPA) requires that the agency official, to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to any National Historic Landmark that may be directly and adversely affected by an undertaking. Alternatives that avoid or minimize the impact to the maximum extent possible would be in accordance with this statute. While these comments are part of the NEPA consultation, choosing an alternative that avoids impacts to the Isley/Aslito NHL would meet this requirement. The negative impact to cultural resources and diminishment of public access and enjoyment of these resources would be significantly greater for either alternative that includes Saipan.

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For alternatives proposed at Saipan airport, project plans indicate the airport apron to be constructed immediately adjacent to multiple standing structures and identified previously-recorded historic sites associated with the former Aslito/Isley Field. While cutouts on the apron design are meant to mitigate impact to the present structures (historic buildings) to some degree, the new apron and associated activities still will negatively affect these historic resources. These impacts include physical damage to part of the NHL, alteration not consistent with the Secretary of the Interior Standards, change of physical features within the NHL's setting and introduction of visual, atmospheric, and audible elements that negatively impact the NHL.

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Additionally, the start-up, idling, take off, landing, and taxiing of large aircraft to and from the apron will directly impact the experience of all visitors present. Visitation to these sites outside the airport fence currently is not controlled and is open to visitation at any time. The proposed apron lies, in part, directly on what appear to be a set of historic hardstands that are still visible above the ground, that were evident during the site visit earlier this month. The proposed fuel line path traverses what appears to be both previously-recorded historic sites, and additional

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remains of hardstands, and are planned to be immediately adjacent to at least two existing historic structures (buildings). The proposed maintenance building lies on what appears to be remains of an historic taxiway and hardstand. These described effects when taken as a whole will negatively affect the historic character, integrity and experience of the NHL.

-M5

For proposals at Tinian airport, project alternatives indicate project construction on either the north, or south side of the runway. Historic maps and photos of the former West Field, which is now part of the Tinian airport show that there would be direct effects to the taxiways, hardstands, and historic service roads from both proposals on the north or south side of the runway. The information provided by the Air Force for the Tinian areas selected for the proposed undertaking show no remaining historic structures such as buildings, in contrast to the multiple buildings present directly adjacent to the proposed project location on Saipan.

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It does not appear that these actions will significantly impact visitors to adjacent cultural sites. Additionally, tourism, which is the driver of the economy in the CNMI, would be negatively affected especially by the Saipan alternatives. As part of the mitigation, an interpretive plan and funding for signage displays, printed and digital media that share the history and importance of the site should be completed and maintained for whichever alternative is selected.

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There is an additional military project proposed for Tinian, the Navy's CJMT. This project proposes facilities similar in construction and operation to those in the PACAF Divert proposal. To minimize the impact to cultural (historic) resources, choosing the Tinian-only alternative appears to minimize overall impact to cultural resources by avoiding negative impacts to the Isley/Aslito NHL.

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NPS recommends close coordination between USAF and Navy to minimize impacts.

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During construction activities at either location, it is likely that significant archaeological items will be encountered. The NPS recommends development of a robust archaeological monitoring and recovery plan that meets all current federal standards.

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The NPS also recommends that PACAF return all archaeological items to the CNMI Historic Preservation Office when they have established a compliant curatorial facility and that PACAF consider funding the long-term care and storage of these items as a mitigation to the undertaking.

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We look forward to continued participation in the consultation for DIVERT. If you have any questions about our comments, please contact Jim Richardson, Superintendent, War in the Pacific National Historical Park, at 671-477-7278, extension 1003.

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Office of Insular Affairs (OIA) Comments

The Office of Insular Affairs (OIA) is responsible for coordinating overall federal policy in the U.S. territories of Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands (CNMI), and for overseeing financial assistance for the freely associated states of the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau.

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OIA’s mission is to promote government efficiency, foster economic opportunities, and improve the quality of life of the people in the U.S. territories and freely associated states. Critical to OIA’s responsibility is ensuring that the underlying federal-civilian relationship with these areas are strengthened and remain effective.

We commend the United States Air Force (USAF) for the collaborative effort it has engaged in with the CNMI people and its leadership since issuing the initial Divert Draft Environmental Impact Statement (Divert DEIS) in June 2012, and appreciate that the scale of the USA footprint has been greatly reduced in response to the public comments process.

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Given the continuing opposition from the Commonwealth Port Authority and CNMI political leaders for the modified Divert on Saipan and the modified Divert Hybrid on Saipan/Tinian, OIA recommends that high consideration be given to the modified Divert on Tinian as it has broad-based support from the CNMI.

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Self-Determination

OIA believes that the USAF cannot look at the Divert RDEIS in isolation from the issue of self-determination for the people and leaders of the CNMI. This includes the right to determine what form of federal activities should occur in the CNMI on CNMI lands, the right to determine which economic activities it wants to drive its economy, and the right to determine the disposition of their land and natural resources. The right to self-determination becomes even more important considering the limited land size of the islands that comprise the CNMI; Saipan is only 44 square miles and Tinian is only 39 square miles.

-M16

Significant opposition to using the Francisco C. Ada Saipan International Airport has been previously expressed by CNMI leaders upon the initial Divert DEIS release in 2012 with many leaders and the public expressing concern about the effort being located on Saipan. The overwhelming preference is to have the Divert located on Tinian. CNMI Governor Eloy Inos officially followed up with a letter to USAF Secretary Eric Fanning, on August 9, 2013, affirming his preference, and the preference of all four CNMI mayors (Saipan, Tinian, Rota, and the Northern Islands), and the CNMI Legislature that the Divert be built only on Tinian.

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Governor Inos also reiterated his support for the Divert on Tinian and opposition to the Divert on Saipan on September 14, 2014, to U.S. Senate Armed Services Committee leadership during consideration of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2015, given that the NDAA for FY 2014 only authorized funding for the USAF to conduct a DEIS process for the Divert on Saipan.

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The Commonwealth Ports Authority (CPA), the governing body of both international airports and seaports on Tinian and Saipan, sent a letter to the USAF in December 2013, informing it of the CPA's unanimous vote in favor of locating the Divert on Tinian. Subsequently, on August 28, 2014, the CPA passed a resolution stating that it would only support and enter into an agreement with the USAF if the location of the Divert were located on Tinian and that the Authority would not support nor submit an Airport Layout Plan (ALP) for the Divert to be located at Saipan International Airport. On November 25, 2015, the CPA Board affirmed support for the modified Divert on Tinian, and its opposition to the modified Divert on Saipan and the modified Divert hybrid on Saipan/Tinian.

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OIA is expecting that all of the CNMI's political leaders will support the position of the CPA. The Nineteenth CNMI Legislature already passed H.J.R. 19-2 in the House of Representatives on May 22, 2015, and the Senate on July 23, 2015. The resolution supports the position of the CPA and the expansion of the USAF Divert on the island of Tinian alone and does not support the implementation of any portion of the Divert initiative on Saipan.

-M20

OIA recommends that the USAF take into account the right to self-determination of the people and leaders of the CNMI and their strong preference for the location of Tinian only during the Divert RDEIS process. A lack of serious consideration for the people's views could jeopardize the federal-civilian relationship with the CNMI.

-M21

Section 902 Consultations

For the USAF, other DOD officials, and other federal officials, it is important to note the serious concerns that CNMI leaders have with both the Divert RDEIS process and the Draft Environmental Impact Statement/Overseas Environmental Impact Statement, Department of the Defense, Department of the Navy, Commonwealth of the Northern Mariana Islands Joint Military Training (CJMT DEIS) process, and their desire to discuss both projects and any future military activities within the context of Section 902 Covenant Consultations.

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Section 902 of Article IX of the Covenant to Establish the Commonwealth of the Northern Mariana Islands (CNMI) in Political Union with the United States of America (the Covenant), the federal law that governs U.S.-CNMI relations, provides that the United States and the Government of the CNMI "will consult regularly on all matters affecting the relationship

between them. At the request of either Government, and not less frequently than every ten years, the President of the United States and the Governor of the Northern Mariana Islands will designate special representatives to meet and consider in good faith such issues affecting the relationship between the Northern Mariana Islands and the United States as may be designated by either Government and to make a report and recommendations with respect thereto.”

On October 2, 2015, CNMI Governor Inos sent a letter to President Barack Obama requesting initiation of Section 902 Consultations pursuant to the Covenant. Governor Inos requested that the President appoint a special representative to discuss the expiration of the CNMI-Only Transitional Worker program in 2019 and the Department of the Defense’s (DOD) proposed military activities (CJMT DEIS and Divert RDEIS) within the CNMI.

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Earlier this year, the Nineteenth CNMI Legislature passed another resolution, H.J.R. 19-5, in the House of Representatives on May 22, 2015, and the Senate on July 23, 2015. The resolution requests that the Covenant Section 902 process be utilized by the President of the United States as the sole forum for discussion, consultation, and negotiation to address the United States’ desire to acquire any interest in real property not already given under the Covenant.

OIA is currently working with the White House in response to Governor Inos’ request for Section 902 Consultations.

Potential Impacts to the CNMI’s Economy

As discussed in our comments on the CJMT DEIS, DOD’s actions in that process as well as the Divert RDEIS should be considered in the context of the stability of the CNMI’s overall economy, which stands to be adversely impacted by current federal law (P.L. 113-235) at the end of 2019. The law will zero out the number of CW-1 foreign workers allowed in the CNMI as part of its labor workforce. Based on current estimates, the CNMI Governor projects that over 10,000 foreign workers will be needed to meet the projected demands of the private sector to keep up with its tourism and construction industries.

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In short, failure of DOD to take into account other federal activities related to the CNMI’s economy may impact its long-term strategic objectives. OIA is currently working with the U.S. Department of Homeland Security on implementing rules for the phase-out of foreign workers, but remains concerned that the U.S. Department of Labor Secretary no longer has the discretion to extend the number of foreign workers in the CNMI beyond December 31, 2019.

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While the primary concern for the CNMI government and the private sector for the economy is the looming 2019 deadline to phase out foreign workers as part of its labor workforce, OIA is also concerned that locating the Divert on Saipan or Saipan/Tinian may create future harm for the CNMI economy.

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From 2002 to 2012, the CNMI economy suffered a 52.7 percent drop in its gross domestic product (GDP). This unprecedented loss in economic activity was a result of the loss of its garment industry coupled with a downturn in tourism. The CNMI has undertaken great strides to rebuild its economy by focusing on expanding its tourism industry. As a result of this concerted effort, the GDP rose 2.1 percent in 2012 and 4.4 percent in 2013. OIA is concerned several actions contemplated within the Divert RDEIS, especially locating the Divert on Saipan, and actions proposed in the CJMT DEIS, may harm the tourism industry and in turn the CNMI economy.

-M26

Hotel Development and Tourism – Tourism continues to be the top economic driver in the CNMI and continues to thrive with sustained growth in tourism arrivals, construction of new hotels and casino operations in Saipan. Hotel occupancy rates have increased from an average of 60 percent in 2011 to between 84 percent and 94 percent during the same time period in 2015. The CNMI, in light of this demand, is actively working to increase the number of rooms available for tourists. Between now and 2020, seven hotels on Saipan and two hotels on Tinian are or will be under development. Current room availability is 3520 rooms. By 2020, 6096 rooms are expected to be added, bringing the total room availability to 9616 rooms, nearly tripling current hotel occupancy capacity.

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Potential Expansion of the Francisco C. Ada Saipan International Airport – The CNMI, through CPA, issued an Airport Master Plan in 2002. This plan is anticipated to be updated in 2016. The 2002 plan calls for expanding the passenger loading bridges by procuring and insulating three new bridges. CPA will also be making improvements to the commuter terminal and is considering expanding the terminal to accommodate additional airlines. Therefore, while the proposed footprint of the Divert on Saipan is significantly less than what was proposed in 2012, it could still hinder commercial development opportunities in the future.

-M28

Coordination with OIA Funded Projects

To implement the mission of OIA, one of OIA's primary functions is to provide financial assistance to the U.S. territories, including the CNMI. In the last ten years, OIA has contributed over \$150 million in grants to the CNMI. OIA provides grants to the CNMI in the form of Capital Improvement Project grants, Technical Assistance grants, Maintenance Assistance grants, Coral Reef grants, Brown Tree Snake grants, Compact Impact Aid, and Empowering Insular Community grants.

-M29

Improvements to the Tinian Airport – Both the Divert RDEIS and the CJMTDEIS contemplate a significant improvements to the Tinian Airport facility. OIA, however, has already funded \$2.9 million for renovation of existing terminal and for construction of a new departure terminal at the

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Tinian International Airport. Neither the Divert RDEIS nor the CJMTDEIS addresses the potential impact to these improvements.

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Rehabilitation Assessment of the Tinian Harbor – OIA awarded a \$1.1 million Capital Improvement Project grant to the CNMI in FY2013 for a rehabilitation assessment of the Tinian Harbor. The assessment is to consider the harbor’s post-World War II conditions of existing finger piers, connecting dock, north quay and channel /turning basin depths. The project consists of topographic and hydrographic surveys, geotechnical explorations, an environmental assessment, rehabilitation plan and architectural and engineering design.

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The requirements of this project could drastically change as a result of both the Divert RDEIS and the CJMT DEIS. OIA is unaware of any collaboration taking place on how the DOD-proposed improvements fit with work the CNMI is currently conducting. We urge DOD to address this issue in both the Divert RDEIS and the CJMT DEIS and to work closely with the CNMI on this project.

OIA and the CNMI are concerned about the existing condition of the breakwater at the harbor. Repairs to the breakwater will need to be made in the foreseeable future, especially if there is increased activity at the harbor. The estimated rough order of magnitude (ROM) costs for the rebuilding of the existing breakwater is \$82.5 million. With an extension of 300 feet, ROM costs would be \$135.9 million. These estimates only cover construction costs. There is no mention of any improvements being considered by DOD in either the Divert RDEIS or the CJMT DEIS to the existing breakwater. OIA urges DOD to consider helping the CNMI in any improvements to the breakwater.

-M32

Brown Tree Snake Program (BTS) – OIA has provided \$3.5 million in FY2014 and plans to provide the same amount for FY 2015 for the interdiction and control, including suppression and eradication, of the highly invasive Brown Tree Snake. Of that amount, approximately \$470,000 are provided to the CNMI.

The Brown Tree Snake is responsible for the extinction or local extirpation of native forest birds and lizards on Guam. Numerous opportunities exist, especially with the increase in military presence and traffic in the CNMI, for this invasive species to be inadvertently introduced in the CNMI. The emergency response teams funded through the BTS program have documented sightings of the Brown Tree Snake in the CNMI, Hawaii, and other areas. A live Brown Tree Snake was found in a trap on the fence line surrounding the Rota Seaport as recently as September 2014. There is grave concern about introduction of the Brown Tree Snake in the CNMI should the USAF not provide adequate safeguards or assistance to the CNMI Brown Tree Snake Program.

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We are pleased with the information set forth in the Biological Plan on how the USAF intends to address invasive species. We cannot reiterate enough the importance of its proper implementation to the overall ecology, economy, and livelihood of the people of the CNMI.

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Summary

OIA commends the USAF on its collaborative efforts with the CNMI people and its leadership since issuing the initial Divert DEIS in 2012 and appreciates that the USAF's footprint has been greatly reduced in response to CNMI leaders and public concerns.

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OIA is expecting that all of the CNMI's political leaders will support the position of the Commonwealth Port Authority in its support for the modified Divert on Tinian, and its opposition to the modified Divert on Saipan and the modified Divert hybrid on Saipan/Tinian. OIA recommends that high consideration be given to the modified Divert on Tinian by the USAF in its decision-making process as it reflects the views of CNMI leaders.

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Due to continuing concerns about DOD's proposed military activities with the Divert RDEIS and CJMT DEIS, CNMI Governor Inos has requested 902 Covenant Consultation with President Obama to discuss DOD's proposed military activities in the CNMI. OIA is working with the White House in response to the Governor's letter.

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OIA continues to have concerns about the impact of the Divert RDEIS on the CNMI economy, particularly on Saipan, which is the major hub for the CNMI's projected hotel development and tourism industry.

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OIA encourages the USAF to look at current and ongoing OIA- or CNMI-funded projects to ensure that future impacts of military activities to such projects, including the airports, harbor, and environmental resources are considered.

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Similar to our comments on the CJMT DEIS, OIA reiterates its position that the USAF should take into account the right to self-determination of the people and leaders of the CNMI during the Divert RDEIS process. Failing to do so could jeopardize the federal-civilian relationship with the CNMI and our standing in the Western Pacific region.

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Thank you for the opportunity to review this project.]-M39

Sincerely,

A handwritten signature in black ink that reads "Patricia Sanderson Port". The signature is written in a cursive style with a large initial "P" and a long, sweeping underline.

Patricia Sanderson Port

Regional Environmental Officer

cc: OEPC Staff Contact: Lisa Treichel, Lisa.Treichel@ios.doi.gov
OIA Staff Contact: Wendy Fink, wendy_r_fink@ios.doi.gov
NPS Staff Contact: Richard James, jim_richardson@nps.gov



COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

Eloy S. Inos
Governor

Ralph DLG. Torres
Lieutenant Governor

December 11, 2015

HQ PACAF/PA
25 E Street, 39 Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853

Re: Comments on Revised Draft Environmental Impact Statement (DEIS) for Divert
Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI)

Dear Sir or Madam:

This letter provides the comments of the Office of the Governor and the Lieutenant Governor on
the Revised Draft Environmental Impact Statement (DEIS) for Divert Activities and Exercises,
Commonwealth of the Northern Mariana Islands (CNMI) (the "DIVERT" or "Project").

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As is evident from recent geopolitical developments and because of the Commonwealth of the
Northern Mariana Islands' strategic location in the Western Pacific, the United States military's
desire or interest in this region of the world as a location for redundant Air Force basing
opportunities and other military training activities is particularly strong at the present moment.

However, this progression or development is something that was foreseen to the Trust Territory
of the Pacific Islands representatives (the founding officials of the CNMI government) and their
United States counterparts who negotiated the Covenant to Establish a Commonwealth of the
Northern Mariana Islands in Political Union with the United States of America nearly forty years
ago.

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In anticipation of this exact turn of events, the CNMI Government entered into the Covenant
Agreement providing two-thirds of the island of Tinian and the entire island Farallon de
Medinilla (FDM) to the United States for military defense related training and joint service air
base activity purposes. Legal papers (the Covenant, the Technical Agreement Regarding Use of
Land to be Leased by the United States in the Northern Mariana Islands and the land leases and
additional amendments) were enacted to embody this agreement.

Specifically, Section Eight of the Covenant is devoted almost entirely to the United States' right
to use property in the Northern Mariana Islands for defense related purposes. To counter any
intentions or need to acquire additional real property in the CNMI, the United States agreed to
"respect the scarcity and special importance of land in the Northern Mariana Islands" in future
developments and put in place a policy limiting eminent domain powers.

Arrow pointing down from -N2

The agreement to restrict military activities to FDM and Tinian is contained not only in the Covenant, but in additional legal documents such as the Technical Agreement and the subsequent real property leases. Under the Technical Agreement, Tinian was ultimately going to benefit (for leasing two-thirds of the island to the United States for 100 years) through the establishment of a joint service air base on that island and as a result of infrastructural improvements that were going to take place.

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The CNMI has acted in accordance with its end of the agreement. The United States has not and the Divert Project now threatens to undue the touch-stone agreement upon which the people of the Northern Mariana Islands agreed to join the American family of states.

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In two of three alternatives presented in the revised DEIS, the military will be required to obtain additional public property on the island of Saipan -- that was never intended to be used for defense related purposes and which is located within our international airport. The island of Tinian will not receive the full benefits contemplated in the controlling legal documents if the Divert Project or some part of the Project is located on Saipan. The Revised DEIS' complete failure to account for improvements needed on Tinian to accomplish the Divert Project's stated mission, such as upgrades to the existing harbor and fire protection and crash rescue services, is extremely problematic.

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Accordingly, the military's desire to acquire property rights on Saipan via the NEPA process is, in the CNMI's opinion, in conflict with the specific agreements contained in the Covenant, the Technical Agreement, the subsequent real property leases and the underlying spirit of the agreement by which the Northern Mariana Islands entered into a Covenant Agreement with the United States.

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Further, the same public property on Saipan wanted by the military is also the same public property identified by the CNMI's port authority for future growth and commercial development at the Saipan International Airport. Competing interests to use the same property by different parties is heightened and a constant fact of life in our islands given the incredibly small total landmass of the entire CNMI. The Air Forces' effort to deconflict the competing use problem and to design the facility it wants to build on Saipan in such a way as to allow future development misses the larger, more significant point.

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The CNMI has a good faith basis to expect that the Divert Project should be located entirely on the island of Tinian and despite our repeated efforts to dissuade the military from including Saipan in its plan; the Revised DEIS continues to do so. The military's desire to locate the Divert Project on Saipan places the CNMI in an awkward and uncomfortable position of appearing to oppose or obstruct the United States' defense related responsibilities in the NMI. This is not true.

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Under the Divert Project's Modified Tinian Alternative, the United States will be required – just like on the island of Saipan – to obtain property rights through a lease agreement to build its desired divert airport facility and training location. The CNMI has repeatedly expressed its

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willingness to immediately begin negotiations to lease to the military the additional CNMI property necessary for this Project to move forward on Tinian.

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This proposal however continues to be discounted by the military because of monetary costs and timing reasons and so today the CNMI must once again re-assert its limited sovereignty and determination that defense related activities should be located on Tinian as explicitly intended and set out in the Covenant, the Technical Agreement and the real property leases.

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Accordingly, I must respectfully insist that the military withdraw Alternative 1 (the Modified Saipan Alternative) and Alternative 3 (the Hybrid Modified Alternative) which would require the CNMI to lease property to the United States on the island of Saipan. The CNMI will do everything possible to ensure the timing to create the divert field capacity (and costs involved) with the Modified Tinian Alternative are resolved as expeditiously and efficiently as possible. In sum, the CNMI as a proud member of the American family fully intends to comply with the promises set out in the controlling legal documents.

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We welcome the opportunity to contribute to the common good and to ensure the military is able to carry out all its important missions in the Western Pacific from the location identified almost forty years ago as the setting from which defense related activities should be based.

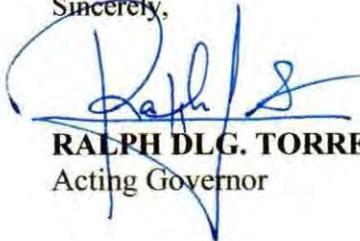
-N11

As recognized and acknowledged in the Revised DEIS, West Field Airport can meet and satisfy all of the Divert Project's mission requirements. The CNMI therefore respectfully maintains that the Divert Activities and Exercises Project should be situated on the island of Tinian if the Air Force decides to go forward with this proposal.

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The CNMI is ready to work with the military towards that end.

Sincerely,



RALPH DLG. TORRES
Acting Governor



**MARIANAS
VISITORS AUTHORITY**

COMMENTS ON

**DRAFT ENVIRONMENTAL IMPACT STATEMENT
PACAF DIVERT ACTIVITIES and EXERCISES
for
COMMONWEALTH of the NORTHERN MARIANA
ISLANDS**

**Submitted on
on
December 14, 2015**



MARIANAS VISITORS AUTHORITY

P. O. Box 501233, Saipan, MP 96950

Tel: (670) 664-3200 | Fax: (670) 664-3237

Email: mva@mymarianas.com or ptenorio@mymarianas.com

Final Divert EIS Appendix G

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PROPOSED ACTION ANALYSIS

Overview

The Marianas Visitors Authority (MVA) has strong reservations about using any part of Saipan for a USAF 'divert' airfield. There are a number of specific reasons for this position which all center upon a degraded experience for our visitors and tourists. The MVA therefore strongly advises that the Modified Tinian Alternative be selected as the alternative to move this project forward.

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Noise pollution and the visual aspects of operating training activities on Saipan are one of MVA's chief concerns and while we have read the DEIS and its assurances that the noise issue has been lessened by dropping fighter jets from the list of allowable training mission planes, we note that military tankers, bombers, cargo planes and other "similar" aircraft will produce noise adding to the amounts created by their commercial counterparts. Reducing the number of proposed mission flights planned reduces the noise projects by two-thirds, but considered in another way will still result in increases of the total amount of noise presently expected. It should also be noted that jet and turbo prop aircraft operating STOL missions produce far more noise than normal length take offs and landings produce.

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We note further that the validity of the 'divert' capability premise itself is severely compromised by the short distance between Tinian or Saipan and Guam (a bit over 100 miles). It is noted that an event severe enough to render a hardened military or commercial airport runway unusable whether natural (earthquake) or manmade (bombing or missile attack) would in either case likely be strong enough to affect the 'divert' airfield as well if located in the southern CNMI. Even the strongest storms are extremely unlikely to do severe enough damage to close Andersen AFB to air traffic.

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More importantly however is the fact that Tinian actually needs development, improvement of facilities and the additional fuel storage, fueling logistics hardware and infrastructure, parking and cargo aprons, fire suppression hardware, maintenance facility, access road improvements and a taxiway all described in the DEIS. Saipan on the other hand, has all these amenities already and will not see any true benefit from granting the Air Force the ability to conduct training missions from the Aslito/Isley Field or from Saipan airport (SPN). Adding the same capability for part time military use on Saipan is redundant, uses a vital and limited real estate footprint and has the potential to cause inconvenience and delay to commercial traffic upon which the CNMI economy relies as its sole source of income.

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We also note that while the Tinian airport (TIQ) needs these amenities the budget act that supplies the money for this project only specifies funding for the SPN which does *not* need the listed amenities. We are therefore concerned that if one of the 'hybrid' alternatives is chosen, that it would in reality become a Saipan only alternative due to lack of appropriate funding to complete the Tinian component of the hybrid plan. This would in effect render the concept of a Tinian "potential shared use" as described in the DEIS, moot and non-functional. The ability of the Air Force to spend money identified to construct this Project must be revisited and changed to allow it to be spent in the CNMI.

-09

It is also noted that a shared-use fuel facility on Tinian would be of great help to Tinian tourism by adding infrastructure allowing for direct international flight operations to occur from the CNMI's primary tourism source countries. MVA would recommend that any future version of this EIS contain a direct reference to designed-in shared uses of fuel storage and fueling hardware rather than only offering an uncertain 'potential' for shared uses. Further, improvements are called for on Tinian under the Covenant and Technical Agreement.

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Another concern is the EIS 2.2.2.1 description of the 'divert' mission includes up to 30 days of continuous, unscheduled operations "until a more permanent home base is established". This would be a severe blow to the tourism based economy of the CNMI as these flights would supersede our commercial traffic on Saipan. As described in the REIS, these "Unscheduled" flight operations could and would occur at "any time" causing disruption and delay in commercial air traffic and possibly stranding visitors here on Saipan. This loss of critically limited hotel room inventory would be compounded by divert mission personnel competing for those same rooms. These losses would be of a lesser magnitude if the unscheduled divert missions were held on Tinian instead of Saipan.

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While humanitarian assistance operations are laudable and might be staged and flown out of the CNMI divert facility if one exists, we note that they will be flown as part of the USAF mandate and direct orders to do so dictate, whether a CNMI divert facility exists or not. We also note that these operations can involve a huge volume of relief material and personnel (as described in 2.2.2.2) which would totally overwhelm our infrastructure and accommodation capabilities.

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It is disturbing that Joint Military Training and Unit Level Training operations already underway in the CNMI's air and sea space via the MITT and the MIRC will likely be expanded and included in any divert facilities constructed in the CNMI. This diversion would be a more reasonable use if the Tinian only option is chosen but would negatively impinge on high volume tourism arrivals on Saipan if a hybrid or Saipan only option were chosen.

-O18

Since three types of operations are involved (divert, military exercises and humanitarian) and any combination can occur at any time whether scheduled or unscheduled, MVA finds that lodging requirements for personnel supporting these activities would be problematic given the limited room inventory resources available on both Tinian and on Saipan. At *current* levels of commercial use, Tinian could better handle this unscheduled room-use overload.

-O19

The Commonwealth of the Northern Marianas Islands (CNMI) has one economic driver: Tourism. It is the life blood of the economy and contributes 92% of the country's \$1.3 Billion GDP; the remaining 8% comes from US Department of Interior and Federal Grants amounting to \$100 Million annually on average. The Marianas Visitors Authority estimates that the industry in FY 2014 generated \$1.18 billion in economic activity and projects \$1.13 billion in activity for FY 2015. At present, only the lack of new hotel development and air service capacity has limited the growth opportunity for the industry.

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The CNMI's tourism assets are sub-tropical weather, friendly people and the natural beauty of 14 tiny islands. Tiny compared to the US Territory of Guam which has considerably more land area than all the islands of the CNMI combined. Tiny compared to Rhode Island; the smallest US State which is seven (7) times larger. Tiny compared to Edwards AFB which is more than twice as large as *all* the land in the CNMI.

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With visitor arrivals on an upswing and new developments in the works, the tourism industry will remain the Northern Marianas' primary industry and the driver of its economy. The CNMI Government and its people cannot afford to allow interference with the income tourism brings us. Without that income, the Government cannot provide essential services and the people cannot maintain a livable economic environment.

-O22

SITE OPTIONS AND SELECTION CRITERIA ANALYSIS



Selection Standards – It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:

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Criteria 1 – US Territory: A) The US has many training facilities and bases not located on US Territory, several of which are in the Asia/ Western Pacific region. One or more of these of these should be considered as an alternative divert airfield site. B) The US also has strong reciprocal military/ diplomatic allies in the Asia Pacific region any number of which could be considered as potential alternative sites for a divert field. C) A strong case can be made that the Covenant agreement does not make the CNMI a US Territory but conveys a unique and special political and geographic relationship.

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The US Government owns no part of the CNMI but was allowed to lease parts of the port area of Saipan, about two thirds of the Island of Tinian and all of the island of Farallon de Medinilla for a limited period of time in consideration of rents paid. The claim that the CNMI (along with Puerto Rico) “can also be classified as an unincorporated, organized territory of the US” is incorrect. Puerto Rico has no Covenant Agreement with the US and lacks the unique land-use policies in place and other self-governing protections that were negotiated and are a part of that Covenant Agreement between the CNMI and the US. This is an inappropriate criteria to base the decision of where to locate the Divert Project.

-O26

Criteria 2 – Storm Radius: A. Storm radius is an inappropriate criteria when choosing an alternative airfield to the hardened USAF base on Guam, USA. A typhoon, no matter how strong, will not damage the runways at Andersen AFB. The credible threats are 1. A massive earthquake, and 2. An external attack on Andersen by a foreign power. Respectively, either threat 1 or 2 pose an almost identical, simultaneous threat to either Saipan or Tinian as to Guam. This criteria, as defined, allows for Saipan and or Tinian uses but excludes Rota even though Rota actually has a less likely threat 2 scenario as it has no military presence. This is an inappropriate criteria to make the decision upon as well.

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Criteria 3 – Available Land at an existing airport: If the USAF’s desire is to locate a divert training base in the CNMI it can be done on the property already leased to the US Government, TSA style security arrangements notwithstanding (i.e. Tinian or FDM). Tinian is ideally suited for construction of a new runway at Tinian North Field or old West Field, either of which is within or adjacent to property already leased to the US. Using Tinian’s commercial airport and paying a stipend agreeable to CPA and making specific improvements to that civilian airport in return should be considered as the primary preference to constructing an all military field on property currently leased to the US DoD.

-O29

Criteria 4 – Pre-existing infrastructure: While certainly cheaper to use someone else’s existing facilities it is a potential safety and security compromise to house, train, exercise and store military aircraft, personnel and fuel stores at a civilian airport. It is easily within the ability of the USAF to build a military airport on old West Field Tinian. Fueling storage and infrastructure could be shared if these amenities were built between the two facilities. While TSA/CPB security is effective for civilian travel, it is not comparable to full military security. Moreover, monetary construction costs are only one measure of the total – costs – associated with this proposed Project. This criteria is therefore also an inappropriate or inaccurate fact upon which to make location decisions.

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Criteria 5 – Location inside the MITT/MIRC: Planes training within the MITT/MIRC can and currently do land on Saipan, Tinian or Rota in the event of an in-flight safety issue. A designated

-O31



“divert” field does not enhance this capability in the least (unless a separate runway is built at West Field, and even that would add very little additional alternative in the event of an emergency or precautionary landing). This is an inappropriate criterion upon which to make the location decision. -O31

Criteria 6 – Seaport Fuel-Receiving Capability. This is an appropriate criteria as the operations described use aircraft and they cannot operate without fuel. The seaport on Tinian, with some modifications, could easily handle the fuel receiving requirements to meet the divert/training/humanitarian missions described in the DEIS. The CNMI believes these improvements are part of the Tinian Lease Agreements set out in the Covenant. -O32

Further the ground transportation phase of operational fuel use could be done via secondary back roads (North option) instead of on primary commercial roads as on Saipan or the Tinian South option. -O33

Further, the distance from the port to the proposed fuel storage location is much shorter on Tinian than on Saipan. -O34

Lastly, fuel received at the enhanced Tinian port could be shared with the Tinian commercial airport thus enhancing tourism on Tinian. (On-airport storage and aircraft fueling infrastructure could likewise be shared if properly designed). MVA suggests that other selection criteria be considered in future versions of this EIS. -O35

ANALYSIS OF SELECTION ALTERNATIVES

Alternative 1 – Modified Saipan Alternative – Both the construction phase and the implementation phase of the DEIS Modified Saipan Alternative (MSA) involve frequent trips over heavily used and very limited 1 and 2 lane commercial roads that carry the bulk of traffic on Saipan. Saipan’s commerce and its Tourism-based economy depend totally on these thoroughfares and the delays caused by the high volume of DoD related traffic would be problematic. Compounding this problem is the nature of the implementation phase cargo; highly volatile jet fuel. The proposed location of the seaport tanks is right next to Saipan’s busiest highway. This high volume use would continue with 6 trucks on the road non-stop 10 hours every day for 14 days just to fill the tanks. This high traffic volume would go on continuously during military operations and less often during off peak periods. -O36

Constructing 2 sets of 2 fuel tanks (4.2 million gallons at each end) and transporting this fuel along busy Saipan roads, two-thirds the length of the whole island each way, is not an acceptable alternative. Likewise, hundreds of trips per year for 3 years with heavily laden, (likely overloaded), concrete and cement carrying trucks over those same roads during the construction phase, is unacceptable. -O38

Lodging and bussing up to 265 people (minimum of 530 person-trips each day) eats heavily into a hotel room and bus inventory on Saipan that is already overtaxed. -O39

Added to the above is the noise and bustle of 720 (possibly many more) jet aircraft movements per year. Many of those movements will be military aircraft that are more noise intensive than their civilian counterparts. MVA does not support this Alternative. -O40

Alternative 2 – Modified Tinian Alternatives – The seaport on Tinian, with some modifications, could easily handle the fuel receiving requirements to meet the divert/training/humanitarian mission described in the DEIS. -O41

Further, the ground transportation phase of operational fuel use could be done via secondary back roads instead of on primary commercial roads as on Saipan. The distance from the port to the proposed fuel storage location is much shorter on Tinian than on Saipan, especially if the North Option is chosen. -O42



North Only Option – This option impacts the CNMI tourism industry least, of all options considered in the current DEIS. Land already under lease to the US is used and no additional use of limited CNMI land is needed. While the burden of 2 months per year of full time military training activity is heavy, it can be borne by existing Tinian infrastructure. In fact, if this option is properly designed, it can actually benefit Tinian tourism by adding airport and seaport improvements allowing for direct international flights to Tinian while minimally impacting major traffic flow thoroughfares. MVA supports this alternative. -O43

South Only Option – This option brings into play the main road of Tinian (Broadway) as a construction and fuel supply road. This will negatively affect tourism in this tiny community. This option also significantly reduces available expansion possibilities for the TIQ airport by using the adjacent land south of the airfield in support of the divert field operations. This is potentially very destructive of tourism on Tinian as all the land north of TIQ is currently under lease to the US DoD and cannot be used to expand the civilian airport. Major civilian development including expansion of the Tinian Dynasty Hotel and Casino is in the planning stages with permits already in place¹, direct flights to Tinian from China, Taiwan, Japan, Korea and Russia are a must for future growth. Those direct flights will require civilian airport expansion. MVA does not support this Alternative. -O44

-O45

-O46

Alternative 3 – Hybrid Modified Saipan/Tinian Options – Generally, it appears the Alternative 3 options simply allow for a divert field (Saipan) to be made available in case the divert field (Tinian) is unavailable to act as a divert field for Guam. This entire series of options is doubly redundant, costly and un-necessary. Further, these options interfere unreasonably with the tourism based economy on Saipan. -O47

-O48

MVA suggests the USAF consider the number of divert/emergency and/or humanitarian landings that have been made annually on Saipan or Tinian for the last 3 decades. That number is quite small. We note that those few landings were made largely without incident and without special construction. -O49

North Option – MVA finds this option redundant and un-necessary. It provides little in the way of positive, useful alternatives to the Modified Tinian Alternative #2 but does create noise and traffic on Saipan and reduces commercial availability of hotel rooms on Saipan. -O50

MVA does not support this Alternative.

South Option – MVA finds this option redundant and un-necessary. It provides little in the way of positive, useful alternatives to the Modified Tinian Alternative #2 but does create noise and traffic on Saipan and reduces commercial availability of hotel rooms on Saipan. It also restricts -O51

¹ First, there are planned developments by Mega Stars Overseas Limited to double the size of the existing Tinian Dynasty Hotel and Casino and to add an 18-hole golf course and a major water park. This civilian commercial development will require a TIQ airport expansion. Likewise, Alter City Group has planned a multi-phase hotel/casino/integrated resort and 18-hole golf course just southwest of TIQ. This development will also require TIQ expansion. Also Bridge Investment Group’s proposed seaside Titanic Replica Hotel and Casino to be located near the seaport will also need civilian airport expansion to accommodate increased arrivals to Tinian. Combined, these projects represent development estimated at hundreds of millions of dollars on Tinian that will likely not proceed if any part of the DEIS Tinian South option is implemented thus restricting TIQ Civilian airport expansion. -O46



TIQ airport expansion and it negatively affects Tinian's main thoroughfare (Broadway) civilian and commercial traffic. ***MVA does not support this Alternative***]-051

Alternative 4- No Action Alternative – Should the Air Force not agree that the Tinian North Only Alternative is appropriate - MVA would support this No Action Alternative. The status quo has worked well up to this point and would, in the opinion of the MVA, continue to work into the future as well.]-052

CONCLUSIONS

The Covenant and the Technical Agreement and lease agreements modified over the past 38 years, taken together spell out clearly the deal struck for military land use rights in the CNMI: two-thirds of Tinian and all of FDM are to be utilized to US Defense related activities. The USAF's Revised DEIS and the accompanying media PR releases indicate that USAF wants to vastly increase military use of Saipan and prefers Alternative 3, the Hybrid Saipan/Tinian option. MVA concludes that both Hybrid options and the Tinian South option will result in negative impacts to CNMI tourism, our only true source of income and revenue. The CNMI must therefore take proactive efforts to ensure that any activity that could harm our most important industry are minimized.]-053
]-054
]-055

Of the alternatives laid out in this version of the DEIS, The Modified Tinian North alternative impinges least on the tourism industry and seems easiest to implement given the only non-green criteria in table 2.3-1 is a modest seaport upgrade.]-055

Additionally, the Tinian North Option uses land on the north side of TIQ only and thus does not impinge on future expansion possibilities of the civilian TIQ airport.]-056

PREFERRED ALTERNATIVE

Alternative 2, Modified Tinian North, is the MVA preferred alternative. The MVA second choice would be the No Action Alternative.]-057





Office of the Mayor

Municipality of Tinian & Aguiguan

Joey P. San Nicolas
Mayor

November 21, 2015

HQ PACAF/PA
Attn: PACAF Divert Marianas EIS
25 E Street, Suite G-108
Joint Base Pearl Harbor
Hickam, HI 96853

RE: Comment submitted on behalf of the People of Tinian & Aguiguan regarding the PACAF CNMI Divert Activities and Exercises Revised Draft Environment Impact Statement (EIS)

To Whom It May Concern:

On behalf of the people of Tinian and the Tinian Legislative Delegation, I would like to thank the United States Airforce for listening to the concerns of the people of the Commonwealth of the Northern Mariana Islands in the Revised Draft Environmental Impact Statement For Divert Activities and Exercises (hereinafter "RDEIS"). The RDEIS takes into consideration the comments of the people and assures us that the United States Air Force is listening to our collective concerns. We hope that this additional commenting period is further opportunity to take into consideration the concerns of the people of Tinian to the revised plans.

While we appreciate the changes reflected in the RDEIS, I would like to express our strong reservations about the U.S. Air Force's proposed plans to use Tinian for Divert activities and exercises. While Tinian remains unwavering in its continued support of our United States

P.O. Box 520059 San Jose Village Tinian, MP 96952 Tel. No. (670) 433-1800/02 Fax No. (670) 433-1819

-P2

Armed Forces and its continued use of Military Leased Areas (“MLA”) for training exercises and activities, such training exercises and activities must be balanced with the people of Tinian’s desire to achieve economic self-sustainability, preserve its cultural identity and historical resources, and protect its limited natural resources and fragile eco system.

-P2

Our review of Pacific Air Forces’ (“PACAF”) RDEIS indicates that there are no assurances that such proposed endeavors to achieve economic self-sustainability through the development of its casino tourism industry. While many have touted that “placing the divert airfield training activities and exercises are compatible with Tinian’s on Tinian will have a substantial benefit on the island,”¹ there is no evidence in the RDEIS that this will actually be the case. Moreover, consistent with our position in the CNMI Joint Military Training DEIS, we are concerned that PACAF’s RDEIS is not in compliance with the National Environmental Policy Act (“NEPA”).

-P3

NEPA requires that the DEIS comply with the NEPA process, applicable federal laws and regulations; adequately review potential environmental impacts; adequately explore and address alternatives; accurately identify and address environmental justice concerns of affected indigenous populations. A “modified Tinian alternative” or a “hybrid modified alternative” which would combine development on both Saipan and Tinian will have a significant impact on Tinian’s ability to achieve economic viability. More importantly, increased noise levels from these proposed activities would likely detrimentally impact both the community and Tinian’s developing tourist industry. It is our position that despite PACAF’s revisions, the RDEIS violates NEPA for the following reasons:

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¹ Saipan Chamber of Commerce President’s Statement public statement regarding the placement of Divert Airfield on the island of Tinian. See generally <http://www.saipantribune.com/index.php/military-will-gather-public-input-tinian-pagan-eis/> (November 24, 2014)

-P3

I. The RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative;

-P6

II. The DOD has failed to prepare a single EIS which discusses the impacts of all connected and cumulative actions in the Marianas;

-P7

III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises;

-P8

For these reasons, the people of Tinian request that PACAF further revise their plans and address the legal deficiencies outlined above and described in detail below. While we remain steadfast in our continued support of military preparedness and training, the law requires that PACAF first address the deficiencies described herein through completion of another EIS.

-P9

I. PACAF’s RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.

PACAF’s attentiveness to the concerns of the people of the Commonwealth as illustrated in the RDEIS must be commended. However, our concerns remain that the RDEIS does not adequately analyze environmental justice concerns in either alternatives which include Tinian. While there is no “standard formula for how environmental justice issues should be identified or addressed,” agencies should consider environmental justice issues at every step of the process as appropriate.² Environmental justice issues encompass broad range of impacts covered by NEPA, including impacts on the economy.³ CEQ regulations defines “impacts” to include “ecological...aesthetic, historic, cultural, economic, social or health, whether direct, indirect or cumulative.”⁴

-P10

² http://www3.epa.gov/environmentaljustice/resources/policy/ej_guidance_nepa_ceq1297.pdf, page 15

³ http://www3.epa.gov/environmentaljustice/resources/policy/ej_guidance_nepa_ceq1297.pdf, page 14

⁴ 40 C.F.R. 1508.8

We note that in 2012, the Tinian Legislative Delegation publicly expressed its support of welcoming divert training and exercises and activities to the island of Tinian.⁵ The primary underlying reason for welcoming such training was the belief that the Tinian International Airport would benefit from the infrastructure that would be built at the airport that would thus support Tinian's desire to welcome international flights⁶ needed to grow its tourism/casino economy. Specifically, it was Tinian's hope that the infrastructure that would be built for divert training exercises and activities would be shared by international commercial flights and be compatible with Tinian's plans for economic development. However, as revealed by the RDEIS and PACAF's statements in the local media, it is unclear whether the purported infrastructural benefits previously discussed in 2012, which prompted Tinian's support, can be realized.⁷

-P11

Furthermore, the RDEIS does not address indirect and cumulative impacts that the proposed plans would have on Tinian's economy. The RDEIS indicates that the primary benefit to the economy would be an increase in revenue due to the additional spending of personnel that may or may not be spent on Tinian.⁸ Beyond that, it is unclear how these activities will truly be beneficial economically to the island of Tinian.

-P12

Tinian's economy is largely dependent on its casino/tourism industry. Revenues generated from the casino support local employment and supplement public programs and services. Our tourism industry markets Tinian as a peaceful, tranquil and pristine island destination rich in culture and history. We believe that increased training related activities in the village may not be compatible with this image and has the likely potential or adversely impacting our tourism industry.

-P13

⁵ <http://www.saipantribune.com/index.php/delegation-adds-support-divert-airfield-tinian/> (September 22, 2014)

⁶ CNMI Senate Resolution 17-90

⁷ <http://www.saipantribune.com/index.php/divert-eis-released-public-comments-sought/> (October 16, 2015)

⁸ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec3-4_100715.pdf, 4-182

-P11

-P12

We also note that at the time that Tinian expressed its support of welcoming divert training exercises in 2012, we did not anticipate that the Alter City Group would be leasing public lands adjacent to the airport for the development of an integrated casino resort. The RDEIS does not adequately address how divert training activities will impact such development. Given the proximity of the project to the airport, there are obvious concerns about noise and land use compatibility with Alter City Group's plans to build its hotel and casino.

-P14

The RDEIS also states that during the 8 weeks of divert exercises, the community should expect flight delays. We are concerned that such delays may endanger the lives of our citizens who require air medivac assistance to Saipan in the event of a medical emergency. While we do believe that PACAF is committed to working cooperatively with the Commonwealth Ports Authority in limiting such delays, this type of situation cannot be planned for.

-P15

Lastly, given that PACAF has stated that the "Divert EIS addresses only the ground movements and immediate approaches and departures at the airport or airports selected for improvement...[and] actual air warfare and air logistic training are addressed by the MIRC EIS and the MITT EIS,"⁹ we also do not believe that this RDEIS has adequately analyzed other concerns of noise, health and safety, socioeconomics and cultural impacts to the community at large given its interconnectedness with other proposed military training activities. Clearly, other DOD training activities are interconnected with divert activities and as such, this community must be informed of the direct, indirect and cumulative impacts of these combined plans with regards to environmental justice issues. As such, at this point, it is our belief that the RDEIS fails to adequately analyze environmental justice concerns not specifically discussed herein.

-P16

II. DOD has violated NEPA by failing to prepare a single EIS which addresses all connected and cumulative actions in the Marianas.

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⁹ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf, ES-7

-P16

PACAF has clearly established that their training and exercises are interdependent with the proposed training and exercise activities in the Mariana Islands Training and Testing (MITT) proposal which seeks to expand what is currently authorized under the Mariana Islands Range Complex (MIRC). Specifically, PACAF states that the proposed divert training exercises and activities would include “a limited number of training activities and exercises... as described and analyzed in pending authorizations associated with the MIRC and in the MIRC EIS and the Mariana Islands Training and Testing (MITT) EIS.”¹⁰ The revised DEIS further states that the “Divert EIS addresses only the ground movements and immediate approaches and departures at the airport or airports selected for improvement...[and] actual air warfare and air logistic training are addressed by the MIRC EIS and the MITT EIS.”¹¹

-P17

“A central purpose of an EIS is to force the consideration of environmental impacts in the decision making process.”¹² “That purpose requires that the NEPA process be integrated with agency planning ‘at the earliest possible time’...and the purpose cannot be fully served if consideration of the cumulative effects of successive, interdependent steps is delayed until the step has already been taken.”¹³ It must be pointed out that the proposed divert-airfield operation is one of four ongoing EIS/OEIS which include the Marine relocation to Guam, MITT/MIRC and the CNMI Joint Military Training (“CJMT”). As stated, these proposed divert airfield operations as admitted by the PACAF overlap with on-going activities authorized by the MITT which are intended to be expanded by the MIRC. Moreover, all these training activities have purported impacts on Tinian and the Mariana Islands as a whole. However, much like the Marine Corps’ CJMT DEIS, PACAF has and continues to limit the scope of its DEIS to address “only to the ground movements and immediate approaches and

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¹⁰ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf, ES-7

¹¹ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf, ES-7

¹² Thomas v. Peterson, 753 F.2d 754, 757 (9th Cir. 1985)

¹³ Id. at 757 (citations omitted).

-P17

-P18

departures at the airport or airports selected for improvements.” By PACAF’s own statement, divert training activities and exercises are connected to the larger overall plan of increasing military presence, training activities and exercises in the Marianas Archipelago.

-P18

The Council on Environmental Quality (“CEQ”) requires that cumulative actions be considered in an EIS¹⁴ and that similar actions be analyzed in a single EIS. Actions that are considered similar are those “which, when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.”¹⁵ As such, it our position that by limiting the scope of the DEIS to address only the above activities, PACAF has and continues to violate NEPA by failing to analyze other connected and interdependent actions in a single EIS.

-P19

III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises.

PACAF has provided the following standards for selecting sites for its proposed Divert exercise and training activities:¹⁶

- Be located in a U.S territory
- Be located outside the average diameter of a typhoon from Anderson AFB (i.e., storm radius).
- Provide an airfield that has land available for development.
- Provide an airfield that has existing functional infrastructure available for improvement and expansion.
- Be located within the MIRC training area (i.e., 30 minute reserve fuel flight time).

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¹⁴ 40 C.F.R. § 1508.25(a)(2).

¹⁵ 40 C.F.R. § 1508.25(3).

¹⁶ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf, ES-7 & 8

-P19

-P20

- Provide a seaport that has existing fuel-receiving capabilities at the port of debarkation.

PACAF has stated that “there are many potential divert airfield locations across the Pacific Rim, but they are all too far outside USAF-established selection standards.” PACAF therefore has only considered airports in the Mariana Islands region to meet its purpose and needs. As such, the discussions in the proposed alternatives are defective as it has failed to fully explore all reasonable alternatives in the DEIS.

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The “heart” of an environmental impact statement is the alternatives analysis.¹⁷ “The existence of reasonable but unexamined alternatives renders an EIS inadequate.”¹⁸ It is clear that PACAF’s divert training activities and exercises are intended to support MIRC related activities as established by its selection criteria that proposed sites must “be located within the MIRC training area.”¹⁹

-P21

Furthermore, given that the selected site must be “located outside the average diameter of a typhoon from Anderson AFB,” there can be no viable discussion of utilizing the Rota International Airport or the A.B. Won Pat International Airport. As such, it is clear that the only two locations that PACAF could consider in its proposed Divert DEIS is Saipan International Airport or the Tinian Airport. In its revised plans, it proposes a new alternative which includes the utilization of both islands.

-P22

NEPA requires that DOD prepare an EIS which examines all reasonable alternatives and to give the people of the CNMI an opportunity to meaningfully participate in these types of decisions. This participation can only truly be meaningful if all reasonable alternatives are discussed. PACAF has “considerable discretion” when defining its purpose and need for divert

-P23

¹⁷ 40 C.F.R. § 1502.14(a).

¹⁸ *Ilio’ulaokalani Coalition v. Rumsfeld*, 464 F.3d 1083, 1095 (9th Cir. 2006) (citation omitted).

¹⁹ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf, ES-9

-P21

training exercises and activities.²⁰ However, when doing so, it “cannot define its objectives in unreasonably narrow terms.”²¹ As outlined and discussed above, any potential divert site must be located within the MIRC training area and must be outside the storm radius from Anderson AFB. PACAF in defining its purpose and needs, created a selection criteria that could only preselect airports in either Tinian or Saipan. These selection standards are “unreasonably narrow” as it has essentially reduced the DEIS to the “foreordained formality” of conducting divert training exercises and activities at the Saipan International Airport or Tinian Airport.²²

-P23

Lastly, there is nothing which currently precludes the Air Force from conducting humanitarian relief exercises or utilizing Commonwealth ports in the event of a natural disaster or national emergency as authorized by current CNMI/US agreements. Inferences could be drawn to conclude that the driving need for additional authorization for the utilization of air or sea ports within the Commonwealth is to support MITT/MIRC/CJMT related activities. Presenting the proposed divert plans therefore as one that is necessary for promoting humanitarian efforts could be construed as a mere pretext to eliminate the full consideration of other alternative sites such as Korea, Japan or the Philippines which all have military installations that could currently accommodate such training exercises that are within the Pacific region.

-P24

CONCLUSION

The people of Tinian remain steadfast in our commitment and support of the United States Air Force and all members of our United States Armed Services. Over the course of many years, and several generations, we have welcomed numerous military training exercises

-P25

²⁰ Friends of Southeast's Future v. Morrison, 153 F.3d 1059, 1066 (9th Cir.1998).

²¹ City of Carmel-By-The-Sea v. United States Dep't. of Transp., 123 F.3d 1142, 1155 (9th Cir.1997)

²² Friends of Southeast's Future v. Morrison, 153 F.3d at 1066 (9th Cir.1998).

-P23

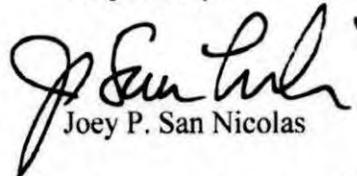
Tinian with clear answers or any assurances that these training activities will be a benefit beyond bringing additional foot traffic to the island.

As such, we, the people of Tinian, request that PACAF and DOD be required to:

1. Provide an adequate analysis environmental justice issues in the modified Tinian Alternative and Hybrid alternative;
2. Prepare a single EIS which discusses the impacts of all connected and cumulative actions in the Marianas of all 4 EIS;
3. Explore all reasonable alternatives for Divert training activities and exercises in the Pacific region.

-P26

Respectfully,



Handwritten signature of Joey P. San Nicolas in black ink.

Joey P. San Nicolas

On behalf of People of Tinian

From: [Thompson, Wendy](#)
To: [Smith, Emily](#); [Pyle, Stephen G](#)
Subject: FW: PACAFComment - Joey San Nicolas
Date: Monday, December 14, 2015 1:18:19 AM

From: Cognito Forms
Sent: Monday, December 14, 2015 2:18:08 AM (UTC-06:00) Central Time (US & Canada)
To: Thompson, Wendy
Subject: PACAFComment - Joey San Nicolas

HDR

PACAF Divert Activities and Exercises EIS Comment

[View full entry at CognitoForms.com.](#)

Entry Details

FIRST NAME	Joey
LAST NAME	San Nicolas
ORGANIZATION	Tinian Mayor's Office
TITLE	Mayor of Tinian
ADDRESS	PO BOX 59, San Jose Village, Tinian, Guam 96952
EMAIL	jp.tinian@gmail.com
COMMENTS	To whom it may concern: I would like to point out that the CNMI is not included as a location from which I can select as an address from which my comments can be uploaded. Your attention to this matter is greatly appreciated.

-P1

UNTITLED

Tinian Mayor's RDEIS Comments.pdf

You are receiving this email because you selected the receive email notifications option on your form in Cognito Forms.



ALTER CITY GROUP

December 14, 2015

PACAF Public Affairs
ATTN: PACAF Divert Section 106 Consultation
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853

RE: Alter City Group's Public Comment to Revised Draft Environmental Impact Statement for the U.S. Air Force's Divert Activities and Exercises Proposal

Alter City Group herein enters its public comment to the Revised Draft Environmental Impact Statement for the U.S. Air Force's Divert Activities and Exercises Proposal (hereinafter "Revised Draft"). Alter City Group objects to Alternatives Two (Modified Tinian Alternative) and Three (Hybrid Modified Alternative) of the Revised Draft and supports the No Action Alternative for two primary reasons, as follows: (1) Alter City Group's investment on Tinian would be directly discouraged by Alternatives Two and Three; and (2) on a grander scale, implementation of Alternatives Two and Three would harm economic development on Tinian.

-Q1

I. Alternatives Two and Three Directly Threaten Alter City Group's Investments on Tinian

Alter City Group is investing on Tinian with the development of the Plumeria Resort in the beautiful and idyllic Puntan Diablo Cove. Alter City Group's project is expected to be completed over 12 years in 3 phases, to result in 6,000 rooms on Tinian in its hotel, as well as villas, corporate villas, service apartments, an 18-hole golf course, a casino, waterpark, museum, clinic, café, restaurant, and shops, among other projects. Alter City Group's development will invite tourists from all over the world, as well as enhance local infrastructure facilities and provide additional community services to the local population on Tinian.

-Q2

Alter City Group's development is located right next to the Tinian International Airport. In addition, Alter City Group has expressed an intent to the Commonwealth Ports Authority to lease the southwestern portion of Airport Expansion, West Field, Lot No. 272 T 10 and the southwestern portion of West Tinian Airport, Lot No. 272 T 09.

SAIPAN OFFICE – CNMI HEADQUARTERS
ACG Building, Garapan Street
P.O. BOX 505110
SAIPAN, MP 96950

OFFICE: (670) 233-4888
FAX: 1 (670) 233-4999

TINIAN OFFICE
PM Building, San Jose Village
P.O. Box 520708
Tinian, MP 96952

OFFICE: (670) 433-4999
FAX: (670) 433-6999



ALTER CITY GROUP

The lease of these lands is sought to allow for extra accommodations for the villas along the coast that Alter City Group has already proposed. Alter City Group intends to lease this land from the Commonwealth Ports Authority for a term of 25 years, with an optional 15-year extension.

-Q2

Right next door to Alter City Group's tranquil development, Alternatives Two and Three propose the construction of a parking apron, a cargo pad, a maintenance facility, fuel tanks and supporting infrastructure, a fuel hydrant system, a fire suppression system, and an access road. Alternatives Two and Three would also include construction of taxiways to connect the cargo and parking aprons to the runway and reroute 8th Avenue on the western side of the runway to avoid the proposed taxiway area. Alternatives Two and Three additionally include construction of fuel tanks at the Port of Tinian, which would entail the transport of construction materials to Tinian International Airport. Alternatives Two and Three would seek to improve the airfield design to accommodate 3 or 12 KC-135 or similar aircraft. These Alternatives approximate 720 operations by KC-135 or similar aircraft over 8 weeks annually and would necessitate fuel transfer from the seaport to the airport as well as temporary lodging and associated support for up to 265 personnel.

-Q3

These activities would result in noise pollution not only during construction but thereafter. Instead of relaxing on their balconies enjoying the serene qualities of the island and wildlife, guests will be treated to noise from construction of all of the aforementioned projects, including noise from an additional 265 personnel and from 3 or 12 KC-135 or similar aircraft making about 720 operations a year. Instead of enjoying the serene views from their villas, guests will be subjected to trucks rattling over the streets transporting construction materials and transferring fuel from the seaport to airport and large KC-135s or similar aircraft roaring overhead. The Revised Draft utterly fails to address its effect on the resort experience.

The implementation of Alternatives Two or Three would directly harm Alter City Group's development plans and its investment. The Revised Draft EIS fails to address both noise level pollution, the effect of the diversion plan on developments and investments on Tinian and its effects on tourism.

-Q4

The Revised Draft EIS further fails to address the associated visual impact (including the proposed infrastructure and light pollution). It also fails to address the impact of the increase in traffic and the impact of the divert activities on commuter flights and air traffic, as well as construction emissions on the Alter City Group development.

-Q5





ALTER CITY GROUP

While it might be argued that the Alter City Group development will also bring increased air traffic and noise pollution, this is the price of economic development. Alter City Group has already committed \$5 million to the Commonwealth Ports Authority for the upgrade of the airport facilities to accommodate direct international and private flights and ferry dock upgrades. Any increased air traffic or noise from the Alter City Group development will end up being a benefit to Tinian's economy – instead of harming it in the way the Revised Draft proposes. The increased air traffic proposed by the Revised Draft will not only fail to enhance Tinian's tourist economy, it will directly impair it.

-Q5

II. Alternatives Two and Three would Harm Economic Development on Tinian

On a grander scale, implementation of either Alternative Two or Three would harm the already struggling economic development on Tinian. Investments like those promised by Alter City Group secure economic growth while capitalizing on the natural beauty of Tinian. Alter City Group's investment will boost the CNMI economy as a whole and benefit Tinian locals by increasing domestic employment opportunities and generating extra revenue to the government treasury.

-Q6

Alter City Group has pledged \$1.2 billion for its project in Puntan Diablo Cove. Alter City Group has already paid a non-refundable fee of over \$1.2 million for the first phase of its project and has already applied for and paid for its application for a casino license. Alter City Group recently signed a memorandum of understanding with the Chu Kong Passenger Transport Company Ltd. to develop a ferry system between Saipan and Tinian. The wheels of economic development have been set in motion for Tinian as an international tourist destination and the proposed divert activities and exercises run counter to that. While expanding U.S. strategic interests and Department of Defense mission requirements in the western Pacific is indeed important, the Tinian International Airport is simply not the appropriate venue. Tinian is already struggling economically and the investments Alter City Group is making on the island promise to meet the objective of using Tinian's natural beauty and resources to build a thriving economy as a tourist destination – a militarized island does not meet that objective. The Revised Draft does not account for the potential loss of tourism and potential deterrence from investment in future resorts and similar facilities, which would have a long term effect on Tinian's prospects of building a tourism economy.

-Q7

Offering one modified alternative after hybrid modified alternative after another is not an accommodation to the people of Tinian, it is simply an obtrusive and unilateral way to meet a military interest that is not in the best interests of Tinian. The interests of a tiny island should not be set aside as less important when the military has apparently deemed

-Q8



ALTER CITY GROUP

Tinian to be significant enough to shoulder the burden of promoting U.S. interests in the Asia-Pacific region. The Revised Draft fails to take into account other locations beyond the CNMI for divert activities. The Revised Draft concedes that there are currently divert landings in Guam, Saipan, and Rota, and fails to qualify or support the need for even more facilities in the CNMI, and specifically on Tinian. The Revised Draft fails to address why the divert activities should occur on Tinian and not elsewhere.

-Q8

Alter City Group stands behind its investment and behind its promises to Tinian and will take whatever appropriate legal action necessary to protect its development and its promise of economic development to Tinian. Alter City Group supports the No Action Alternative.

-Q9

Sincerely,

Edvon Sze
Chief Executive Officer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105

December 14, 2015

Mark Petersen
HQ PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, Hawaii 96853

Subject: Revised Draft Environmental Impact Statement (RDEIS) for Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CEQ 20150289)

Dear Mr. Petersen:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

The Revised Draft Environmental Statement (RDEIS) updates the 2012 DEIS with modified alternatives for facility construction at Saipan International Airport and/or Tinian International Airport to support a combination of aircraft and support personnel for divert operations, periodic exercises, and humanitarian assistance/disaster relief. The Air Force has not identified a preferred alternative in the RDEIS. Therefore, in accordance with EPA's *Policy and Procedures for the Review of Federal Actions Impacting the Environment*, we are rating individual alternatives evaluated in the RDEIS.

-R1

Through a comment letter to the Air Force on July 26, 2012, EPA rated the 2012 DEIS Preferred Alternative 1 as *Environmental Objections – Insufficient Information (EO-2)* (see enclosed “Summary of Rating Definitions”) due to severe noise impacts predicted for residents on Saipan for 8 weeks per year. The alternatives in the RDEIS no longer include fighter jet aircraft as part of the training exercises and, as a result, noise levels would be much reduced. While this alleviates our noise objections, EPA is concerned that the revised analysis uses a new metric that averages the noise that would be generated during 8 weeks of training over the course of a year, artificially reducing predicted noise levels and presenting noise impacts in a manner that is not consistent with how the noise would be experienced by the public. Because of this, we are rating Alternative 1 in the RDEIS as *Environmental Concerns – Insufficient Information (EC-2)*. We strongly recommend that the Air Force reassess noise impacts using the noise metric and methodology that was previously used in the 2012 DEIS in order to clearly disclose project noise levels in the Revised Final EIS as they would be experienced by residents for 8 weeks/year.

-R2

-R3

We have rated the Tinian alternatives (Alternatives 2 and 3) in the RDEIS as *Environmental Objections – Insufficient Information (EO-2)*, based on potentially significant impacts to the drinking water system that should be avoided to adequately protect the environment. The RDEIS does not sufficiently evaluate the impacts of the project on the drinking water utility and the amount of water available from the CUC system on Tinian may not be sufficient to meet the construction-phase demand for the project. The CUC is under a Stipulated Order to bring its drinking water system into compliance with the Safe-

-R4

Drinking Water Act and is in "severe distress" financially, according to a recent CUC quarterly report. If the military action would place an additional financial burden on CUC, this would be a significant impact to the utility and could compromise the public's access to drinking water. The Marine Corps recently published the CNMI Joint Military Training (CJMT) DEIS (April 2015) and is now conducting supplemental analyses of impacts of that project on the Tinian drinking water system. We recommend that the Air Force consult the technical appendices of the CJMT DEIS, and work closely with the Marine Corps, to better assess the construction-phase impacts of Divert Activities and Exercises on the drinking water system. We also recommend close coordination of construction scheduling with the Marine Corps, if a Tinian alternative is selected, to ensure that the capacity of the drinking water system is not exceeded and access to drinking water by the local population is not affected.

-R4

-R5

-R6

We appreciate the opportunity to review this Revised DEIS and look forward to working with the Air Force to address the issues outlined above and in the enclosed Detailed Comments. If you have any questions, please refer staff to Karen Vitulano, lead reviewer of the RDEIS, at (415) 947-4178, or to Kathleen Goforth, Manager of the Environmental Review Section, at 415-972-3521. Please send a copy of the Final Revised EIS to this office (mail code ENF-4-2) when it is electronically filed with our Washington, D.C. office.

-R7

Sincerely,



Kathleen H. Johnson, Director
Enforcement Division

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: John Warner, Federal Aviation Administration
Sherri Eng, MARFORPAC
Wesley M. Bogdan, CNMI Office of the Lt. Governor
Frank M. Rabauliman, CNMI Bureau of Environmental and Coastal Quality (BECQ)
Fran Castro, BECQ Division of Coastal Resources Management
John Riegel, Commonwealth Utilities Corporation (CUC)

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

“LO” (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

“EC” (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

“EO” (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

“EU” (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

Category “1” (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category “2” (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category “3” (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

-R2
-R4

-R2
and
R4

Impacts to drinking water

While not formally designated as a Sole Source Aquifer under the Safe Drinking Water Act, groundwater is the sole source of drinking water on Tinian and meets the definition of a sole or principal source aquifer¹. The Commonwealth Utilities Corporation (CUC) supplies drinking water to the island via a single public water well. Given the limited source of drinking water available on Tinian, it is critical that estimates of impacts to available drinking water be fully analyzed, disclosed and mitigated. The RDEIS for the Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (Divert Project) does not sufficiently assess the Proposed Action’s impacts on the CUC for the Tinian Alternatives, nor does it include a complete estimate of construction-phase water demand.

-R8

The water demand identified in the RDEIS for the construction phase includes only the amount of water that would be used for dust suppression. Other construction water use, such as concrete mixing, rinsing new water pipes, hydrotesting new water storage tanks, etc. is not included. In addition, the water demand from the 500-750 construction workers is not analyzed, and it is unclear if this estimated number of workers includes dependents. If it does not, the estimated water demand would be even higher, since, as the RDEIS acknowledges, Tinian does not have the construction workforce needed and it is assumed that 85% of these workers would be from off-island (p. 4-176, 4-117). The estimated water demand for dust suppression alone is 51,500 gallons per day (gpd) for 3 years for the North option (32,500 gpd for the South option). Consumption by the construction workforce would be a substantial addition to this construction-phase estimate. The RDEIS estimates the water consumption demand during the implementation phase at 98 gpd per person, which, if applied to the construction workforce would calculate at an additional 49,000 - 73,500 gpd water demand. The RDEIS identifies the amount of water Tinian is able to generate at 1.26 million gallons per day, which appears to be a high estimate averaging the generation for wet and dry seasons. Since, as the RDEIS acknowledges, water supply issues are intensified during the dry season (p. 3-110), it would be more conservative to utilize the dry season estimate for the analysis.

-R9

The RDEIS does not calculate the amount of water that would be available to be pumped from the CUC system therefore it is unclear whether the CUC could accommodate the water demand. We note that the CJMT DEIS calculated, using the wet/dry season average pump rate, that there would be 50,862 gpd available to the Tinian population after losses in the distribution system (CJMT DEIS p. 4-414). The CJMT DEIS utilized a water loss or “unaccounted for water” (UFW) rate of 75% for this calculation. The Divert RDEIS estimates the unaccounted for water (UFW) in the CUC distribution system at 50%, referencing a 2011 National Renewable Energy Laboratory (NREL) Report, which may not be the most updated estimate. The CUC Drinking Water and Wastewater Master Plan estimates the UFW for Tinian to be 74%.

-R10

If the 50,862 gpd value of available water is accurate, it appears that the construction-phase water demand for Divert would substantially exceed the amount potentially available from the CUC system. This would counter the conclusion in the RDEIS that adverse impacts from the Divert Project would be

-R11

¹ EPA defines a sole or principal source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas may have no alternative drinking water source(s) that could physically, legally and economically supply all those who depend on the aquifer for drinking water.

-R8

R11- negligible on the water supply (p. 4-149). Additionally, the CJMT DEIS, Appendix P (p. 2-1) notes that three of the four pumps serving the Tinian drinking water well are operating almost constantly, and because one pump is kept on standby for maintenance purposes, the well is operating near full capacity. If this is correct, the CUC public water well may not realistically be able to support the projected increase in water use when it is already operating at near capacity. **-R12**

The CUC is under a Stipulated Order to bring its drinking water system, primarily on Saipan, into compliance with the Safe Drinking Water Act and to provide comprehensive planning for current and future infrastructure needs with regard to groundwater protection and drinking water supplies on Tinian. According to a recent CUC quarterly progress report², the utility continues to struggle financially and is in “severe distress”. CUC also recently reported that it currently lacks approximately 20 percent of the manpower needed to successfully operate and maintain its facilities³. **-R13**

The cumulative impacts to the drinking water utility would be even greater. The cumulative impact assessment does acknowledge that the combination of the Divert Project with other construction projects, particularly the CJMT proposal, the large hotel resorts, and the new homestead development, would place much greater demands on utilities because of the increased worker population and level of construction (p. 5-37). The RDEIS notes the pre-existing potable water utility deficiencies that can contribute to potential impacts but states only that the Air Force would coordinate with the CUC to ensure water supply is sufficient (p. 5-37). **-R14**

The Air Force proposes no mitigation for its impact on the CUC system. If the proposed military action could place an additional financial burden on CUC, potentially compromising the public’s access to drinking water, EPA believes this would be a significant impact. **-R15**

Recommendation: Quantify the full construction-phase demand for all alternatives. Revise the analysis to use the dry season estimate for the amount of water the CUC system on Tinian can generate, and explain or revise the UFW value used. **-R16**

Discuss the capacity of the water system and limitations of the CUC system regarding ability to pump and amount of manpower available. **-R17**

If the construction phase would place an additional financial burden on CUC, potentially compromising the public’s access to drinking water, identify those significant impacts on the CUC utility for the Tinian alternatives. **-R18**

Identify specific mitigation that the Air Force would implement to reduce impacts to the drinking water system. Potential mitigation could include assistance in reducing the high UFW in the CUC system. **-R19**

In the Revised Final EIS (RFEIS), identify specific measures to coordinate with the Marine Corps on their CJMT supplemental analysis of impacts to the CUC system to ensure any cumulative water demand is considered and construction timelines are scheduled to minimize simultaneous water demand on the CUC system, if applicable. **-R20**

² STIPULATED ORDER NO. 1; Item 69, Quarterly Progress Report No. 25, January 29, 2015 - April 28, 2015. Submitted to EPA by Alan W. Fletcher, Executive Director, Commonwealth Utilities Corporation, on April 27, 2015. **-R13**

³ *Draft Groundwater Management and Protection Plan*, Commonwealth of the Northern Mariana Islands, Prepared for Commonwealth Utilities Corporation, Dueñas, Camacho & Associates and CH2M, May 2015

Noise Impacts

Impact assessment methodology

EPA had raised environmental objections regarding the very high noise levels predicted under the original 2012 DEIS's Preferred Alternative on Saipan, especially under the medium and high scenarios which would have subjected over 11,000 residents to noise levels considered incompatible with residential land use. The high scenario would have exposed some residents to noise levels above 80 A-weighted decibels (dBA) which can cause hearing loss. In our comments, EPA requested an evaluation as to whether an alternative that would operate under only the low scenario (no fighter jets) would meet the project purpose and need. We are pleased that for the revised Proposed Action, the Air Force is no longer including fighter jet aircraft as part of the training exercises. This change is substantial enough to result in much reduced noise levels. However, the decision to alter the noise methodology used to assess and disclose noise impacts in the RDEIS is the basis for continuing environmental concerns because the updated methodology generates artificially low noise estimates which are incongruent with the manner in which humans experience noise. The conclusion that impacts are less than significant was based on this methodology and EPA is concerned that impacts may result that are not disclosed in the RDEIS.

-R21

In the RDEIS, the Air Force has changed the primary metric used to express noise that would occur during the Proposed Action's 8-weeks of training from the Average Busy Day (ABD), to the Average Annual Day (AAD). AAD was calculated by dividing the total number of aircraft operations that are conducted during the 8-week training period by 365 days to obtain an average number of operations per day. The AAD results were used to evaluate significance for noise (p. 4-4). EPA cautioned strongly against such a methodology, when it was suggested by the Air Force during a noise-related conference call with EPA on August 2, 2012, because it would not represent how noise is actually experienced by human receptors. The RDEIS states that the AAD noise contours were added to maintain noise analysis consistency across USAF EIS documents and since the baseline noise analysis was estimated using 365 days per year, noise from proposed military aircraft operations was also estimated using 365 days per year to be able to compare noise impacts directly to the baseline (p. 3-1). When EPA identified the Day-Night Average Sound Level, DNL, as the most appropriate measure to describe cumulative noise exposure during an average annual day in its "Levels" document⁴, it was based on several considerations, including the applicability of the measure "to the evaluation of pervasive long-term noise in various defined areas and under various conditions over long periods of time", as well as the close correlation of the measure "with known effects of the noise environment on the individual and the public". The altered use of the cumulative noise metric, developed by the Air Force in this analysis, is inconsistent with these considerations and does not sufficiently assess and disclose shorter term noise exposures to the public.

-R22

While the RDEIS includes the ABD noise contour map and one paragraph discussing it, the RDEIS includes no information regarding land use or population receptors within noise contours. The 2012 Divert Project DEIS "low scenario" analysis indicated that over 1,200 acres of off-airport property for the Saipan Alternative would be incompatible with residential land use, with almost 200 of these acres in the higher 70-74 dBA contour, during the 8-week training exercises. For Tinian, 400 acres would be

-R23

⁴ "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," U. S. EPA Report No. 550/9-74-004, September 1974

-R22

incompatible, with 73 acres in the 70-74 dB contour (DEIS p. 4-20). We understand this may not represent the revised Proposed Action, but the Air Force had suggested consulting this analysis in response to our requests for additional information regarding the noise analysis⁵.

-R23

The AAD metric was also used in the assessment of both land use and environmental justice impacts, which influences the impact assessment conclusions presented in the RDEIS for these analyses.

-R24

Recommendation: We strongly recommend that the AAD metric be removed from the RFEIS and that the Air Force use the ABD metric for the noise impact assessment, as it did in the 2012 Divert DEIS.

-R25

Identify representative points of interest, population receptors, and acres exposed to ABD project noise levels and compare with baseline conditions.

-R26

Update the land use and environmental justice analyses to include an estimate of noise levels using the ABD metric.

-R27

Disclosing noise impacts to quiet rural environments

EPA generally accepts the use of 65 dBA DNL as appropriate for a significance threshold for noise impacts since this corresponds with residential land use compatibility. However, in very quiet existing environments, especially the rural atmosphere on Tinian, the amount of noise increase should also be considered when assessing noise impacts. The RDEIS identifies baseline noise levels at noise-sensitive receptors around Tinian airport as less than 45 dBA (p. 3-92). (We note that the CJMT DEIS identifies some residential locations as higher than 45: Marpo Heights at 45.4 dBA, and Northeast of Marpo Heights at 48.5 dBA). For this quiet setting, a change of exposure analysis is helpful, along with a discussion that provides meaningful information to the public as to how the project will affect their lived noise environment. Because no change of noise exposure data is provided, there is no indication of the extent that Tinians will experience a degradation of their noise environment. The Federal Interagency Committee on Noise (FICON) Technical Subgroup characterized a 3 dB increase in noise as “a large change” in the level of noise exposure when the existing condition is below 65 dB, and noted that this increase can be perceived by people as a degradation of their noise environment⁶. Because decibels are on a logarithmic scale, an increase of 10 dBs represents a subjective doubling of loudness⁷. The RDEIS should attempt to disclose the change in noise environment that residents would experience during training exercises in a meaningful way.

-R28

Recommendations: Provide a change of exposure analysis for residents for the Saipan and Tinian Alternatives. Discuss how the increases in noise that would occur during the 8-week training period would be perceived by residents (i.e. whether it would represent a doubling or greater increase in loudness, etc.).

-R29

⁵ Telephone conversation between Karen Vitulano, USEPA, and Mark Petersen, USAF, November 10, 2015

-R23

⁶ Federal Interagency Committee on Noise (FICON), August 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. p. 3-5. Available: <http://www.fican.org/pdf/nai-8-92.pdf>

⁷ *ibid*

-R28

Project interface with CNMI Joint Military Training (CJMT) not explained

The Tinian Alternatives in the RDEIS have elements that are identical with components of the CNMI Joint Military Training (CJMT) action, which is also undergoing NEPA review. Both projects propose improvements at the Tinian airport, including fuel tanks, cargo pad, access roads, aircraft parking apron/ramp, and military taxiways. For the Tinian Alternative North option, these facilities are located in the same locations. Both projects also propose fuel tanks at the Port of Tinian. The RDEIS does not discuss how these two projects will interface, whether they would be shared spaces or if it's possible that these projects would both occur in different locations (e.g. both north and south areas of Tinian airport being developed). Additionally, both the Divert Project and the CJMT EISs state that their construction workforces would likely be housed at the Tinian Dynasty Hotel and Casino, which would not appear to support both workforces simultaneously. Based on discussions with the Air Force and Marines, we understand if the Air Force selects the Tinian Alternative North option, it is likely that only one project's elements would be constructed at the airport, however this is not explained to the public in the RDEIS.

-R30

-R31

Recommendation: Explain how the Marines and Air Force Proposed Actions at Tinian's airport and seaport would interface. If there is the possibility that both projects would proceed with construction at Tinian airport, identify the Divert project schedule, if/how it would overlap with the CJMT construction schedule, and how housing needs and utility demands would be accommodated.

-R32

-R33

Port Improvements as a Connected Action

The Proposed Action involves the transfer of large amount of fuel and bulk fuel storage at the Ports of Tinian or Saipan. For the Tinian and Hybrid Alternatives, the Port of Tinian would be used, however the RDEIS states that the Port of Tinian is currently in disrepair and has a limited capability to accept fuel shipments at the port (p. 3-113). We are aware that the harbor has no fixed shore-side cranes or lighting, and two finger piers west of the main wharf are in complete disrepair and unusable. The rehabilitation of the Tinian pier appears to be vital to the implementation of this project for the Tinian alternatives. Unless the action can proceed using Tinian Pier in its current deteriorated state, rehabilitation of the pier appears to be a connected action (40 CFR 1508.25(a)1(ii)).

-R34

Recommendation: Discuss whether the project could proceed without the rehabilitation of the Tinian Pier and, if it could not, evaluate the environmental impacts from rehabilitation of the pier as a connected action in the RFEIS.

-R35

Solid Waste

The document presents no definitive proposal for the final disposition of solid waste for the Tinian and Hybrid Alternatives. The RDEIS states only that contractors hired for the various construction projects would be responsible for the removal and disposal of their construction wastes generated on site (p. 4-150) and because there is a lack of municipal solid waste facilities on Tinian, construction debris would have to be collected and transported off the island using commercial solid waste haulers and commercial barges or ships until a permitted municipal solid waste facility is constructed (p. 4-151). There is no commitment to recycling or composting the waste, as required by Executive Order 13693 and DoD Policy and it is not clear if the amount of green waste from the clearing of over 82 acres of Tangantangan Ironwood scrub and forest vegetation on Tinian is included in the construction waste totals (p. 4-71). Composting facilities may be an option for the green waste, but that does not appear to have been explored. The Marine Corps is proposing to process all green waste for reuse on island, e.g., as mulch and compost for their future actions on Tinian.

-R36

-R37

-R38

-R39

There are limitations to the proper disposal of solid waste at nearby landfills. There are no RCRA compliant solid waste landfills on Tinian. The Marpi landfill on Saipan has only one landfill cell in operation and it is full. The Department of the Navy has had discussions with EPA and the CNMI government about utilizing the Marpi landfill for CJMT waste; however, the Marpi landfill would require the opening and construction of new cells for which the CNMI government does not have complete funding. The landfills on Guam also have limitations. Layon is the only permitted landfill on Guam and does not accept either green waste or construction and demolition (C&D) debris, including asbestos containing material that could be part of the C&D debris. The compliance status of the Navy Base landfill on Guam, which is not currently permitted, is uncertain, and the Anderson Air Force Base landfill is undergoing closure.

-R40

-R41

Recommendation: Identify how the management of solid waste will occur under the Proposed Action and disclose the impacts in the RFEIS. If negotiations are underway to secure a disposal site, provide an update in the RFEIS. Construction of the project should not commence unless there is a compliant landfill capable of accepting project waste.

-R42

-R43

-R44

The RFEIS should include a commitment to follow DoD’s Integrated (Non-Hazardous) Solid Waste Management Policy. We recommend a solid waste diversion plan and a green waste management plan be developed, and that the Air Force process all green waste for reuse/composting on the island where it is generated.

-R45

Hazardous Waste

The RDEIS provides no information regarding the final disposition of hazardous waste generated from the project, stating only that storage, handling, and disposal would be the responsibility of the contractors (p. 4-124, 4-129). We are not aware of hazardous waste haulers on Tinian. Guam does not have any permitted commercial or military hazardous waste disposal facilities. For temporary storage on Guam, it is our understanding that the Air Force would need to obtain written approval from the Guam EPA Administrator prior to transport to Guam.

-R46

-R47

The RDEIS states that the Proposed Action would develop and implement a Spill Prevention, Control and Countermeasures (SPCC) Plan (p. 4-58). Based on the proposed volumes and activities, Facility Response Planning⁸ is also applicable. Both the SPCC Plan and Facility Response Plan (FRP) would need to be in place and fully certified by a professional engineer and ready for full implementation at the time fuel is first placed into any tankage.

-R48

Recommendations: Clarify how hazardous wastes would be managed, stored and disposed in accordance with the Resource Conservation and Recovery Act (RCRA) and how transportation of hazardous materials would meet the requirements of RCRA and the U.S. DOT, as appropriate.

-R49

R50- Identify the requirement for FRP in the RFEIS. EPA is available to provide technical support if needed to ensure SPCC and FRP requirements are met. Please contact Pete Reich of EPA Region 9’s Oil Program at 415-972-3052 with any questions. EPA would inspect the operations for full compliance shortly after startup.

-R51

⁸ See <http://www2.epa.gov/oil-spills-prevention-and-preparedness-regulations/facility-response-plan-frp-overview>

-R48

Use of Fighter Aircraft evaluated in other NEPA documents

The project description in the RDEIS has been changed to eliminate fighter aircraft from proposed exercises (p. 2-2). However, the RDEIS states that a limited number of scheduled joint military training activities and exercises would occur, as described and analyzed in the Mariana Islands Range Complex (MIRC) and the Mariana Islands Testing and Training EISs (p. 2-9), and that the analysis in this EIS is limited to the shift of some of the aircraft already operating during these exercises to the airport or airports proposed for improvements (p. 2-8). While the Air Force has confirmed that no fighter jets are included in this action⁹, the above statement seems to suggest that fighter aircraft take-offs and landings evaluated in other EISs could utilize the improved airports on more than an emergency basis. The RDEIS states that while the analysis is based on the KC-135, the precise mixture of aircraft during exercises could vary depending upon mission requirements (p. 2-7). Table 4.1-4 indicates that F-16's are part of Alternative 1 at Saipan International Airport (p. 4-5), however the Air Force informed us that this was a data artifact from an emergency landing of one F-16 in 2012.

-R52

-R53

Recommendation: Clarify in the Revised FEIS whether the airport improvements proposed under the proposed action could enable their use by fighter jets, the impacts of which were evaluated in other NEPA documents. If the proposed action would enable new landings by fighter jets at the improved airports for Divert, their impacts should be evaluated and disclosed in this Revised EIS.

-R54

⁹ Teleconference between Karen Vitulano, USEPA, and Mark Petersen and other personnel, USAF, November 18, 2015



COMMONWEALTH PORTS AUTHORITY

Main Office: FRANCISCO C. ADA/SAIPAN INTERNATIONAL AIRPORT
P.O. BOX 501055, SAIPAN, MP 96950-1055
Phone: (670) 237-6700 | Fax: (670) 234-5962
E-mail Address: cpa.admin@pticom.com
Website: www.cpa.gov.mp

December 14, 2015

HQ PACAF/PA
ATTN: PACAF Divert Marianas EIS
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853

Dear Sir/Ma'am:

The Commonwealth Ports Authority hereby submits its comments on the Revised Draft Environmental Impact Statement for Divert Activities and Exercises ("RDEIS").

-S1

The Authority remains opposed to siting Divert activities on Saipan. The Saipan International Airport is the front door to the CNMI's tourism economy - the lifeblood of the overall CNMI economy - and the Authority cannot responsibly risk even minor or temporary negative impacts to its operation. Further, the Authority is generally opposed to the siting of Divert activities at the Tinian International Airport rather than at North Field in the MLA.

-S2

That being said, I recognize the many compromises that the USAF has included in the RDEIS, many of which resulted from comments generated by the 2012 Draft EIS. The Authority recognizes these efforts as well, and sees them as a substantial step towards a program that would be temporary, reasonable, low impact, and conducted in cooperation with the Authority.

-S3

However, the Authority has concerns about the possibility of Divert opening the door to greater military operations on Tinian via MARFORPAC and the Department of the Navy's CNMI Joint Military Trainings proposal for Tinian. The CJMT is not in the best interests of the Authority. These concerns must be addressed more adequately than they are in the RDEIS. The RDEIS also does not adequately address the North Field alternative, makes incorrect assumptions about the availability of Port of Tinian property, and proposes no compensation to the Authority for the cost shift it would bear if Divert were implemented at an Authority airport.

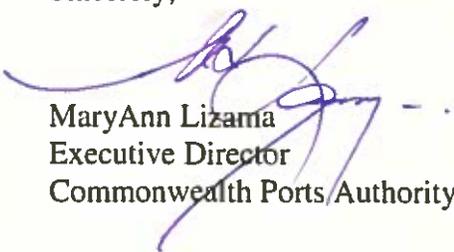
-S4
-S5

The Authority has worked in the past with military activities on Tinian and will do so in the future. The Authority will continue to do its part to work with the USAF to see if an accord can be reached that fulfills both the Authority's concerns and the USAF's Divert need.

-S6

The Authority's specific comments on the RDEIS are enclosed.

Sincerely,


MaryAnn Lizama
Executive Director
Commonwealth Ports Authority

Board of Directors
Joe Jayson



ALTER CITY GROUP



RECEIVED
CPA ADMINISTRATION

DATE: 4/20/2015

BY: *Mission*

April 28, 2015

MaryAnn Q. Lizama
Executive Director
Commonwealth Ports Authority
P.O. Box 501055
Saipan, MP 96950

Re: Request to lease a portion of CPA Land on Tinian

Dear Executive Director Lizama,

We would like to express our interest in a long term lease for a portion of the Commonwealth Ports Authority's land property located on Tinian. The following are the particular areas we seek to lease:

The southwestern portion of Airport Expansion, West Field, Lot No. 272 T 10.

The southwestern portion of West Tinian Airport, Lot No. 272 T 09.

Please see the enclosed map containing a shaded region illustrating the areas we are referencing.

Since the legislative approval of our land lease, ACG has substantially expanded its development plans. The reason we seek to lease this portion of property from CPA is to allow for extra accommodations to the proposed villas along the coast.

We are looking to lease this land from CPA for a term of 25 years, with an optional 15 year extension. This land seems perfectly suited for our purpose and we are willing to negotiate price and terms and conditions in detail.

Si Yu'us Ma'ase and thank you again for your continued support.

Sincerely,

Edvon Sze
Chief Executive Officer
Alter City Group, Inc.
STJ Golden Island Investment, LLC

ALTER CITY GROUP INCORPORATED

Saipan Office
ACG Building, Garapan Street
P.O. BOX 505110
Saipan, MP 96950
Office: (670) 233-4888
Facsimile: (670) 233-4999

Tinian Office
PM Building, San Jose Village
P.O. Box 520708
Tinian, MP 96952
Office: (670) 433-4999
Facsimile: (670) 233-6999

“[[CPA submitted copies of two letters between CPA and ACG regarding the ACG request to lease CPA land on Tinian. Lease requests include the following properties: the southwestern portion of Airport Expansion, West Field, Lot No. 272 T 10; the southwestern portion of West Tinian Airport, Lot No. 272 T 09; and title and interest in LOT 272 T 03 and LOT 272 T 04.]]”

-S7

*Board of Directors
- Joe H.
- Elco*



ALTER CITY GROUP



RECEIVED
CPA ADMINISTRATION
DATE: 06.04.15
BY: Jadene v.

June 4, 2015

*- Joe H. & Jonathan
please work on
the areas
described
& provide
reply.
f*

MaryAnn Q. Lizama
Executive Director
Commonwealth Ports Authority
P.O. Box 501055
Saipan, MP 96950

Subject: Request for Lease of Lot 272 T 03 & Lot 272 T 04

Dear MaryAnn:

Alter City Group Incorporated wishes to pursue leasing portions of CPA property in order to complete its proposed 18-hole golf course together with 20 corporate villas and an equestrian center. This letter will outline the terms and conditions under which Alter City Group Incorporated, with the consent of the CPA Board of Directors, may initiate due diligence investigations and inspections to be able to proceed towards negotiating a lease agreement for CPA properties located on Tinian.

PROPERTY DESCRIPTION

The properties subject to this letter consists to CPA's rights, title and interest in LOT 272 T 03 and LOT 272 T 04 consisting of approximately 236,107 square meters, as depicted on the exhibit map attached hereto and referenced as Exhibit A.

LEASE TERMS

We are requesting for a primary lease term for a total period of 40 years with the option to extend the lease.

PROPERTY ACCESS

Alter City Group Inc. requires full and complete access to the Property prior to the lease commencement date in order to initiate and complete the investigation, inspection and evaluation the of the premises.

LEASE RATE

In anticipation of an appraised fair market value of the unimproved premises, we propose the lease rate similar to that of our DPL Lease Agreement which would be based on a percentage of the appraised fair market value in amounts set out in a schedule that will be negotiated with the CPA Board of Directors.

SAIPAN OFFICE – CNMI HEADQUARTERS
ACG Building, Garapan Street
P.O. Box 505110
Saipan, MP 96950

TINIAN OFFICE
PM Building, San Jose Village
P.O. Box 520708
Tinian, MP 96952

“[[CPA submitted copies of two letters between CPA and ACG regarding the ACG request to lease CPA land on Tinian. Lease requests include the following properties: the southwestern portion of Airport Expansion, West Field, Lot No. 272 T 10;the southwestern portion of West Tinian Airport, Lot No. 272 T 09; and title and interest in LOT 272 T 03 and LOT 272 T 04.]]”



ALTER CITY GROUP

DEPOSIT

To show our commitment and as a gesture of good faith, Alter City Group Inc. is willing to make a deposit and/or advance rental payment upon execution of a lease agreement.

PROPOSED CONSTRUCTION TIMELINE

Our project development timeline is segregated into 3 phases with a target completion of the entire project in approximately 12 years. Alter City Group foresees commencing constructing the additional holes and other amenities required to complete the 18-hole golf course on the proposed premises in 3 years. In line with our overall development, we anticipate to tie in the construction of approximately 20 2-storey corporate villas and the equestrian center within 6 years upon execution of a lease agreement with CPA.

If the above proposal for our request for lease of CPA properties is acceptable, we hope to be able to get the ground work started with a Notice to Proceed and commence negotiations for a lease agreement.

I am available at any time to answer any questions. I can be reached directly at (670) 484-6999. We look forward to your favorable response.

Sincerely,

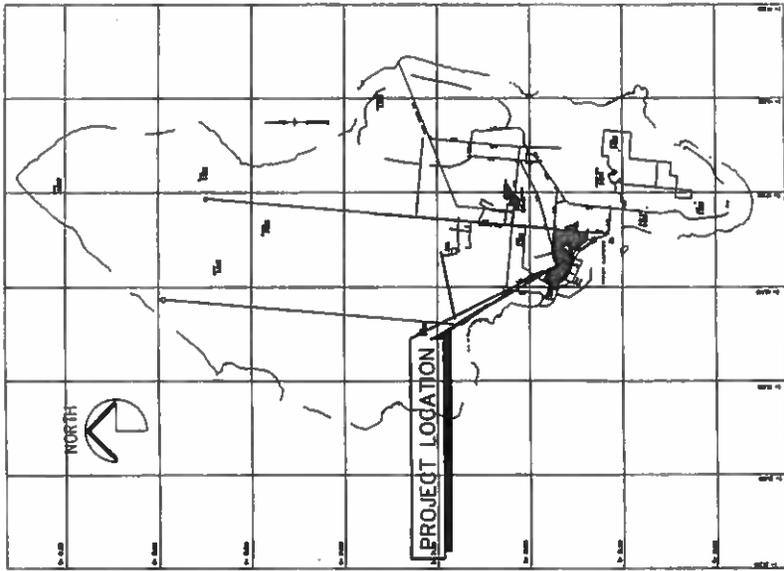
Ken T. Lin
Managing Director

Enclosure

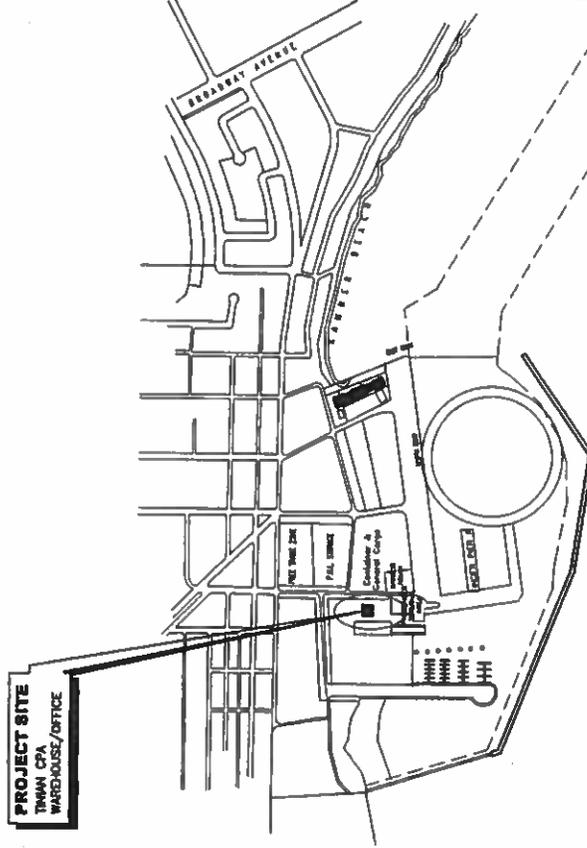
TINIAN C P A WAREHOUSE / OFFICE

SAN JOSE, TINIAN MP96950

LOCATION MAP



VICINITY MAP



HENRIK B. CAMERA & ASSOCIATES
ARCHITECTS PLANNERS
CONSTRUCTION MANAGEMENT
CONSULTANTS
STATE OF HAWAII, DE. 198-240-0700



THIS WORK WAS PREPARED BY ME
AS A PROFESSIONAL ENGINEER
REGISTERED IN THE STATE OF HAWAII
SIGNATURE

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COMMONWEALTH PORTS AUTHORITY

Saipan, Tinian and Rota Airports



MILITARY EXERCISE GROUND OPERATIONS PLAN And IMPLEMENTATION PLAN

March 2013

CPA MILITARY EXERCISE GROUND OPERATIONS PLAN

SECTION I

Roles and Responsibilities

Purpose: This section defines operational roles and responsibilities for the Military members and other support personnel. Emphasis is on proper management of activities related to the exercise events to maintain the highest level of safety throughout the exercise at a FAR Part 139 Certified Airport.

Key Positions:

Airport Manager or authorized designee – Overall responsibility for safe operation of the airport, including:

1. Responsible for the safe conduct of exercise events on the airport coordinating with Air Traffic Control Tower (ATCT, Guam CERAP) personnel during the exercise.
2. Determine whether crowd evacuation is necessary in an emergency. If evacuation is required, issues appropriate instructions to direct evacuation pursuant to its AEP.
3. Continuously monitor for any operation or activity deemed unsafe, and communicate necessary instructions to appropriate personnel to terminate those activities.
4. Ensure compliance with FAR Part 139.
5. Manage the schedule of exercises.
6. Coordinate with outside agencies.

Operations Supervisor or authorized designee – Overall responsibility for safety on the AOA during the exercise including:

1. Overall responsibility for placement of approved temporary facilities and equipment.
2. Assess ground operations from the standpoint of safe practices.
3. Coordination of parking and transportation issues.
4. Coordinate real time activities with ATCT, Guam CERAP.
5. Ensure necessary operational planning has been completed.
6. Coordinate with Emergency personnel to ensure emergency resources are in place prior to commencing exercises when required.
7. Conduct a daily exercise operations briefing for participating pilots and ground crews as required. The briefing will include specific local information such as compliance with FAR Part 139 and security requirements.
8. Continuously monitor the exercise remaining alert for any operations or activity deemed unsafe, and take action to terminate those activities.
9. In an emergency requiring evacuation, assist with appropriate crowd evacuation procedure pursuant to the AEP.

Chief of Ports Police or authorized designee – Responsibility for implementation of 49 CFR Part 1542, security regulations.

1. Coordinate operations of the emergency resources: local fire protection district and emergency medical service units, first aid station, local law enforcement, and contract security agencies.
2. Ensure that exercise site security (perimeter, controlled access points, etc.) is maintained at all times, including proper deployment of crowd control barriers and personnel.
3. Handle crowd control and security-related issues in coordination with all Airport Emergency Plans (AEP).
4. Make continuous safety announcements.
5. Inform all of an emergency situation.
6. Maintain calm by making appropriate announcements.

ARFF Operations - Command Post: The exercise Command Post will be located at the Emergency Operations Center (EOC) at the ARFF station for Saipan or respective EOC locations for Rota and Tinian, as designated by the ports managers, and will serve as the central location for managing information, directing exercise staff, and coordinating with outside agencies. Command post resources will include: communications capability (radios and cell phones), site diagrams, posted lists (key personnel and contact numbers), copies of exercise documents and plans, message board, and office supplies. In the event of emergency, key exercise personnel, the airport manager, and the local FAA coordinator are authorized to coordinate information, assess conditions, and manage the incident.

Communications Network: A formal radio communications network will be used during the exercise. Key personnel and operational areas will be issued a radio and or communication device and shall monitor the assigned frequency at all times. At Tinian and Rota Airports, radio communications must be freely accessible by the Flight Service personnel to the exercise's radio communications command center. If no radio is available or provided by the exercise operation, a manned personnel from the exercise team must be stationed at the Flight Service Office to monitor and relay traffic activities of the exercise to Flight Service personnel.

The command post shall serve as base station and conduct a roll call each morning of the event to ensure the network is operating properly. Notification of minor incidents (e.g., small fuel spill from static aircraft, etc.) and medical emergencies will be via this network.

Air Operations Briefing/Debriefing: An operations briefing for the current day followed by debriefing of the previous day will be held daily at a specified time at the command post. The focus will be on procedures that worked well, problems encountered, suggested corrective actions, and an evaluation by the Airport Manager. These briefings/debriefings shall be attended by the following:

1. Airport Manager or authorized designee
2. Director of Emergency Management or authorized designee
3. Chief of Ports Police or authorized designee
4. Chief of ARFF or authorized designee
5. Operations Supervisor or authorized designee
6. Safety Officer or authorized designee

7. Officer in Charge of Military Operations

SECTION II
GROUND OPERATIONS

Purpose: This section defines the procedures to be followed to safely conduct ground operations in support of the exercise.

Safety: The safety of flight line personnel, aircrew, exercise participants and visitors is the primary focus during the exercise and aircraft handling activities. All personnel are to remain alert for unsafe conditions or practices. Anyone observing a safety-related incident must immediately report the problem to the appropriate airport management representative and/or immediately take corrective action.

Security:

1. The exercise area will be delineated by crowd control barriers and security fencing. There will be two (2) to four (4) controlled entry and exit points depending on the airport and as designated by each respective Airport Manager. Each airport designated entry and exit points are as follows:

Saipan International Airport

- AOA Gate #1, West Gate (main gate)
- AOA Gate #3, Commuter Gate

Tinian International Airport

- Main Gate "A" Ramp Access
- Secondary Gate "C"
- Secondary Gate "D"

Benjamin Taisacan Manglona International Airport (Rota)

- AOA East Gate
- AOA West Gate
- AOA South Gate

2. Flight line access will be allowed only to appropriately badged individuals, to include:
 - Exercise officials and directors.
 - Military personnel.
 - Pilots of aircraft parked on the ramp/apron.
 - Certain guests escorted by exercise personnel.
 - Media personnel, if allowed.
3. Ports Police personnel will provide security for the exercise ramp area during the period of the scheduled exercises hours as well as during off hours to discourage unauthorized entry and to prevent tampering with the aircraft.

Apron/Ramp Operations: The following procedures and considerations will apply to exercise participants:

Note: Prior to any operations at the airport, all ground personnel identified as part of the exercise operations must go through a briefing by either the Operations Supervisor or Chef/Asst. Chief of Ports Police.

1. Aircraft shall not be started or taxied on non aircraft usable surfaces
2. Aircraft engines will not be started and operated closer than 100 ft. of the terminal area.
3. Helicopters may not engage rotor systems closer than 200 ft. from the terminal area.
4. A fire guard with fire extinguisher shall be posted prior to exercise aircraft engine starts.
5. There must be at least two wing-walkers for each aircraft being moved or towed by the ramp crew.
6. Following engine start and prior to taxi, each aircraft will be inspected by a flight line crewmember for anomalies such as fluid leaks, loose panels, etc.
7. Aircraft shall be checked when in their assigned parking spot
8. Flight line personnel are to remain clear of propellers and jet engine intakes at all times.
9. To the extent practical, there should be no running on the flight line.
10. Flight line personnel must be alert for and remove any debris, trash etc. on the ramp that could cause foreign object damage (FOD) to aircraft.

SECTION III **OPERATIONS**

Purpose: This section defines procedures to be followed to safely conduct the aerial events scheduled for the exercise.

Aerial Events: Exercise aerial events will be conducted in accordance with and/or be governed by the following standards and regulations:

- Federal Aviation Regulations (FAA Order 7110)
- Federal Aviation Regulations (FAR Part 139)
- Federal Flight Standards District Office (FSDO) directives
- Commonwealth Ports Authority (CPA) rules, regulations, policies and directives

Note: All fighter jets approaching the runway for landing must align with the runway no less than a mile away. Similarly, when taking off from the runway, they should maintain alignment (no right or left turn) at least three miles away from runway end prior to making any turns.

SECTION IV **TERMINATING EXERCISE ACTIVITIES**

Purpose: This section sets protocol that will be used to suspend an exercise event that is in progress on the airport. Only the Airport Manager or his/her designee has the authority to terminate any and all exercise activities in the airport for non-complying conditions in accordance with FAR Part 139, safety of personnel and the protection of property. The Exercise

Coordinator must report any unusual exercise activities to the Airport Manager for immediate action.

SECTION V **EMERGENCY PLANNING**

Purpose: This section defines procedures that will be implemented in the event of an emergency situation and shall be conducted pursuant to the Saipan, Tinian or Rota International Airports' AEP.

Emergency Situations: Emergency situations requiring immediate action to ensure life safety could occur during the exercise. These include (but are not limited to): aircraft crash, aircraft fire, fuel spill, and structure fire.

Aircraft Emergency: In the event of an aircraft accident, primary response will consist of Airport aircraft rescue and fire fighting (ARFF) equipment along with mutual aid fire and emergency medical services (EMS) units in accordance with the established Airport Emergency Plan. If an aircraft emergency occurs during the exercise, the primary objective of the airport staff will be to quickly isolate the hazard by evacuating people away from the area. This also applies to fires and other hazardous situations (e.g. fuel spill) involving aircraft on its apron/ramp areas.

Airport personnel assisted by other resources, as necessary, will handle incident mitigation.

Non-Aircraft Emergency: Fire incidents (e.g. vehicle fire) and other hazardous situations in the exercise area (not involving aircraft) or in the parking areas, can be handled by both ARFF and the local fire department engine company assigned to the state. Local law enforcement personnel will assist by directing participants away from the incident and then keeping the area clear for responding emergency services.

Medial Emergency: Emergency care and transport of sick or injured persons will be conducted in accordance with established local EMS protocols. Resources available to accomplish this function include:

1. On-site first aid station
2. Local EMS unit on exercise standby (assisted by local fire department).
3. Local EMS response capability. In the event of a mass casualty-type incident, triage, emergency care, and transport will be conducted in accordance with the established Airport Emergency Plan and local EMS protocols.

Incident Notification Procedure: The exercise command post will serve as "base station" for the operations communications network. The command post must be notified of an emergency or hazardous condition as soon as is practical by the person(s) discovering the problem. In many cases, this notification could occur after one of the on-site emergency units has been alerted (e.g. EMS unit on exercise standby). When notified of an incident in progress, the command post will:

1. Confirm the nature and location of the emergency

2. Announce the nature and location of the emergency over the operations communications network
3. Verify that the proper resources are responding to the incident
4. Ensure the proper airport and exercise personnel are aware of the incident
5. Document all relevant information on the incident, including: time of occurrence, nature, location, and action taken.

CROWD EVACUATION

Purpose: - This section defines procedures that will be implemented in the event of an emergency situation requiring exercise participant evacuation from all or part of the airport.

* *For evacuation routes, see Evacuation Route APPENDIXES for each respective airport attached to this document.*

Evacuation Procedures:

The Chief of Airport Police:

1. Determine the need for evacuation
2. Notify the Airport Management on the exercise communications network to initiate evacuation. Specify by which evacuation route(s) (e.g. primary and secondary only).
3. Determine if aircraft exposed to the incident can be safely moved and issue necessary instructions to accomplish this task.

The AOA Crew:

1. Immediately isolate the incident site by evacuating people from the area
2. Direct the personnel toward the appropriate evacuation route – as instructed by the Chief of Police.
3. Move exposed aircraft away from the incident site – as instructed by the Chief of Police
4. Make appropriate announcements to direct participants away from the incident and toward the appropriate evacuation route(s).
5. Announcements may be supplemented with pre-assigned personnel on foot utilizing bull horns.

AIRCRAFT ACCIDENT/INCIDENT PROCEDURES

Purpose: This section defines procedures to be followed should an accident/incident occur involving any aircraft.

Refer to the Saipan, Rota or Tinian Airport Emergency Plans (AEP) depending on which airport accident/incident occurred on.

Accident Scene Preservation: Preservation of the accident scene and physical evidence shall be a high priority after life safety issues have been addressed. Exercise staff shall assist in this effort at the direction of the Incident Commander and airport staff.

Access to the crash site shall be restricted to ALL personnel unless approved by the Incident Commander.

KEY POSITIONS of levels of Management include:

OVERALL:

1. **Executive Director** – Ms. MaryAnn Q. Lizama

Saipan International Airport

2. **Saipan Airport Manager** – Mr. Edward B. Mendiola
3. **Operations Supervisor** - Mr. Juan C. Tudela
4. **ARFF** - Chief James V. Diaz
5. **Ports Police** – Acting Chief Juan Dela Cruz

Tinian International Airport

6. **Tinian Ports Manager** - Mr. Joseph M. Mendiola
7. **Tinian Asst. Ports Manager** - Gerald K. Crisostomo
8. **Police/ARFF** - Capt. Rudeinn C. Sablan

Benjamin Taisacan Manglona International Airport (Rota)

9. **Rota Ports Manager** - Mr. Martin Mendiola
10. **Police/ARFF** – Asst. Chief Roger Taisacan

Others

11. **Military Officer in Charge** – Military appointed
12. **Safety Administrator** – TBD

SECTION VI

Airspace: All airspace use will be strictly coordinated with the FAA Guam CERAP office.

Aircraft Handling, Servicing and Fueling: It is the responsibility of the exercise participants to arrange for all necessary and proper Aerospace Ground Equipment (AGE) for military units to ensure professional, qualified and safe aircraft servicing. All aircraft requiring fuel and related fueling operations shall be conducted in accordance with the Saipan, Tinian or Rota Airport Certification Manuals, NFPA 407, FAR Part 139 and APPENDIX B for Hot Refueling requirements. *Note: Hot refueling operations are not permitted at the Benjamin Taisacan Manglona International Airport on the island of Rota.*

Hangar Space: The only available hangar space available at the Francisco C. Ada/Saipan International Airport is being leased out exclusively to Freedom Air. Therefore, temporarily tent” shelters may be used in a location designated by CPA as provided by the military.

Due to limited hangar space at Tinian Airport, exercise participants will be granted temporary access to any terminal space as designated by the airport manager or “tent” shelters on the side of the airport as provided by the military.

Due to limited hangar space at Rota Airport, exercise participants will be granted temporary access and use of ARFF Bay II or in temporary “tent” shelters as provided by the military.

AOA Security: Security of the exercise will be conducted in accordance with 49 CFR, Part 1542, security regulations and combined efforts between the airports, TSA and the military. Airport perimeter gates and openings in security fence will be protected by the Airport Police. The exercise will utilize only areas of the airport that are designated by the Airport Manager.

Hazardous Materials: Hazardous Materials (HAZMAT) disposal methods will comply with both State and Federal HAZMAT disposal regulations. A HAZMAT disposal drum shall be provided by the Exercise participants for the discarding of hazardous materials and ultimate disposal of same.

SECTION VII

FAR PART 139 ISSUES: The proceeding topics cover elements contained in the Airport Certification Manuals (ACM). CPA is responsible for resolution of these issues:

Airline Operations: The exercise event is planned for the Apron/Ramp area and is not anticipated to impact the commercial airlines terminal and ramp areas. Accordingly no special Operations can be conducted during the exercise that will impact other aeronautical activities on the airport.

Aircraft Rescue and Firefighting (ARFF) Capability and Special Emergency Response Procedures: All three CPA airports will function in accordance with their Airport Emergency Plans which is to provide Aircraft Rescue and Firefighting (ARFF) in the event of an aircraft incident or accident during on the airport. ARFF is the first responder to all incidents on the airport back up by the state Fire Department. The airport shall ensure that pre-positioning of an ARFF unit does not affect any of the airport’s Part 139 Certification Level. Response times to any airport incident will not be affected by the exercise. The airport has the following ARFF Units:

Saipan International Airport

Vehicle	Gallons of Water	Gallons of Foam
RIV	100	10
Crash-7	1,500	205
Crash-8	3,000	420
Crash-9	1,500	210
Tanker-6	3,000	none

On-Duty ARFF Personnel per shift: 7-9 personnel

Tinian International Airport

Vehicle	Gallons of Water	Gallons of Foam
Striker ARFF Vehicle	1,500	200
Titan ARFF Vehicle	1,500	200
HAZMAT Vehicle w/trailer		

On-Duty ARFF Personnel per shift: 2 personnel (ARFF/ Ports Police Officers)

Benjamin Taisacan Manglona International Airport (Rota)

Vehicle	Gallons of Water	Gallons of Foam
Striker ARFF Vehicle	1,500	200
Titan ARFF Vehicle	1,500	200
HAZMAT Vehicle w/trailer		

On-Duty ARFF Personnel per shift: 2 personnel (1 Chief, 1 fire fighter)

Hazardous material response will be provided by both the ARFF and State Fire department. However, the ARFF is not fully trained to handle and respond to hydrazine incident(s). ARFF personnel will assist with exercise participants who are trained to handle this specific hazardous material. Exercise participants shall be responsible in bringing highly trained and qualified personnel to handle hydrazine incidents.

Temporary Arresting Gears Installed in a Runway Safety Area: Arresting Gear/Barrier Engagement Systems must be coordinated for use with the Airport Manager and can only be utilized upon approval by the FAA ADO. To include objects that cannot be located in the Safety Areas that are not fixed by function and must be frangible no higher than 3 inches above grade.

Pyrotechnic Devices: Pyrotechnic devices must be coordinated for use with the Airport Manager and can only be utilized upon approval by the FAA ADO, Airport Police and TSA.

Temporary Closures of Runways and Taxiways: Must be coordinated with the Airport Manager and conducted in accordance with its ACM and AC 150/5370-2f.

Movement Area Maintenance: Exercise aircraft and ground vehicles will be parked in the following locations of each respective airport:

Saipan International Airport

- Western end of the apron which is adjacent to Taxiway G, in a non-movement area.

Tinian International Airport

- East Apron adjacent to Taxiway A or west gate adjacent to Taxiway A, in a non-movement area.

Benjamin Taisacan Manglona International Airport (Rota)

- East Apron adjacent to Taxiway C, in a non-movement area.

NOTE: Any ground vehicles required to access the movement areas MUST BE ESCORTED BY A QUALIFIED AIRPORT OPERATOR in accordance with its ACM and FAR Part 13.339.

Fueling Operations: Jet-A fueling will be provided by mobile refueler truck through Exxon/Mobil. Refueling of AVGAS will be coordinated with local supplier. All Exercise Self Fuelers MUST conduct all fueling operations in accordance with the Saipan, Tinian or Rota International Airports' ACM, NFPA and FAR Part 139.321.

Public Protection: Personnel control is maintained by encircling the exercise grounds with a combination of manufactured chain link fence, snow fence and water filled barricades. The Airport and Exercise participants are responsible for protecting any openings in this fencing. Facilitation of ingress and egress of participants is a combined effort of local law enforcement agencies. Exercise aircraft will taxi on Taxiway A and onto Taxiway G at the western end of the apron at the Saipan International Airport in a non-movement area, Taxiway B north of the terminal at the Tinian International Airport, and north to south on Taxiway B south ramp at the Benjamin Taisacan Manglona International Airport (Rota). The security effort provided by the airport will be in place for exercise control along the fence line and will keep people away from the fence during aircraft operations to protect against jet blast.

Self-Inspections: The airport will conduct inspections daily except as otherwise required by the ACM and FAR Part 139.327, which are required to be performed as a result of unusual conditions such as construction activities, meteorological conditions, after an accident and or an incident on the movement areas.

Exercise Ground Vehicle Operations: Should a need occur for exercise personnel to enter the movement area; they will be escorted by a Qualified airport personnel who are trained and permitted.

The exercise will utilize vehicles permitted to operate within the AOA areas and as approved by each respective airport. The other vehicles will be used only to transit adjacent non-movement areas only. Exercise operators will use the established marked roadways already in use by FBO and general aviation personnel in the non-movement areas ONLY.

Pedestrian Operations: Should a need occur for exercise personnel to enter the movement area on foot, they will be escorted by Qualified airport personnel who are trained and permitted. Exercise personnel shall not be left unattended under any circumstance and must be accompanied at all times while operating on the movement areas.

Impact to NAVAIDS: The airport shall prevent the use of exercise equipment that may derogate the operations of an electronic or visual NAVAID and ATCT facilities on the airport in accordance with FAR Part 139.333. ONLY FAA maintenance personnel are responsible for placing NAVAIDS out and in service.

NOTAMs: The airport is responsible for the issuance of NOTAMs in accordance with its ACM and FAR Part 139.339, i.e., NOTAMs affecting airport closures, airport surfaces and airport aircraft landing and movement areas.

Wildlife Hazards: The airport is responsible for reporting and alleviating wildlife hazards whenever they are detected in accordance with its ACM, Wildlife Hazard Management Plan and FAA Part 139.337.

FOD Control: Exercise participants shall provide the necessary personnel and equipment for the cleanup and control of FOD on the AOA within its assigned areas.

Changes to Airport Markings: No changes to any airfield signage, markings and lightings are authorized unless approved by the FAA ADO. This includes any temporary features.

Paved Areas: No changes or alterations to any runway, taxiway, loading ramp and aircraft parking surface is authorized, unless approved by the FAA ADO. This includes any temporary features to be installed on any portion of paved aircraft surfaces.

Obstructions: The installation of objects in Obstruction Free zones and areas are prohibited and must be approved by the Airport Manager prior to installation. This includes temporary objects i.e. antennas, light poles/fixtures, communications towers, etc.

SECTION VIII **CLAIMS AGAINST THE UNITED STATES**

CPA hereby reserves the right to make a claim against the United States for property damage, personal injury, or death caused by military personnel or civilian employees of any branch of the military acting in the scope of their employment or otherwise incident to the military's noncombat activities while on or off CPA property.

SECTION IX **CONDITIONS**

Any military branch requesting use of a CPA airport must submit a scope of work for CPA's review, and acknowledge receipt and understanding of the Implementation Plan, as attached to this document. No military activities will be allowed/permitted without approval by CPA's Executive Director or his designated appointee.

APPENDIX A
Implementation Plan

CNMI Airfields (Rota, Saipan, Tinian) Implementation Plan

It is in the mutual interest of the Commonwealth of the Mariana Islands (CNMI) through the Commonwealth Ports Authority (CPA), the Federal Aviation Administration (FAA) through the FAA ADO Honolulu, and the Department of Defense (DoD-Army, Navy, Air Force, Marines) that the DoD continue the DoD use of the various airports in the CNMI (Rota, Saipan, Tinian) for military exercises, operations and training (referred to collectively as “the participants”).

The purpose of this Implementation Plan is to outline and implement a consistent plan containing CNMI’s requirements that DoD agencies can follow to facilitate use of CNMI airfields on an enduring and long-term basis.

Unless there is any superseding Federal or CNMI law to the contrary, this Implementation Plan does not apply to foreign military units or commercial aircraft contracted by DoD to provide support services. All foreign military units or private commercial aircraft participating in military exercises with United States DoD units shall be assessed fees or other landing charges unless CPA determines that such landing fees or charges do not apply.

STANDARD OPERATING PROCEDURES

The following is the Commonwealth Ports Authority’s (CPA) standard operating procedures for preparing and planning of military exercises at CPA facilities. A Ground Operations Plan is also required as part of this Implementation Plan.

1. Any branch of the U.S. military services (generally referred to as the “Military” regardless of branch, station or unit or location) planning to conduct exercises/training at a CPA airport must submit its written proposed scope of work (SOW) to the airport manager of the proposed airport no later than SIXTY (60) CALENDAR DAYS prior to the actual exercise/training. Short fused requests will be handled as expeditiously as possible but the Military shall comply with all requirements and the operating requirement is sixty (60) calendar days’ notice in writing. The SOW from the Military should be as detailed as possible and should include, but not be limited to the following:
 - a. The type of exercise and military units involved including any foreign military;
 - b. The duration of the exercise, including number of days, frequency of activities per day and exercise hours;
 - c. A description of movement/mobilization locations at the airport, whether in or outside restricted and/or safety areas;
 - d. The location of staging areas, temporary tents, equipment, machinery and signs within the airport properties;
 - e. Any other information requested by CPA Management.

Should the SOW not include the items listed above at a minimum or additional information is required, the submission shall be deemed incomplete or deficient. The Airport Manager shall request for additional detailed information from the military branch.

2. Once an airport manager receives a satisfactory detailed SOW, the airport manager shall immediately send the document to the Executive Director for approval, as submitted or with amendments, restrictions and/or conditions prior to any activity at a CPA airport. The manager shall also provide the FAA ADO office with an informal notice of the SOW request and intended operation as soon as possible.
3. The Executive Director shall notify the Federal Aviation Administration's (FAA) Honolulu ADO of the Military's proposed activities at each respective airport. FAA ADO Honolulu will review the SOW and give concurrence and/or comments on the activity. The Executive Director will also brief the CPA Board of Directors on the proposed activity once FAA concurrence and comments are received. The Executive Director shall also provide his approval in writing to the Military and FAA.
4. After CPA approval of the SOW, the CPA Executive Director will transmit to the requesting Military the following: 1) the CPA Military Exercise Ground Operations Plan, 2) the Implementation Plan and 3) the Acknowledgment Form. These are provided for the Military's review. The Military shall return the signed acknowledgment forms to the CPA Executive Director within seven (7) days.
5. No later than fourteen (14) days prior to the scheduled exercises/trainings, designated military personnel responsible for the activities at CPA airports shall meet with CPA management for a briefing on the proposed activities and the allowable safety areas as well as restricted activities within the safety areas of the airport. By this time, the CPA Military Exercise Ground Operations Plan and Implementation Plan shall be acknowledged by CPA.
6. Seven (7) days prior to the scheduled approved exercise/training at the CPA airport, involved airport management and/or their authorized representative shall conduct a briefing with all airport employees, tenants and users to inform all of the proposed activities at the airport as listed in Item No. 1.
7. Prior to any exercise/training at a CPA airport, designated military personnel working/assisting with such activities within the safety areas of the airport shall attend a briefing by designated safety officers of CPA. Any military personnel who do not attend such briefing may be restricted from entering the safety areas of the airport.
8. No approved activities in conjunction with the exercise/training shall commence unless all required documents, agreements and forms are submitted to CPA management with the signature of the responsible party conducting/sponsoring the Military exercise/training.
9. An acknowledgement Form must be completely signed and executed before any military activities/exercises are permitted on any CPA airports.
10. Notice to and approval by the Manager, FAA Guam Air Route Traffic Control Center (ARTCC) is also required prior to CPA approval for any military activities/exercises on CPA airports as set forth below.

11. **Military Operation Facilities Impact Report:** Each Ground Operations Plan and Standard Operating Procedures shall include a “Military Operation Facilities Impact Report” (“MOFIR”) which shall be completed and submitted to CPA within seven (7) days following completion of the military exercise or operation. The MOFIR is intended to provide CPA with an accounting and report of the use of CPA’s facilities by the military. The MOFIR shall include the number of take-offs and landings; the gross take-off weight of each aircraft; the types of aircraft or helicopters landing and taking off and any landings by civilian-contracted aircraft. The purpose of each MOFIR is for CPA to monitor the level of use of its facilities by the Military units for which CPA will seek reimbursement once the substantial use level is reached as authorized in Section 17 of CPA’s Grant Assurance Agreement with the FAA. Should a Military Unit fail to provide a MOFIR within the required time-frame and continue to fail to produce that information after request to do so, CPA shall withhold further approval for future operations by that particular unit the MOFIS is provided for the last military exercise.

Air Traffic Control Notice and Approval or Clearance Requirements

All DoD units seeking to conduct military exercises shall, as a preliminary requirement, provide written notice to the Manager, FAA Guam ARTCC. Such notice shall detail the flight operations activities; type and number of aircraft to be used; and the frequency and duration of all activities. Clear and specific clearance or approval by the Manager, FAA Guam ARTCC is required before any military exercises are conducted.

No less than forty-five (45) days’ prior to military exercises by any DoD unit, written notice shall be submitted to the Manager, FAA Guam ARTCC through the Marianas Islands Range Complex Operations (MIRC Ops). A copy of the written notice shall be provided to CPA as part of the Scope of Work described above.

Safety Risk Mitigation Process

Every DoD or Military unit conducting an exercise shall be subject to and shall participate in a Safety Risk Mitigation Process with CPA. The Military Unit shall provide CPA with formal written notice of its intended exercise at least sixty (60) days prior to commencement as required in the Standard Operating Procedures above. Further, CPA and the Military Unit shall confer and participate in a Safety Risk Mitigation Process with other stakeholders (such as airlines, the FAA ADO, and the FAA ATC) in order to address all safety risks and how those safety risks will be addressed and mitigated.

Once CPA and the Military Unit agree and approve the exercise activity and the Safety Risk Mitigation plan, there shall be no revisions or changes to the plan. CPA will not accept any additional activities or exercises after the established “cut-off” point. The “cut-off” point for any changes or activities for an approved exercise shall be when CPA’s Executive Director or designee approves the exercise and Safety Risk Mitigation plan. Any additions or inserts to the exercise or operations shall be denied.

Designated Military Point of Contact

All DoD units seeking to conduct military exercises shall, as a preliminary requirement, be directed to communicate with and inform Joint Region Operations Marianas and/or the Commander for Joint Region Marianas (JRM).

The JRM Commander or his designee shall, in response to such communication and notice, immediately and without any delay inform CPA through its Executive Director as well as the Manager, FAA Guam Air Route Traffic Control Center (ARTCC). JRM is directed to provide such notice in writing, such as by fax or e mail.

Legal Authorities

There are numerous legal authorities related to the use of the CNMI airports by DoD entities, which are set forth below in summary fashion. The authorities cited are not intended to be exhaustive nor exclusive.

- A. Title 49, United States Code (U.S.C.), Chapter 471, 'Airport Development (Title 49 U.S.C., Sections 47101-47129), provides that each of the airport's facilities developed with financial assistance from the United States Government and each of the airport's facilities usable for the landing and taking off of aircraft always will be available without charge for use by government aircraft in common with other aircraft, except that if the use is substantial, as that term is defined in Chapter 27 of the Federal Aviation Administration (FAA) Grant Assurance, the government may be charged a reasonable share, proportionate to the use, of the cost of operating and maintaining the facility used.
- B. Federal Aviation Administration (FAA) Grant Assurance 27, *Use by Government Aircraft*, defines substantial use as any one of the following:
 - 1) Five (5) or more government aircraft regularly based at the airport or on land adjacent thereto; or
 - 2) The total number of movements (counting each landing as a movement) of government aircraft is 300 or more in a month; or
 - 3) The gross accumulative weight of government aircraft using the airport (the total movement of government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds in a month.
- C. Antideficiency Act, 31 U.S.C. § 1341, and the Adequacy of Appropriations Act, 41 U.S.C. § 11.
- D. Covenant to Establish a Commonwealth of the Northern Mariana Islands in Political Union with the United States of America (48 USC § 1801) provides that all facilities at Isley Field developed with federal aid and all facilities at that field usable for the landing and take-off of aircraft will be available to the United States for the use by military and naval aircraft, in common with other aircraft, at all times without charge, except, if the use by military and naval aircraft shall be substantial, a reasonable share, proportional to such use, of the cost of operating and maintaining the facilities so used may be charged at

a rate established by agreement between the Government of the Northern Mariana Islands and the Government of the United States.

Fiscal Control Procedures

Title 49, United States Code (U.S.C.), Chapter 471, 'Airport Development (Title 49 U.S.C., Sections 47101-47129), provides that each of the airport's facilities developed with financial assistance from the United States Government and each of the airport's facilities usable for the landing and taking off of aircraft always will be available without charge for use by government aircraft in common with other aircraft, except that if the use is substantial, as that term is defined in Chapter 27 of the Federal Aviation Administration (FAA) Grant Assurance, the government may be charged a reasonable share, proportionate to the use, of the cost of operating and maintaining the facility used.

In addition, Commonwealth Port Authority Regulations (Title 40) ("CPA Fee Schedule") sets forth the tariffs and fees for use of the CPA airport facilities. The CPA Fee Schedule includes fee exemptions for:

- A. landing Fees (40-10.1-1205)
- B. "public apron and operational area" charges, including parking on the public apron, crew access to public facilities in the departure building and on the airport
- C. departure facility service charge
- D. aircraft parking charge
- E. in-transit passenger service charge
- F. public parking fees

The parties confirm that whenever the military requests services and facilities beyond those exempted under law or regulation, then DoD, subject to availability of appropriations, shall pay the appropriate charges for such additional services requested pursuant to the CPA Fee Schedule. In addition to fees payable directly to the CPA, exercise participants need to be aware that additional fees may be payable directly to service providers. In the event of any disagreement or dispute in fees, the parties will engage each other in good faith to resolve any fee disputes.

Risk Management

The airport(s) were designed, constructed, and are operated, primarily for civil use. Mixing military operations with the existing civil use may create risks of loss not anticipated in the airport(s) original design. Therefore, military operations or exercises will be evaluated to minimize risks and damage to airport facilities. The following risk management measures will be adopted and shall be incorporated in each military exercise or operation:

- A. Flight operations will be conducted in accordance with the Aeronautical Information Manual (AIM) February 9, 2012 et seq.
- B. The airports' Airport Traffic Airspace (ATA) shall not be considered as Special Use Airspace (AIM Section 4)
- C. The DoD will not cause or allow any temporary fueling facilities to be installed at the airport(s) without prior permission.

- D. The DoD will assure that all helicopter and VTOL flights will take off and land from existing runways or from specially prepared and designated points commensurate with the overall operational safety of the airport(s).
- E. The DoD will assure that all ordinance and ammunition will be stored in appropriate facilities to positively assure there will be no loss or damage to civilians or airport property.
- F. The DoD will assure that during loading of any ordinance or ammunition the aircraft being loaded/unloaded will be located in a remote portion of the airport(s) and parked at a heading of 070 (Saipan and Tinian) and 090 (Rota) to assure that any accidental discharge of such ordinance or ammunition will be directed away from inhabited areas.
- G. Pursuant to Part 139, the parties shall consult with and secure review and approval of proposed military exercises from the FAA.

Claims

The United States Government (USG) to the extent permitted by law, may be liable to third parties for personal injury, wrongful death, or property damage caused by the negligent or wrongful act of its officers, employees or agents acting within the scope of their office or employment.

The USG is self-insured as to such claims and indemnification is prohibited.

Any claim for personal injury, wrongful death, or property damage should be submitted to the Joint Region Marianas Force Judge Advocate office. Claims forms and instructions will be provided upon request.

Claims against foreign nation military forces participating shall be addressed within the Ground Operations Plan. All concerns or objections by CPA with respect to participating foreign nation military forces shall be resolved or addressed to the satisfaction of CPA and/or the FAA prior to their participation in military exercises. This shall include providing CPA with the designated foreign military forces' authorized point of contact; claims process; and authorized legal counsel. CPA, however, reserves the right to deny access by foreign nation military forces to its facilities until all concerns regard responsibility for any damage or loss on CPA property are addressed.

The Commonwealth disclaims responsibility for any claim for damages, property loss, personal injury or death resulting solely from an act or omission of the USG occurring on the Premises.

DoD entities using the CNMI airfields agree to the following:

- A. Removing disabled government aircraft as expeditiously as possible in order to minimize the time the CNMI Facilities, or any part thereof, would be closed because of such aircraft.
- B. Subject to availability of appropriations, manpower and expertise, the user will repair the CNMI Facilities to the extent that such damage is caused solely by government aircraft or military exercise operations and is in excess of the fair wear and tear resulting from the military use.

- C. Except as otherwise provided in this implementation plan, neither party accepts liability for damages to property or injuries to persons arising from acts of the other in the use of the CNMI Facilities.

APPENDIX B
Hot Refueling Procedures

Hot Refueling Area must first be identified and situated away from the terminal and other aeronautical activities, preferably to be conducted at the designated HOT Cargo Area. ALL HOT REFUELING OPERATIONS MUST BE DESIGNATED BY AND APPROVED BY THE AIRPORT MANAGER.

Note: No hot cargo or hot refueling operations are permitted at the Benjamin Taisacan Manglona International Airport on the island of Rota, CNMI.

Required Action: Hot fueling/loading can be extremely hazardous and is not recommended except when absolutely necessary due to the nature of the operation. Operators who conduct hot fueling/loading should develop standard operating procedures (SOP) for flight and ground crew personnel. The operator's procedures should address the following guidelines:

1. Hot fueling is to be conducted only by aircraft utilizing JET A or JET A-1 fuel types. If strict operating procedures are not followed, hot fueling of aircraft utilizing AvGas can be extremely hazardous due to its low flash point. Aircraft being fueled while an engine is operating should have all potential ignition sources located above the fuel inlet port(s) and above fuel vent or tank openings. Sources of ignition include, but are not limited to: engines, exhausts, auxiliary power units (APU), and combustion-type cabin heater exhausts. In accordance with 14 Code of Federal Regulations (14 CFR) section 91.9, hot fueling is not permitted if the Airplane or Rotorcraft Flight Manual contains an associated operating limitation.
2. An appropriately certificated and rated pilot shall be at the flight controls during the entire hot fueling/loading process with controls appropriately adjusted to prevent aircraft movement. The pilot shall unbuckle all restraints, and be prepared to immediately shut-down the engine and egress the aircraft, if necessary. The pilot shall not conduct any extraneous duties during hot fueling/loading.
3. Only designated personnel with proper training in hot fueling/loading operations shall operate fueling or chemical loading equipment. The operator's written procedures shall include: precautions for safe handling of the fuel or chemical, emergency shutoff procedures, fire extinguisher use, hand signal use, and precautions regarding moving propeller and rotor blades
4. At least two ground personnel shall be present during hot fueling/loading. One person conducts the fueling/loading, while the other stands by prepared to activate the fuel/chemical emergency shutoff and handle fire extinguishers if necessary. The aircraft shall remain well clear of the fuel source and at no time shall the aircraft wing or helicopter blades extend over the fueling source
5. Before fueling, the aircraft must be bonded to the fuel source to equalize static electricity between the fuel source and the aircraft. Grounding of the aircraft and/or fuel truck is no longer recommended because it does not prevent sparks at the fuel source, and the grounding cable may not be sufficient to discharge the electrical current.

6. All doors, windows, and access points allowing entry to the interior of the aircraft that are adjacent to, or in the immediate vicinity of the fuel inlet ports shall be closed and should remain closed during fueling operations.
7. ARFF units of appropriate airport index must be on standby at the site during hot refueling operations and properly suited in personnel protective equipment (PPE).
8. Fuel shall be dispensed into an open port only from approved deadman-type nozzles, with a flow rate not to exceed 10 gallons per minute (38 liters per minute). Close port pressure fueling ports are preferable because the potential for spillage is reduced.
9. A fire extinguisher of an appropriate type and size for the fueling operation must be within easy reach of ground personnel at all times during hot fueling operations. Operators who conduct hot fueling shall also equip the aircraft with a fire extinguisher in the cockpit, if possible.
10. When fueling/loading is complete, the pilot must ensure that the seatbelt and shoulder harness are properly re-secured as necessary prior to any aircraft movement.
11. Operators shall require initial and recurrent training for pilots, ground personnel and ARFF.

References:

- *Aeronautical Information Manual (AIM) – Helicopter Rapid Refueling*
- *AC 00-34A, Aircraft Ground Handling and Servicing,*
- *National Fire Prevention Association (NFPA) 407, Standard for Aircraft Fuel Servicing,*
- *Include review of this SAFO in initial and recurrent training, and flight reviews.*

APPENDIX C
Emergency Procedures for F-16 Hydrazine Leaks/Spills

The U.S. Air Force F-16 Fighting Falcon utilizes the chemical compound Hydrazine (H-70) which fuels the aircraft's Emergency Power Unit (EPU). The EPU is used to re-start the F-16s single engine in the event of an engine failure while in flight.

With the F-16's EPU operating, Hydrazine problems usually occur when the aircraft is on hold awaiting take-offs, or while in-flight. Rarely will a problem occur while the aircraft is parked with the engine and EPU not running, and Hydrazine canister's removed and properly stored.

I. Basic Hydrazine Information

- Hydrazine is extremely combustible in its liquid and vapor forms
- Hydrazine poses an extreme health risk for responders and ground personnel
- It is potentially fatal if inhaled, ingested, or absorbed through the skin
- Hydrazine is colorless, with an ammonia odor, and is classified as a highly corrosive agent
- An F-16 carries 6.7 gallons of Hydrazine to fuel the EPU
- Hydrazine's listed UN Number is 2029

II. Emergency Access Route(s) Around Exercise Areas - In the event ARFF must respond to emergency at the exercise areas, access routes shall be by way of the following taxiways:

Saipan International Airport

- Taxiway B via Taxiway A
- Taxiway D via Taxiway A
- Taxiway F via Taxiway A

Tinian International Airport

- South end
- South on west
- Street on east
- AOA ramp north of aircraft parking spot if emergency is at or near north section of the exercise barricade

Benjamin Taisacan Manglona International Airport (Rota)

- Taxiway Bravo
- Taxiway Charlie
- ARFF Access Road

III. ARFF Response for Emergency EPU Activation Procedures - For purposes of the EXERCISE, ARFF response for a Hydrazine leaks/spills shall be as follows:

WARNING: Non-essential personnel shall leave the immediate area to avoid breathing Hydrazine vapors. Failure to do so may result in personal injury. Personnel will exercise care to ensure that hydrazine does not come in contact with skin or eyes. All EPU firings

and suspected hydrazine leaks will be treated as definite leaks until the EPU servicing/spill cleanup team determines otherwise.

1. A pilot - - taxiing or awaiting take-off - - declaring an emergency involving Hydrazine shall be directed to taxi with prevailing winds (This allows the aircraft to be at a minimally safe distance of 600 feet downwind from all human activity).
2. ARFF crews responding to a Hydrazine emergency shall be in full firefighting Personal Protective Equipment, approaching scene from upwind and establishing a cordon of 50 feet minimum - upwind, and 600 feet downwind - at a 45-degree angle off the aircraft nose and tail.
3. If no wind is present, a 600 foot cordon around the entire aircraft shall be established.
4. The Incident Commander (IC) shall ensure that the pilot positions aircraft with the left-wing upwind, and with the pilot breathing 100% oxygen, remaining in aircraft if no fire is present, until Hydrazine leak has stopped and is fully dissipated.
5. Once the leak as stopped and Hydrazine has dissipated, ARFF crews may proceed with extrication of pilot from rescue-side of aircraft (pilot's left).
6. ARFF crews shall provide and out-fit the F-16 pilot with a spare Self-Contained-Breathing-Apparatus (SCBA) at time of extrication.
7. Pilot declaring an in-flight emergency shall be diverted to AAFB (Guam).
8. In event the aircraft is unable to proceed to AAFB Guam, and must land, aircraft shall be directed to a taxiway designated by ATCT, with prevailing winds, and pilot shall position aircraft with leftwing upwind.
9. If fire is present, ARFF crews shall fight fires utilizing heavy fog-patterns directing any spill downwind and away from aircraft, before performing rescue operations.

NOTE - Runoff must be controlled since Hydrazine is harmful to the environment 10. If F-16 crashes, normal firefighting operations shall be accomplished.

10. All ARFF, and, Mutual-aid (HFD) responders at emergency shall be on SCBA's.

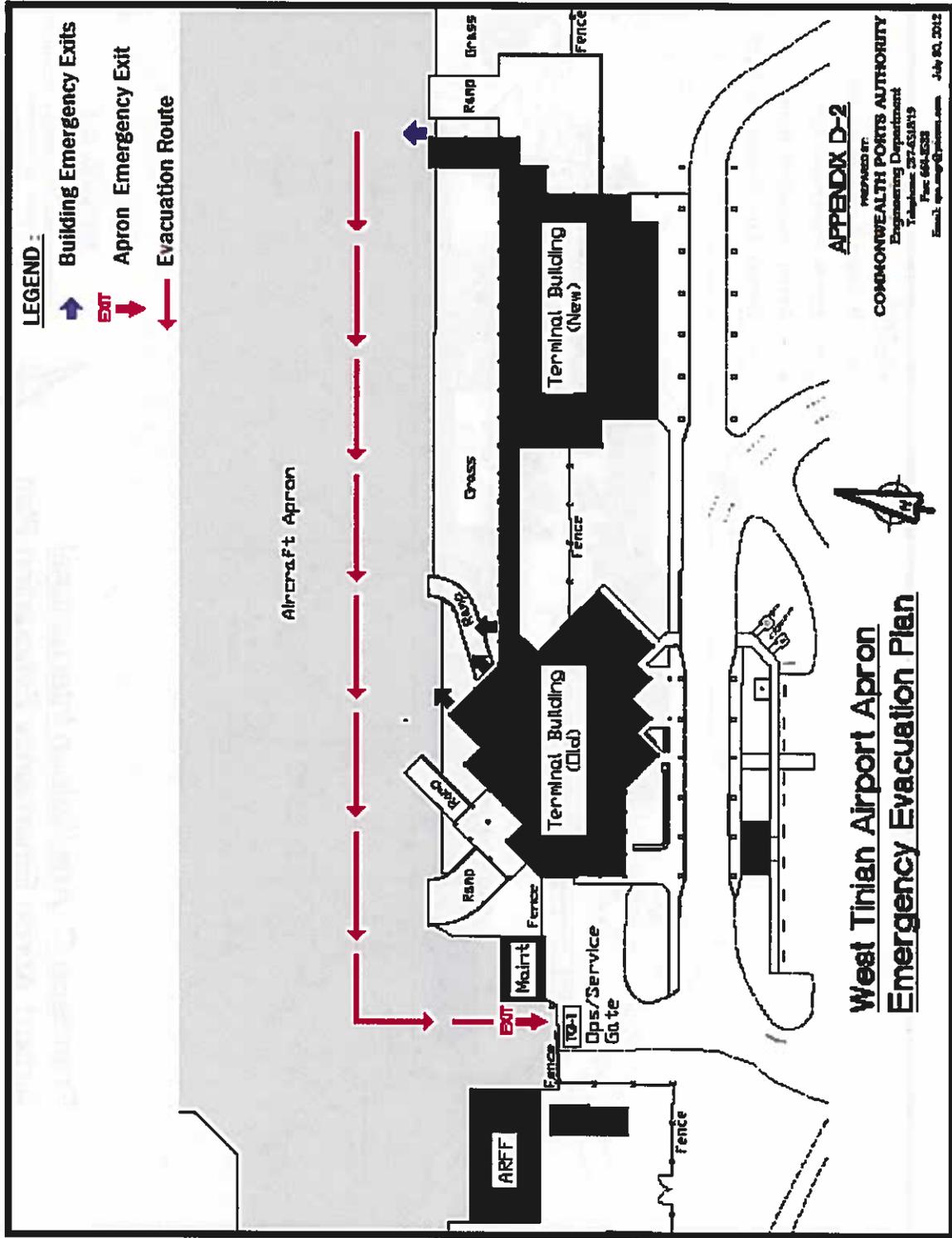
References:

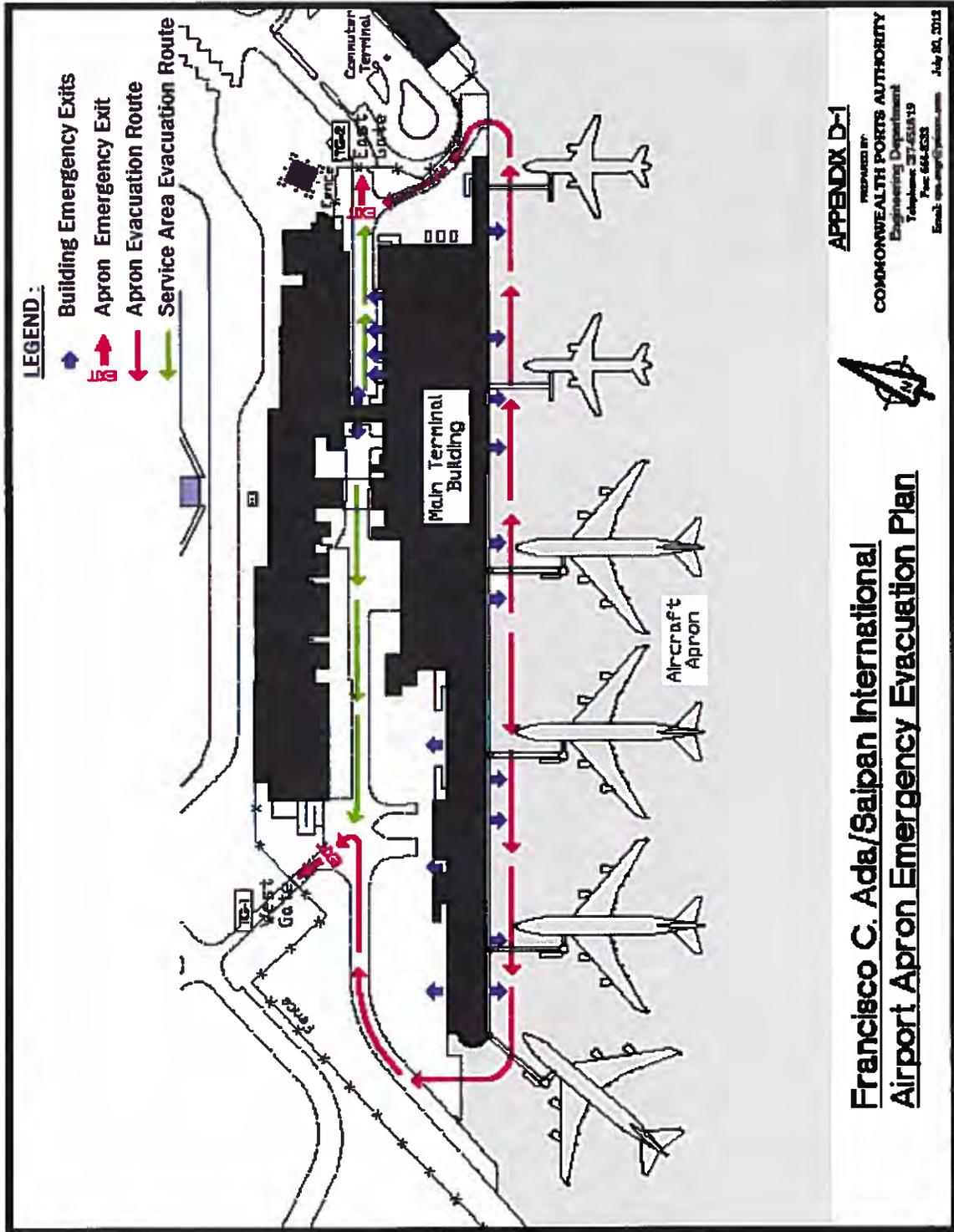
- *NFPA Fire Protection Guide to Hazardous Materials, Emergency Handling of Hazardous Materials in Surface Transportation, Dangerous Properties in Industrial Materials*
- *2008 Emergency Response Guidebook (ERG) CHRIS Manuals*
- *USAF 419th Fighter Wing Emergency Spill Response Plan*
- *USAF 301st Fighter Wing Hydrazine Emergency Response Program*
- *AFPD 91-3, Occupational Safety and Health;*

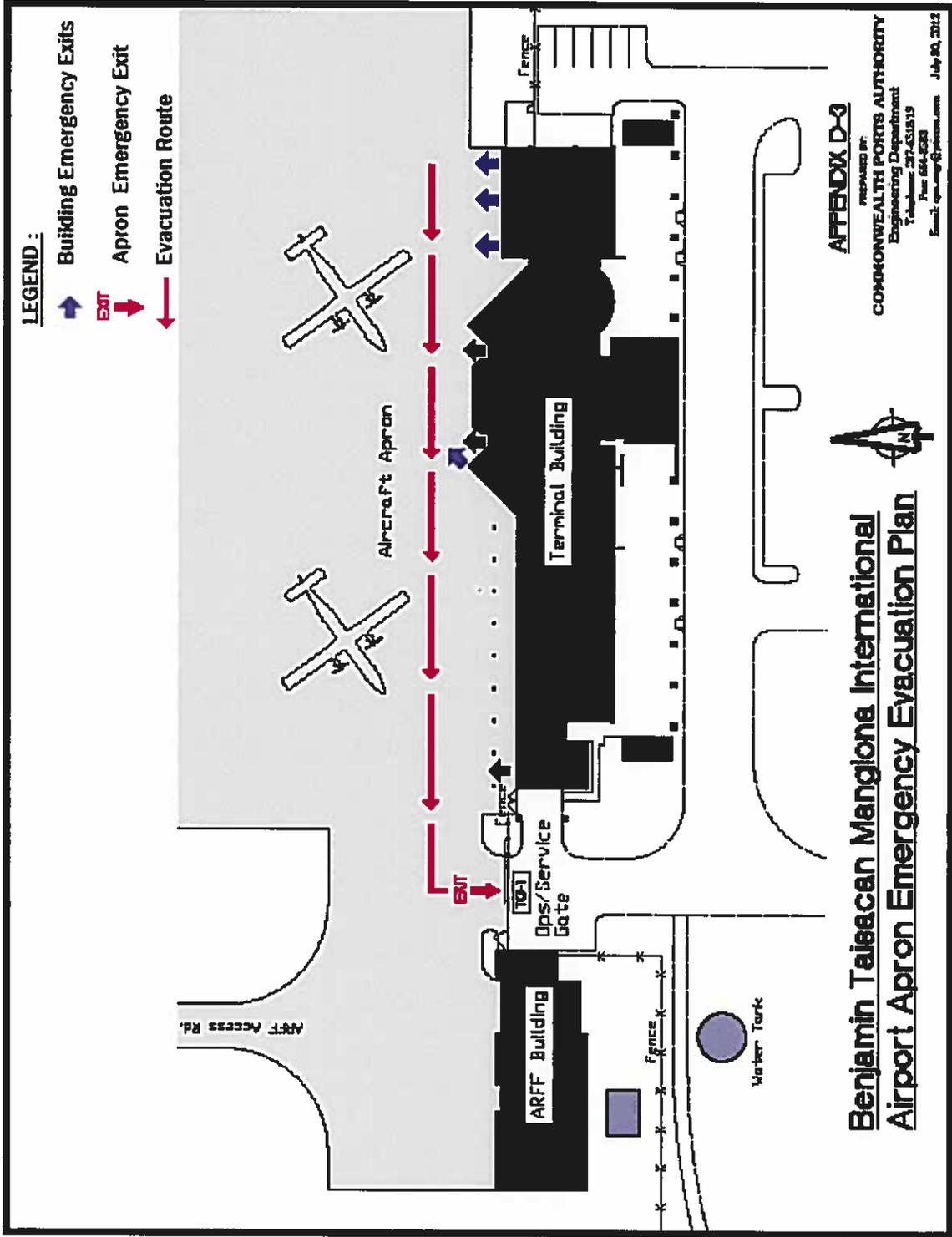
- *AFI 91-301, Air Force Occupational and Environmental Safety, Fire Prevention and Health (AFOSH) Program;*
- *AFMAN 91-201, Explosive Safety Standards;*
- *T.O. 00-25-172, Ground Servicing of Aircraft and Static Grounding/Bonding;*
- *AFOSHSTD 48-137, Respiratory Protection Program;*
- *AFOSHSTD 48-8, Controlling Exposures to Hazardous Materials;*
- *T.O. 1F-16C-2-10JG-00-1, Aircraft Safety;*
- *T.O. 1F-16C-2-49JG-00-2, Emergency Power System;*
- *T.O. 1F-16C-2-49GS-00-1, Emergency Power System;*
- *LCL-419FW-10-6, H-70 Response, (H-70 Spill Check-list);*
- *T.O. 42B1-1-18, Handling of H-70 (Hydrazine - Water Fuel*

APPENDIX D
Apron Evacuation Routes

- ⇒ D-1 Saipan International Airport
- ⇒ D-2 Tinian International Airport
- ⇒ D-3 Benjamin Taisacan Manglona
International Airport (Rota)

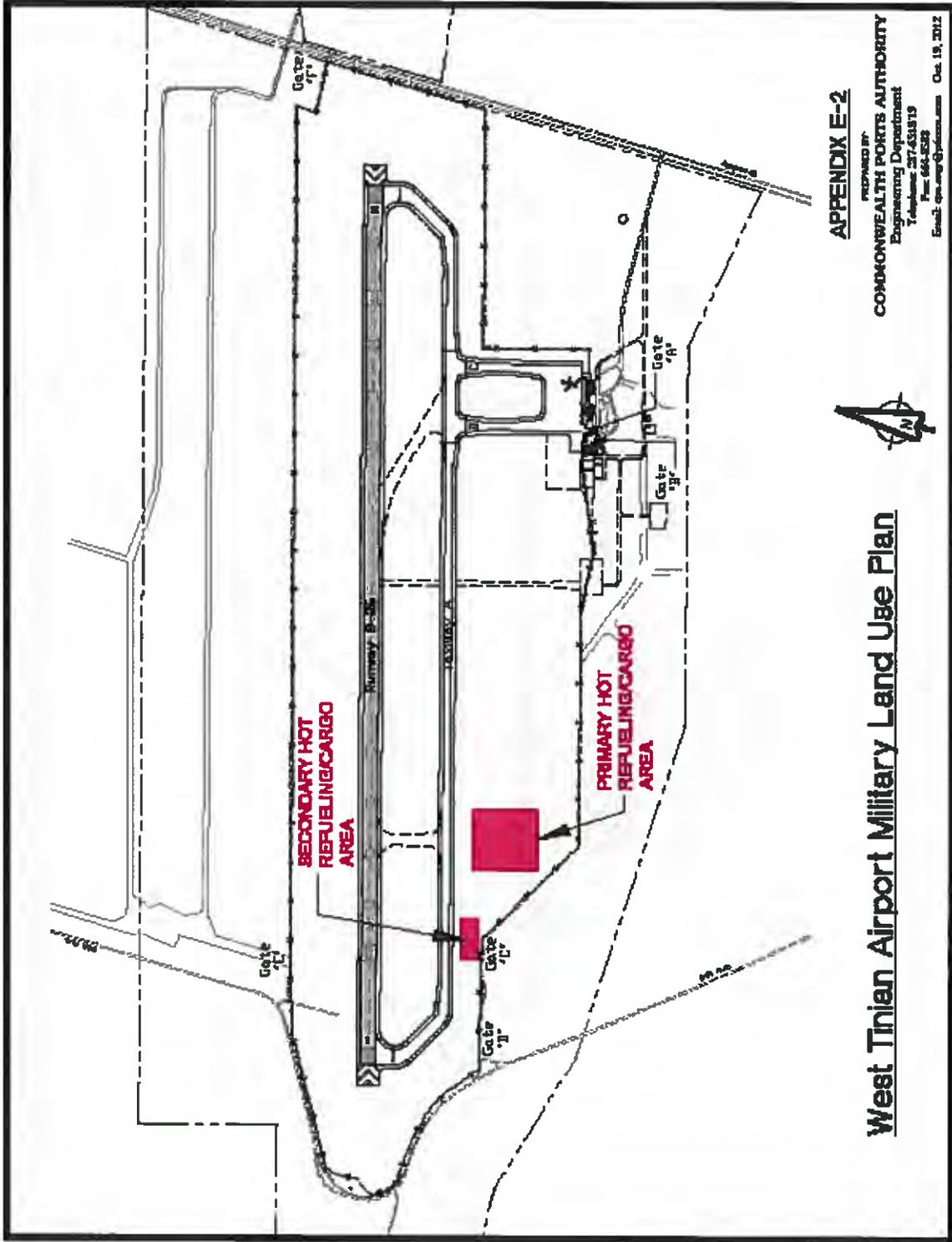






APPENDIX E
Approved Sites for Military Use

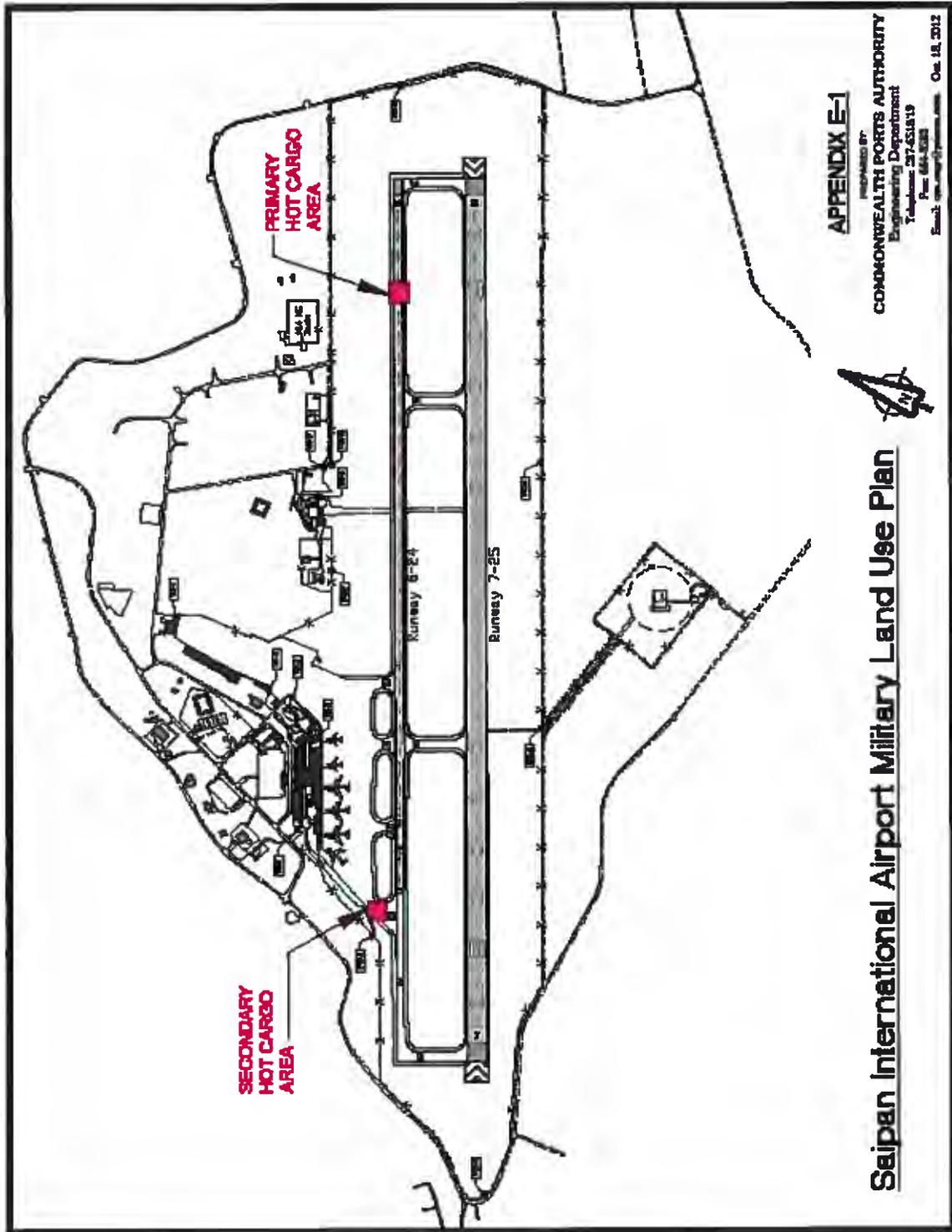
- ⇒ E-1 Saipan International Airport
- ⇒ E-2 Tinian International Airport
- ⇒ Rota Airport - NO HOT CARGO/
REFUELING ALLOWED



APPENDIX E-2
 PREPARED BY:
COMMONWEALTH PORTS AUTHORITY
 Engineering Department
 Telephone: 274-53119
 Fax: 666-5259
 Email: ops.enp@ports.com
 Oct. 18, 2012



West Tinian Airport Military Land Use Plan



APPENDIX E-1
 PREPARED BY:
COMMONWEALTH PORTS AUTHORITY
 Engineering Department
 Telephone: 274-51819
 Fax: 684-6282
 Email: enr@airportauthority.com Oct. 18, 2012



Seipan International Airport Military Land Use Plan

COMMONWEALTH PORTS AUTHORITY MILITARY EXERCISE/OPERATIONS

STANDARD OPERATING PROCEDURES

The following is the Commonwealth Ports Authority's (CPA) standard operating procedures for preparing and planning of military exercises at CPA facilities.

1. Any branch of the U.S. military services planning to conduct exercises/training at a CPA airport must submit its proposed scope of work (SOW) to the airport manager of the proposed airport no later than three (3) weeks prior to the actual exercise/training. SOW from Military should be as detailed as possible and should include, but not limited to the following:
 - a. type of exercise;
 - b. duration, including number of days, frequency of activities per day and exercise hours;
 - c. description of movement/mobilization locations at the airport, whether in or outside restricted and/or safety areas;
 - d. location of staging area, temporary tents, equipment, machinery and signs within the airport properties;
 - e. any other information requested by CPA management.

Should SOW not include the items listed above at a minimum or additional information is required, Airport Manager shall request for additional detailed information from military branch.

2. Once an airport manager receives satisfactory detailed scope of work, it shall immediately be forwarded to the Executive Director for approval, as submitted or with amendments, restrictions and/or conditions prior to any activity at a CPA airport
3. The Executive Director shall notify the Federal Aviation Administration's (FAA) Honolulu ADO of the military's proposed activities at each respective airport. FAA Honolulu will review the SOW and give concurrence/approval and/or comments on the activity. Executive Director will also brief the Board of Directors on the proposed activity once FAA approval is received.
4. After FAA and CPA approval of SOW, CPA Executive Director will transmit to requesting military 1) the CPA Military Exercise Ground Operations Plan, 2) the Implementation Plan and 3) the Acknowledgment Form for Military's review. Military shall return the signed acknowledgment form to CPA Executive Director within fourteen days.
5. No later than two weeks prior to the scheduled exercises/trainings, all military personnel responsible for the activities at CPA airports shall meet with CPA management for a briefing on the proposed activities and the allowable safety areas as well as restricted activities within the safety areas of the airport. By this time, the CPA Military Exercise Ground Operations Plan and Implementation Plan shall be acknowledged to CPA.

6. A week prior to the scheduled approved exercise/training at the CPA airport, involved airport management and/or their authorized representative will conduct a briefing with all airport employees, tenants and users to inform all of the proposed activities at the airport as listed in Item No. 1.
 7. No later than two days prior to any exercise/training at a CPA airport, all military personnel working/assisting with such activities within the safety areas of the airport shall attend a briefing by designated safety officers of CPA. Any military personnel who do not attend such briefing will be restricted from entering the safety areas of the airport.
 8. No approved activities in conjunction with the exercise/training shall commence unless all required documents, agreements and forms are submitted to CPA management with the signature of the responsible party conducting/sponsoring the exercise/training.
 9. Attached acknowledgement form must be completely signed and executed before any military activities/exercises are permitted on any CPA airports.
-

CPA ACKNOWLEDGEMENT:

Jose R. Lifofoi
Chairman of the Board of Directors
Commonwealth Ports Authority

Date: _____

MaryAnn Q. Lizama
Executive Director
Commonwealth Ports Authority

Date: _____

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Comments Summary

The Commonwealth Ports Authority ("CPA") has exclusive jurisdiction to plan, develop, enlarge, and operate the ports of the Commonwealth.¹ This includes the power to enter into contracts, leases, or other agreements granting the privilege to use or improve the ports it operates for terms not to exceed 40 years.² The CJMT EIS/OEIS (hereinafter "draft EIS") is built on several assumptions pertaining to the use of Commonwealth ports currently operated by CPA. If fully implemented, the use of Commonwealth ports as outlined in the draft EIS would cause severe adverse impacts to the islands of Tinian and Saipan. As a responsible steward of its obligation to operate the ports of the Commonwealth, CPA must express its deep concern regarding the paradigm shift for the island of Tinian proposed by the plan outlined in the draft EIS.

This paradigm shift would contain three aspects: (1) the doubling of Tinian's current population for a significant portion of the year; (2) the permanent or temporary closure to civilians of most of the natural wonders and historic sites of Tinian, the foundation of Tinian's tourism-based economy; and (3) the restriction of future activities at and potential or proposed expansions of the ports of Tinian.³ The population of Tinian is approximately 3136. Draft EIS, Appendix Q p. 3-5. The draft EIS proposes a plan that would facilitate up to 3000 military trainees on Tinian at one time. Draft EIS p. 2-34. Training is planned on Tinian for twenty weeks per year but might be extended up to forty-five weeks per year under certain future circumstances (an ambiguity that itself renders the draft EIS inadequate). Draft EIS p. ES 13-14. The proposal calls for approximately ninety-five additional full-time personnel located on Tinian. Draft EIS p. ES-21. While most would rotate in and out, this influx to Tinian would in effect double its population at any one time during military training activities. The draft EIS also details how the military use it proposes would close or limit access to recreational resources on Tinian during military training, including cultural sites and ocean-based recreation, as well as impacting annual festivals — categorizing the cumulative impact of these closures and limits as "significant." Draft EIS p. ES-55-56, 5-41. Finally, the draft EIS proposes military use of the ports of Tinian that would limit their use for civilian purposes. The physical changes it proposes to CPA property at the Tinian International Airport and the Port of Tinian do not take into account current and proposed physical changes to those properties and would limit the potential for future civilian expansion.

All of this is designed for the sole benefit of the United States military. Any benefits to the island and people of Tinian outlined in the draft EIS would be tangential and purchased with the loss of the island's existing character, economy, and culture.

¹ 2 CMC § 2122(b).

² 2 CMC § 2122(e).

³ The draft EIS contains several alternative proposals for unit level range and training areas ("RTAs") on Tinian, including a no-action alternative. Unless otherwise specified, these comments will be on the proposed alternative with the largest impact during the operational phase.

To be clear: CPA does not oppose military training. On the contrary, CPA has been an active participant in regular dialogue with representatives of the Department of Defense in order to find ways to accommodate the needs of our military while also protecting the resources of the Commonwealth. One such option is the proposed "hybrid" plan for improving local airports to increase operational and divert capabilities needed by the Department of Defense, USAF North Option. Such an annual, eight-week operation could be conducted within the confines of existing agreements and the requirements of the CPA Military Exercise Ground Operations Plan and Implementation Plan while having an acceptable impact on Commonwealth resources.

Going beyond this temporary, reasonable, and low-impact usage coordinated with CPA and the people of the CNMI, the plan outlined in the draft EIS raises very considerable concerns with CPA regarding the plan's proposed use of CPA premises, its failure to provide information about the consequences of, alternatives to, and mitigation of such use, and the character-altering socio-economic impacts on Tinian and CPA properties that would result. The specific adverse impacts of greatest concern to CPA are outlined below.

[It is important to note that the preparation of these comments largely predated the landing of Typhoon Soudelor on Tinian and Saipan. At the time of the submission of these comments, the full impact of this devastating storm on the Commonwealth, CPA facilities, and many of the factual underpinnings of the draft EIS is not known. The uncertainties brought about by the impact of Typhoon Soudelor on the future of the CNMI are too amorphous at this time to effectively incorporate into these comments. However, the impact of the storm on the CNMI community is severe and will be felt for some time.]

Adverse Impact #1: Project Development on CPA Properties

Authorization for the proposed significant changes to the Tinian International Airport must flow through CPA in the form of an amended or new lease agreement. In light of (1) the apparent incompatibility between the plan outlined in the draft EIS and continued civilian use of CPA properties and (2) draft EIS's failure to meaningfully address this issue, CPA would have very significant concerns entering into such an agreement. The plan proposed in the draft EIS assumes the availability of CPA property. If implemented, this plan would severely limit civilian operations and budding civilian expansion at the Tinian International Airport in favor of a militarization of the airport with few benefits for CPA and civilian usage. Additionally, the proposed changes to the Port of Tinian do not take into account planned development already in progress and limit the potential for port development and expansion. Draft EIS's assumption of the availability of CPA property and the corresponding displacement of projects congruent with CPA's present trajectory in favor of military use of CPA properties is a formula that, if implemented, would have calamitous consequences for CPA.

TIA: Limit Civilian Operations: A review of the draft EIS Figure 2.4-4 shows that the proposed changes to the Tinian International Airport would limit civilian operations at this one-runway airport. Yet the details within the draft EIS reveal the full extent of this limitation. As part of the planned airfield operations, the draft EIS estimates approximately 9,244 takeoffs and landings of military aircraft per year (or more than

sixty-six per training day) at the Tinian International Airport. Draft EIS p. 2-2, Table 2.4-3. For comparison purposes, Tinian International Airport currently averages approximately ninety-five takeoffs and landings per day.⁴ Most of those flights are with Piper Cherokee Six and Navajo Chieftan propeller craft, as opposed to the transports, fighters, and helicopters contemplated in the draft EIS.⁵ The usage contemplated by the draft EIS goes far beyond that envisioned by the Divert draft EIS for Tinian International Airport of twelve large aircraft, or a combination of large and small aircraft at a 2:1 ratio, for sixty days per year (plus unscheduled/unplanned needs) (Draft EIS for Divert Activities at p. ES-6-7, ES-9) or the "Hybrid" Divert plan of two to four tankers for six to eight weeks per year.⁶ This dramatic expansion of prior proposed uses, which were in themselves contrary to the interests of CPA, is of serious concern to CPA.

The draft EIS bears out how this increased traffic would adversely impact civilian operations at the Tinian International Airport. The airport would in effect be transformed from a civilian airport that could (under the "Hybrid" Divert plan) accommodate military needs, to a military airport requiring procedures to accommodate civilian arrivals and departures. Draft EIS p. ES-62. Moreover, civilian use would experience increased delays, flight times, and costs. Draft EIS p. ES-62. CPA concurs with the draft EIS that these adverse impacts would be "severe." Draft EIS p. ES-62. However, that understatement of the total impact proposed in the draft EIS is profound.

TIA: Limit Budding Civilian Expansion: The Tinian alternatives would require new "[l]ong-term real estate agreements" in "the north portion of Tinian International Airport." Draft EIS p. 2-33. Leasing this land for the use outlined in the draft EIS, combined with the planned base camp and corresponding development on land currently leased to the United States, would severely limit the potential for civilian expansion of the Tinian International Airport and alter budding plans for expansion already in place. Constructing the proposed facilities and using them for up to forty-five weeks per year is categorically different from temporary training missions and establishment of facilities for a divert airfield. Draft EIS p. ES-14. CPA continues to improve the Tinian International Airport facilities and would not wish to limit potential future options for additional improvements. Draft EIS p. 5-8. Under the plan proposed in the draft EIS, conflicts of use between military interests and civilian interests would be resolved in favor of the military, with civilian uses requiring accommodation. Draft EIS p. ES-62. Any expansion for civilian use of the Tinian International Airport, CPA must assume, would ultimately be resolved under the same rubric. The Tinian International Airport is CPA property and is operated for civilian use, not military. The military already has considerable property on Tinian. Ceding control of decision making for future development of property developed locally for civilian use would be contrary to the responsibility CPA owes to the people of the CNMI.

Port of Tinian: Limits on Future Port Development: The draft EIS proposes development on CPA property in areas around the existing boat ramp. Draft EIS p. 2-37, Figure 2.4-5, Appendix O Figure 3.1-6. This is prime CPA property within the Port of Tinian. Both

⁴ Estimate from CPA data on monthly TIQ Aircraft Landings, October 2014-February 2015.

⁵ STAR MARIANAS AIR, INC., <http://www.starmarianasair.com> (last visited April 15, 2015).

⁶ Details taken from handout "Divert Activities and Exercise Initiative ("Hybrid" Divert plan)."

directly and indirectly the plan proposed in the draft EIS would limit future development in and around the Port of Tinian. Current planned development on CPA property includes the Tinian Ocean View Resort, improvements to the passenger terminal area, and extension of the small boat marina. Draft EIS p. 5-10.⁷ This development would likely spur other development in the area of the Port of Tinian, including potential development on CPA land. In addition, this development is predicated on continued access to the on- and off-shore recreational opportunities available on Tinian, many of which would be temporarily or permanently closed off from civilian access by the plan proposed in the draft EIS. Draft EIS p. 5-41.

Further, the draft EIS proposes potential use of the existing boat ramp for military purposes and the use of the main wharf for supply and personnel loading and unloading. Draft EIS Figure 2.4-5, Appendix O p. 3-56-57. This would presumably include the loading of solid waste generated by military activities for transport to Saipan and potentially the unloading of live ammunition (which may, in turn, restrict other activities at the port). Draft EIS p. 4-417, 4-423. Previous military exercises on Tinian consisting of mobilization of 600-800 military personnel caused significant, though tolerable, hardship to port activities, including taking up as much as 85% of available port space for cargo staging during periods of disembarkation and loading. Such use would prevent any other large vessel from docking and unloading at the port. In addition, these areas would be guarded and off-limits, further restricting non-military port operations. Previous use by the military also caused destruction of maintained seaport grounds due to flooding from water used to wash down equipment near the port and accompanying soil erosion, mud, and debris flowing into the port from heavy equipment activities. The plan proposed by the draft EIS would go further than these previous exercises, with port usage increased to support 3000 military personnel at any one time. If implemented, this plan would thus transform the Port of Tinian from a potential zone of economic development based on tourism to a military personnel, supply, and solid waste thoroughfare with limited economic development potential due to limited access to the majority of Tinian's natural attractions.

Financial Impact on CPA: CPA generates a considerable amount of its operating budget from fees collected through the use of its Tinian ports. The direct impact on CPA's financing derived from use of its Tinian ports based on the military operations proposed in the draft EIS is not directly analyzed in that document. In fiscal year 2014, CPA generated \$96,101 in fees from Passenger Facility Charges ("PFCs") and \$79,504 in wharfage fees based on a rate of \$4.50 per enplaning passenger and \$11.40 per revenue

⁷ Unlike most aspects of the plan in the draft EIS for the Port of Tinian, this project includes supplemental improvements for the port and the community of Tinian as opposed to land simply leased from CPA to the military for its use. Draft EIS p. 2-33, 4-156, 5-10. One such improvement, the construction of the new CPA warehouse and office, is situated in the same location as some of the military facilities proposed in the draft EIS. HERMAN B. CABRERA & ASSOCS., TINIAN CPA OFFICE BUILDING NO. 1 LOCATION & VICINITY MAP, PROJECT NO. 2015-01.01 (2015) (attached as Exhibit 1). Improvements to the passenger terminal area and the extended boat ramp are part of the Tinian Harbor master plan. JUAN C. TENORIO & ASSOCS, INC. ET AL., TINIAN HARBOR MASTER PLAN (1997) (attached as Exhibit 2).

ton of cargo through the port.⁸ Supporting documents to draft EIS suppose additional CNMI government revenue due to base operation expenditures, which may potentially include revenue generated through use of Tinian ports in the transport of military equipment, supplies and personnel, but no specifics are given. Draft EIS Appendix Q, p. 5-6, 5-11. However, the draft EIS assumes there will be no changes in the number of annual civilian flight operations at the Tinian International Airport between 2013 and 2040 (draft EIS Appendix O, p. 3-36), and that the total impact of changed flight paths and reduced access to tourism sites on Tinian will reduce the number of annual visitors to Tinian by only 0.8%-1.6% (draft EIS Appendix Q, p. 5-5). Further, the draft EIS predicts "[n]o significant change in the baseline (non-action related) level of port use." Draft EIS Appendix O, p. 3-56. In effect, this predicts a stagnant future for CPA revenues generated through the Tinian ports.

Two Tinian Futures: Current Development v. Development per Draft EIS: Cooperative action between investors and community leaders is on the cusp of fully activating Tinian into the CNMI tourism economy. Three developments are currently in the planning or initial implementation stages: (1) Tinian Dynasty Hotel & Casino proposed ferry service⁹ (draft EIS Appendix O, p. 2-34); (2) Bridge Investment Group's Tinian Ocean View Resort (draft EIS p. 5-10); and (3) Alter City Group's Plumeria Resort.¹⁰ Along with other development in the CNMI tourism economy, these developments are projected by the Marianas Visitors Authority to result in the near doubling of the CNMI's tourism economy from \$1.18 billion in FY'14 to \$3.1 billion annually.¹¹

Two of these developments will provide direct benefit to CPA facilities. The Tinian Ocean View Resort will be on 40,803 square meters of leased CPA property secured by a lease through 2054 to Bridge Investment Group, LLC.¹² It will provide supplemental benefits directly to CPA,¹³ including: (1) a "gross revenue fee...equal to 1% of the gross revenues...collected and earned on the premises" to be paid quarterly; and (2) the relocation and replacement of several port structures, including CPA's office building and

⁸ COMMONWEALTH PORTS AUTHORITY, "OPERATING REVENUES" (2015) (attached as Exhibit 3).

⁹ A development project by Tinian Dynasty Hotel & Casino is also referenced by the Marianas Visitor's Authority in their draft comments on CJMT Draft EIS. MARIANAS VISITORS AUTHORITY, COMMENTS ON DRAFT EIS (DRAFT) 6 (2015) ("Choosing the EIS No-Action alternative would likely cause TDH&C to move forward with their nine (9) figure project.").

¹⁰ ALTER CITY GROUP, PUBLIC COMMENT BY ALTER CITY GROUP, INC. 2 (2015). This project is omitted from the "Present and Reasonably Forseeable Actions" for Tinian in the draft EIS. Draft EIS p. 5-8 -11, Table 5.2-5.

¹¹ MARIANAS VISITORS AUTHORITY, COMMENTS ON DRAFT EIS (DRAFT) 3 (2015).

¹² COMMONWEALTH PORTS AUTHORITY AND BRIDGE INVESTMENT GROUP, LLC, LEASE AGREEMENT 4 (2014) (attached as Exhibit 7).

¹³ Moneth G. Deposa, *Bridge Investment Justifies Lease Agreement with CPA*, SAIPAN TRIBUNE, June 13, 2014, <http://www.saipantribune.com/index.php/bridge-investment-justifies-lease-agreement-cpa/> (quoting Bridge Investment Group Executive Director Phillip Mendiola-Long on commitments by Bridge Investment Group to CPA included in its lease agreement, including construction of two new port warehouses and an office building); *see supra* n. vii.

Tinian Marine Stevedore, Inc.¹⁴ More substantially, Alter City Group¹⁵ has: (1) requested a long-term lease of airport property from CPA to facilitate its proposed villas, golf course, and equestrian center;¹⁶ (2) pledged \$5 million to CPA for improvements to its Tinian facilities;¹⁷ (3) committed to working with CPA to open direct international flights to Tinian;¹⁸ and (4) requested berthing space at the Port of Saipan and the Port of Tinian to dock and moor a passenger vessel used in a planned ferry service between the islands.¹⁹ Alter City Group has repeatedly expressed its commitment to assist CPA with its infrastructure needs to facilitate its resort project.²⁰ Based on projections by the Marianas Visitors Authority on the impact of these projects on the total number of annual visitors to Tinian,²¹ PFCs raised from the increase in enplaning passengers and wharfage fees raised from the consumables shipped to the Port of Tinian to service them could amount to millions of dollars of new CPA revenue, which could be used to further improve CPA facilities and enhance the tourism-based economy.

CPA is currently playing an active role in preparations for these projects' full implementation. For example, substantial, civilian-based changes to the Tinian

¹⁴ COMMONWEALTH PORTS AUTHORITY AND BRIDGE INVESTMENT GROUP, LLC, LEASE AGREEMENT 6, 30 (2014) (attached as Exhibit 7).

¹⁵ In addition to these commitments, Alter City Group has also pledged to contribute funding for relocation of a Tinian solid waste dumpsite. ALTER CITY GROUP, PUBLIC COMMENT BY ALTER CITY GROUP, INC. 3 (2015). In contrast, the plan proposed in the draft EIS depends on shipping solid waste off Tinian through the Port of Tinian. *See infra* Adverse Impact #7.

¹⁶ EDVON SZE, LETTER FROM ALTER CITY GROUP EXPRESSING INTEREST IN LEASE OF CPA AIRPORT PROPERTY (2015) (attached as Exhibit 8 - ACG Letters); KEN T. LIN, LETTER FROM ALTER CITY GROUP REQUESTING LEASE OF CPA AIRPORT PROPERTY WITH DETAILS 1 (2015) (attached as Exhibit 8 - ACG Letters); *see* ALTER CITY GROUP, PUBLIC COMMENT BY ALTER CITY GROUP, INC. 3 (2015).

¹⁷ *Id.* at 3.

¹⁸ *Id.* at 4; Alexie Villegas Zotomayor, *Alter City Group to Work with CPA in Bringing Direct Flights*, MARIANAS VARIETY, Sept. 28, 2014, <http://www.mvariety.com/cnmi/cnmi-news/local/69569-alter-city-group-to-work-with-cpa-in-bringing-direct-flights> ("[Alter City Group Executive Vice President Ken] Lin said they will do whatever is required to bring direct flights.").

¹⁹ KEN T. LIN, LETTER FROM ALTER CITY GROUP REQUESTING BERTHING SPACE FOR TINIAN-Saipan FERRY (2015) (attached as Exhibit 8 - ACG Letters).

²⁰ *See, e.g.*, ALTER CITY GROUP, PUBLIC COMMENT BY ALTER CITY GROUP, INC. 3 (2015) (pledge of \$5 million to CPA for improvement of facilities); KEN T. LIN, LETTER FROM ALTER CITY GROUP REQUESTING INFORMATION FOR FERRY SERVICES (2015) (attached as Exhibit 8 - ACG Letters) ("Alter City Group Inc. is committed to assisting CPA with its infrastructure needs between Saipan and Inian so that we are able to meet the required transportation needs of the Plumeria Resort").

²¹ Marianas Visitors Authority projects that the total number of visitors to Tinian would increase from 65,992 to 474,792 annual visitors upon the completion of these projects, based on the annual visitors needed to Tinian to fill the projected hotel rooms available on Tinian at 80% capacity. MARIANAS VISITORS AUTHORITY, COMMENTS ON DRAFT EIS (DRAFT) 3 (2015).

International Airport that do not contemplate the military use proposed in the draft EIS²² but do contemplate future expanded civilian use is planned by CPA.²³ Business requests for permission to develop additional hangar facilities at the Tinian airport are also currently under review.²⁴ CPA is also undertaking an assessment of the Tinian Harbor in cooperation with the U.S. Army Corps of Engineers in advance of potential future uses, including a small craft entrance analysis.²⁵

In contrast, implementation of the plan proposed in the draft EIS would likely cut short the three developments discussed above.²⁶ Rather than a vibrant tourism economy built on appreciation of the natural wonders of Tinian through cooperation of local government and private interests,²⁷ development on Tinian as outlined in the draft EIS would be military-focused and nearly military-exclusive. It would also have a direct degrading effect on CPA's planned development and infrastructure.²⁸

In addition, the financial impact on CPA is difficult to quantify but certain to be significant. No commitment is made for the payment of wharfage fees or enplanement fees to CPA due to military activities proposed in the draft EIS, beyond suppositions or references to future negotiations.²⁹ Rather than new tourists (and the consumables

²² This planned ALP allows for continued periodic use of the Tinian International Airport by the military, as has been accommodated in the past, but does not plan for any military facilities or infrastructure.

²³ Some of these improvements are included in an updated ALP. COMMONWEALTH PORTS AUTHORITY, WEST TINIAN AIRPORT: AIRPORT LAYOUT PLAN (ALP), LAND USE AND PROPERTY MAP DRAWING (2012) (included as Exhibit 6). Improvements to the terminal are already approved and slated for completion in March of 2016. COMMONWEALTH PORTS AUTHORITY, TIA TERMINAL IMPROVEMENTS PROJECT SUMMARY (2015) (included as Exhibit 5).

²⁴ SHAUN R. CHRISTIAN, LETTER FROM STAR MARIANAS REQUESTING A LAND USE AGREEMENT AT THE TINIAN INTERNATIONAL AIRPORT TO CONSTRUCT A 10,000 SQUARE FOOT HANGAR (2014) (included as Exhibit 4).

²⁵ MILTON YOSHIMOTO, LETTER FROM CORPS OF ENGINEERS TO CPA REGARDING PLANNING FOR THE TINIAN HARBOR ASSESSMENT STUDY (AND ENCLOSURES) (2014) (attached as Exhibit 9).

²⁶ See generally ALTER CITY GROUP, PUBLIC COMMENTS BY ALTER CITY GROUP, INC. 2 (2015) ("The DEIS now seeks to militarize Tinian, driving out investors, and cutting economic development off at its knees."); MARIANAS VISITORS AUTHORITY, COMMENTS ON DRAFT EIS (DRAFT) 3 (2015) ("To say that tourism will be destroyed on Tinian island if the US military forces a live fire training facility on the population there is a strong statement, but a true one.").

²⁷ See, e.g., Alexie Villegas Zotomayor, *Alter City Raises Budget to \$1.2B*, MARIANAS VARIETY, May 4, 2015, <http://www.mvariety.com/cnmi/cnmi-news/local/76460-alter-city-raises-budget-to-1-2b>.

²⁸ CPA's additional assessment of the economic and cultural impact to the island is detailed in the remainder of these comments, along with CPA's assessment of the impact on CPA's facilities.

²⁹ The draft EIS indicates that additional direct payments by the U.S. government to the CNMI government may be negotiated into land acquisition or lease agreements necessary to implement the plan proposed in the draft EIS. Draft EIS Appendix Q, p. 5-11. This may include payments to CPA to compensate for facility usage akin to PFCs and wharfage fees, but this is not made clear in the draft EIS. As in this example, the draft EIS contains throughout a handful of vague promises to consider problems like this in future negotiations or decision-making processes. That is not sufficient. NEPA requires the Navy to identify, evaluate, and mitigate all reasonably

necessary to serve these new tourists) coming through the ports of Tinian and generating revenue for CPA, Tinian would see only the transport of military personnel, equipment and materials for each training cycle arriving through her ports. Draft EIS p. 4-398. In addition, solid waste generated as a result of military activities would also flow through the Port of Tinian. Draft EIS 4-417, 4-423. Meanwhile, maintenance costs for the only shared-use airport facility, the airport runway, would increase. Draft EIS p. 4-393; 5-64. Commitments for civilian-use improvements of CPA facilities would be lost. Opportunities for expansion of the Tinian International Airport to allow international flights directly to Tinian would disappear. In all, the draft EIS's predictions of zero future growth of Tinian International Airport civilian flight operations and Port of Tinian civilian usage, once the plan it proposes is implemented, would likely come to pass.

Recommendation: No-Action Alternative: CPA has great concerns regarding the proposed changes for CPA facilities in the draft EIS beyond the no-action alternative. CPA has worked with the military in the past, accommodating several short-term military operations on Tinian that utilized CPA properties. The working relationship between military and civilian demands on CPA facilities during these short-term operations was less than ideal, but was tolerable. Based on this experience, expansion of military activities at CPA facilities to twenty to forty weeks per year would be unworkable and incompatible with CPA's mission. Under the no-action alternative, rather than making permanent additions, the military could continue to use existing airport facilities under the terms of existing agreements or through the CPA Military Exercise Ground Operations Plan and Implementation Plan. Meanwhile, CPA would continue to participate in the dialogue with the military, the FAA, and other participating organizations in the potential development of divert landing facilities along the lines of the proposed "Hybrid" Divert plan, USAF North Option. The no-action alternative would also eliminate encumbrances on future seaport development. Draft EIS p. 4-403.

Adverse Impact #2: Impact on Commercial Airline Traffic

The draft EIS inadequately addresses the impact of the plan it proposes on commercial airline traffic. The draft EIS admits that the airspace restrictions it contemplates, which are necessary for the live-fire ground-based and air-based exercises it includes, will result in increased costs and delays in arrivals and departures for air taxi traffic between Saipan and Tinian. It is less clear on the overall impact of full implementation of the restricted airspace on the now-increasing flow of large commercial flights into Saipan International Airport. It also does not consider the future expansion in commercial air activities for Tinian International Airport. The draft EIS also lacks any analysis of the continued economic viability of air taxi service between Tinian and Saipan when airspace between the two islands is restricted for over a third of the days of the year. These gaps in the analysis of the draft EIS are critical to CPA, its mission, and its revenue. The absence within the draft EIS of demonstrated data and assurances that existing and planned future

forseeable environmental impacts — including impacts on CPA's maintenance and capital improvement capabilities — in the EIS.

business models based on existing commercial traffic patterns would be preserved is of great concern to CPA.

Restricted Airspace: Draft EIS Figures 2.4-18 and 2.4-19 display the proposed restricted airspace for all Tinian alternatives. "The boundaries of each Restricted Area are based on the minimum airspace needed to ensure the safety of non-participating aircraft during different phases of military training." Draft EIS p. 2-87. The largest of these zones, Restricted Area 7203 West, could be activated independently as needed for live fire training, as opposed to the Notices to Airman process, for up to 140 days per year. Draft EIS p. 2-87. This introduces unpredictability to civilian air traffic from Saipan to Tinian and into Saipan International Airport. The other zones could be activated for between 135-140 days per year. Draft EIS p. 2-87. This adverse impact is rated as "severe" by the draft EIS, which further presumes that these impacts can be mitigated to "less severe" through increased communications, tracking, and coordinated procedures. Draft EIS at ES-62. Yet the restricted airspace would still result in delays in departures and arrivals at the Tinian International Airport, rerouting of flight paths of commuter flight traffic, and increased flight times and fuel costs. Draft EIS at ES-62. The draft EIS further does not take into account the historical impact of inclement weather on the safest route for air taxi service between Saipan and Tinian and whether those paths go through restricted areas. Lastly, the draft EIS does not provide data to demonstrate that its proposed mitigation efforts would be effective. These restrictions are of paramount concern to CPA.

Combined Effect of Restricted Airspace and Limits on Civilian Operations: The draft EIS fails to address the effect the plan it proposes would have on the continued economic viability of commuter/air taxi service to Tinian. The draft EIS estimates that the plan it proposes for airport operations would result in only a 0.08-0.22% percent decrease in Tinian visitors. Draft EIS, Appendix Q at 5.2-1. Air taxi service is the only widely available commercial mode of transportation between Tinian and Saipan. This civilian traffic also generates revenue for Tinian International Airport's operation.³⁰ Should this service no longer become economically viable due to increased costs and the average CNMI resident's inability to pay the resulting increased fare, the island of Tinian would become effectively cut off from the remainder of the CNMI. Given that 94% of operations at the Tinian International Airport at present are air taxi operations, the elimination of air taxi service due to a changed marketplace as a result of the plan proposed in the draft EIS would make Tinian International Airport a military airport in all but name. Draft EIS p. 3-258. It would also limit any potential future expansion due to costs and travel time, thereby affecting the growth of the tourism-based economy on the island.

Recommendation: No-Action Alternative. Pursuing the no-action alternative with regard to manipulations of the airspace over and around Tinian in order to accommodate only limited periodic training exercises would address many of CPA's concerns in this area. Draft EIS p. ES-22. Procedures in existence to manage aircraft operations in these military maneuvers at Tinian North Field would continue. Draft EIS p. ES-63.

³⁰ Tinian International Airport aviation revenues were \$242,197 for FY 2013, \$201,601 for FY 2014, and \$164,931 for FY 2015 as of 7/20/15. COMMONWEALTH PORTS AUTHORITY, "OPERATING REVENUES" (2015) (attached as Exhibit 3).

Adverse Impact #3: Impact on Tinian Seaport - Closure of Ocean Access

The draft EIS inadequately defines when designated "danger zones" in the seaspace around Tinian would be closed to the public for live-fire exercises. This issue should be dealt with upfront and in a clear and detailed manner in any plan proposing seaspace closures for this community closely connected to ocean use.

If seaspace closures correspond with closures of restricted airspace, then closure of seaspace around Tinian could be for up to 140 days per year. Draft EIS 2-87. Such closures would exacerbate travel difficulties between the Ports of Saipan and Tinian and drastically limit commercial shipping and other potential economic development on Tinian and surrounding waters. It would also frustrate fishing activities off Tinian as well as other scientific, economic, and recreational use of that seaspace.

Hampered Sea Travel Between Tinian and Saipan: The closure of seaspace areas around Tinian designated as "danger zones" would increase the time and expense of travel between the Port of Saipan and the Port of Tinian. Draft EIS Figure 2.4-20. Since Restricted Area 7203 West could be "activated as needed for live-fire training," safe sea travel would likely have to divert around it for the up to 140 days per year it could be activated. Draft EIS p. 2-87. Cargo and larger transport vessels would have to deviate from the traditional shipping pattern of a distance of a mile off shore. Draft EIS p. 3-227, Appendix O p. 4-3 ("The DZs of the proposed training ranges have the potential to disrupt existing marine traffic patterns by excluding vessels from waters used as regular shipping lanes."). The draft EIS categorizes this impact as "intermittent," "less than significant impact," and even "low," and predicts it can be mitigated by scheduling. Draft EIS p. 4-399, ES-58, Appendix Q p. 5-17. However, given the quality of existing shipping stock, the current constraints on shipping due to cost concerns, and the dependence of the Tinian community on cargo shipments from the Port of Saipan to the Port of Tinian, the adverse impact of this aspect of the plan proposed in the draft EIS is qualitatively higher. Draft EIS Appendix O, p. 2-34. Its quantitative impact is not directly addressed by the draft EIS. Draft EIS Appendix O p. 3-58 ("The severity of the impact of the closed DZs is dependent on the frequency and length of closures, which have not been determined."). Any potential future passenger ferry system, such as the one proposed by the Tinian Dynasty, would be similarly adversely impacted. Draft EIS Appendix O, p. 2-34.

Fishing, Scientific, and Recreational Limitations: The closure to ocean access for commercial traffic between the Port of Saipan and the Port of Tinian caused by the "danger zones" would have an even greater impact on local fishing, scientific, and recreational use of these waters. The CNMI is a federally recognized fishing community,³¹ meaning it is "a community which is substantially dependent on or

³¹ Fisheries Off West Coast States and in the Western Pacific; Pelagic Fisheries, Amendment 8; Crustacean Fisheries, Amendment 10; Bottomfish and Seamount Groundfish Fisheries, Amendment 6; Precious Corals Fisheries, Amendment 4, 64 Fed. Reg. 19067 (Apr. 19, 1999) (to be codified at 50 C.F.R. pt. 660).

substantially engaged in the harvest or processing of fishery resources to meet social and economic needs."³² Fisheries management is community-based, with "social and cultural ties to fishing remain[ing] strong for both indigenous peoples of the CNMI and immigrants."³³ Fishing is already restrained in the waters around the islands of the CNMI for sustainability purposes.³⁴ Further restrictions of up to 140 days a year in the waters covered by the "danger zones" would have a significant adverse impact on this essential part of life to many in the CNMI. CPA anticipates this impact would be greater than the "less than a significant impact" estimated by the draft EIS. Draft EIS p. 4-447, ES-57.

Similar impacts would occur in scientific research in the "danger zones." There is significant and active study of and preservation activities focused on the natural wonders in the waters around the islands of the CNMI. One fixed example of this activity is a Fish Aggregating Device ("FAD") maintained by the CNMI Division of Fish and Wildlife as part of its fisheries conservation and management program that appears to be in Restricted Area 7203 West.³⁵ The draft EIS does not take into account the potential adverse effects of the closure of the "danger zones" for up to 140 days per year on these scientific and research activities.

Tourism is a driving element of the Tinian Economy and an important part of CPA's public facilities. Tourists enter Tinian through CPA's ports, so it has a vital interest in facilitating this industry. The adverse impact to the tourism industry of the proposals outlined by the draft EIS would have a dramatic negative effect on the tourism industry by instituting a paradigm shift in the recreational opportunities available on Tinian. The draft EIS lays out limitations to access of historical sites and points of interest, the effect on annual festivals, and the closure of ocean-based recreational resources, each of which it characterizes as significant impacts. Draft EIS p. 5-41. Regarding ocean access, of primary importance to CPA is the impact to location-specific ocean-based recreational resources, namely dive locations. The "danger zones" would do more than close or limit access to a significant part of the ocean immediately around Tinian, it would close access to dive sites including Dump Coke North and South, the Tinian Grotto, and Fleming Point. Draft EIS p. 4-178. Their locations within Restricted Areas 7203 A and B would close them off for up to 140 days per year from 7:00 AM-10:00 PM. Draft EIS p. 2-87. The draft EIS proposes no mitigation possibilities for this rated "significant impact." Draft EIS p. 4-178.

Recommendation: No-Action Alternative: CPA has concerns regarding the draft EIS as proposed beyond the no-action alternative because it otherwise fails to preserve access to seaspace around Tinian. The no-action alternative would limit adverse effects of military

³² Sustainable Fisheries Act, 16 U.S.C § 1802(17) (2012).

³³ Stewart D. Allen and Judith R. Amesbury, Commonwealth of the Northern Mariana Islands as a Fishing Community 3, 80 (NOAA Technical Memorandum NMFS-PIFSC-36) (November 2012), available at

http://www.pifsc.noaa.gov/library/pubs/tech/NOAA_Tech_Memo_PIFSC_36.pdf.

³⁴ *Marine Protected Areas*, CNMI Division of Fish and Wildlife, <http://www.cnmi-dfw.com/marine-protected-areas.php> (last visited Apr. 16, 2015).

³⁵ *Fisheries Conservation and Management*, CNMI Division of Fish and Wildlife, <http://www.cnmi-dfw.com/fisheries.php> (last visited Apr. 16, 2015).

exercises on recreational activities to a minimum and within the current Military Lease Area. Draft EIS p. 4-53, 4-182. It would also eliminate impacts to seaport transportation. Draft EIS p. 4-403.

Adverse Impact #4: Impact on the Tinian Community

The plan proposed in the draft EIS would radically alter life on Tinian for the foreseeable future. It would essentially transform this quiet island into a military complex. It would change its economy from a growing tourism-based economy to an economy wholly dependent on the military presence. It would limit cultural activities and access to popular local and tourist destinations, making their use dependent on the schedule of the military. Based on prior examples, this complete overhaul of what it is like to live and work on Tinian would ultimately lead to friction between the local population of Tinian and their military neighbors.

Economic Impact: The economic impact of the plan proposed in the draft EIS is difficult to categorize. In fact the draft EIS only superficially addresses its breadth and depth. How will the doubling of the population of Tinian with military personnel over significant portions of every year affect the economy and existing population of the island? This is likely a difficult question to answer, but one that is critical when exploring the potential effects of this plan on this human environment, which is the goal of an EIS.

Some indicators of the overall economic impact have previously been discussed. Cultural and recreational sights will be closed or have limited access for a third of the year or longer, likely decimating a tourism economy that is based on access to these natural wonders. Interference with transportation to and from Tinian would result in increased costs and travel times, perhaps changing access to the market for such alternatives, and even further undercutting tourism. Noise pollution from military activities would further limit enjoyment of the remaining accessible recreational activities. Draft EIS p. ES-52, -54.

Yet the socioeconomic study accompanying the draft EIS, in summarizing its findings, determines that "with the proposed action on Tinian, population would increase and economic impacts would be beneficial." Draft EIS, Appendix Q p. 5-1. It goes on to examine quantitative projections of population change, changes in tourism, changes in GDP based on new expenditures on Tinian for construction and maintenance of the military base and by construction and military personnel, base and construction jobs, agricultural changes, and changes in public services. Draft EIS, Appendix Q p. 5-6-22.

What it does not explore is the effects of changes to the Tinian economy on the typical current resident of Tinian. What existing businesses will fail, and where will those employed in them find new employment? What are the opportunity costs on casino & resort, tourism, and agricultural development on Tinian? Would local travel between islands be subsidized due to increased operational costs caused by danger zones and restricted areas? Military personnel will have one day of liberty every training cycle to

"go into town" and spend their money.³⁶ Draft EIS, Appendix O p. 3-13, Appendix Q p. 5-6. What goods and services will this new money be spent on? What new businesses will rise to service the military personnel on liberty? Most importantly, will the purchasing power of current Tinian residents remain stable given the influx of new capital into the economy? The draft EIS provides a generally positive outlook for the new Tinian economy as a whole, but leaves these considerable questions unanswered.

History provides some insight to these questions. In the early 1940s the United States military bought two-thirds of the land on Vieques, a small island off of Puerto Rico with a 1940 population of just over 10,000. The land was used for military training, to the exclusion of the existing population. What followed the purchase of the land was a boom in employment driven by military construction which compensated for the loss of the prior industry on the island.³⁷ However, "[w]hen construction stopped and employment declined, Vieques was overtaken by economic crisis."³⁸ The economy transitioned to one dependant on the military, an economy "geared to providing services for the U.S. troops stationed on the island."³⁹ This economic change included "the proliferation of bars, restaurants, hostels" and "the closure of rural stores where viequenses had previously purchased their food."⁴⁰ A similar transition may occur in Tinian, but the level of change is unknown as this type of analysis is absent in the draft EIS.

Cultural Impact: Potential economic changes based on the influx of military personnel could exacerbate the cultural impact of the planned use of land and sea proposed in the draft EIS. As previously discussed, cultural and historical sites and two-thirds of the island as a whole would be closed or available only on a limited basis during periods of active training. Local festivals would also be significantly impacted, requiring mitigation through adjusted scheduling. Limited access to ocean-based recreational activities and access to large parts of the ocean surrounding Tinian would be an additional blow to the current culture of Tinian. Most importantly, a community that is connected to the respectful use and enjoyment of its land would be transformed to one where the first priority for land use was military training.

Inevitable Friction: The plan proposed in the draft EIS would likely lead to friction between the current population of Tinian and the military over the cultural and economic consequences resulting from its presence on the island. This happened on Tinian in the 1970s and has happened with other island communities where the tension between military preparedness and local cultural concerns became a part of the culture of the island itself. In Hawaii, tension over the military's use of Kahoolawe Island led to protests and litigation over the continued bombing of the island.⁴¹ Prior to more recent

³⁶ Assuming a two-week training cycle, and approximately 1500 trainees per cycle, this would result in over 100 trainees per day going "into town."

³⁷ Cesar J. Ayala, *From Sugar Plantations to Military Bases: The U.S. Navy's Expropriations in Vieques, 1940-45*, Centro J. Vol. XIII No. 1, 33 (2001).

³⁸ *Id.* at 37.

³⁹ *Id.* at 24-25.

⁴⁰ *Id.* at 24.

⁴¹ *History*, Protect Kaho'olawe 'Ohana, <http://www.protectkahoalaweohana.org> (last visited Apr. 17, 2015).

tensions, the military presence in Vieques was contested by local fisherman looking to fish in traditional areas kept off-limits by the military.⁴² The rhetoric in such situations can quickly escalate.⁴³ The changes in cultural attitudes that such friction creates can live on as a part of the culture after the conflict itself has come to an end.⁴⁴ Elements of this friction are already present in the debate on the current pivot of United States military forces to the Pacific and the plan proposed in this draft EIS.⁴⁵ This type of conflict between the people of Tinian and the military that protects them should not be allowed to become a fixture of Tinian and Commonwealth culture. The formation of the Commonwealth involved mutual sacrifice on the part of the United States and the people of the Northern Mariana Islands on the issue of lands reserved for military use.⁴⁶ That compromise should be respected. CPA firmly believes that alterations to this compromise should be mutually agreed upon before they are implemented.

Recommendation: No-Action Alternative: Beyond the no-action alternative, the plan proposed in the draft EIS would categorically alter life on Tinian. The draft EIS fails to address critical issues of how the plan it proposes would affect the typical current Tinian resident. Use of areas beyond the current Military Lease Area is of concern to CPA. Any expansion of property use by the military in the CNMI should be on terms that are mutually agreed upon by representatives from the Commonwealth and the Department of Defense.

⁴² James D. Hessman, Op-Ed., *Vieques Serves Navy Units as 'University of the Sea,'* James D. Hessman, V.I. DAILY NEWS, Nov. 20, 1979, at 23, available at <https://news.google.com/newspapers?nid=757&dat=19791120&id=zexLAAAIBAJ&sjid=v60DAAAIBAJ&pg=6101,2922968&hl=en>.

⁴³ For example, in Vieques fisherman claimed the military was "violating their human rights" while supporters of the military presence claimed bowing to the wishes of the fisherman would be "its greatest loss of combat capability since the bloody defeats inflicted by Japanese in early days of World War II." *Id.*

⁴⁴ Brent Harold, *Unpretentious Vieques, an Island in Transition*, BOSTON GLOBE, Jan. 7, 2007, available at http://www.boston.com/travel/getaways/caribbean/articles/2007/01/07/unpretentious_vieques_an_island_in_transition/.

⁴⁵ Leevin T. Camacho, *Poison in Our Waters: A Brief Overview of the Proposed Militarization of Guam and the Commonwealth of the Northern Mariana Islands*, ASIA-PACIFIC J., Vol. 11, Issue 51, No. 1 (Dec. 23, 2013), available at <http://japanfocus.org/-Leevin-Camacho/4050>.

⁴⁶ NMI Covenant §§ 802 & 806 (48 U.S.C. § 1801 note).

Adverse Impact #5: Physical Changes on CPA Properties

The draft EIS is based on the assumption of the availability of CPA property for lease to the military. This assumption is made in error. Under the plan proposed in the draft EIS, several physical changes would come to the CPA property it assumes will be leased. Yet many of these changes would be for military use only and would hinder CPA's mission. Further, the plan offers little in improvements to CPA properties that would provide benefit to CPA and civilian use of CPA's facilities.

What the Plan Will Do: The plan proposed in the draft EIS will make several physical changes to the facilities at Tinian International Airport. Draft EIS p. 2-37, Figure 2.4-4. Other than the painting of the runway to replicate aircraft carrier conditions at sea, and perhaps elevating the security fence around the airport, these changes would be used only by the military. Draft EIS p. 2-37, Figure 2.4-4, Appendix O p. 3-55. The draft EIS's accompanying Transportation Study recommends additional runway lighting changes that may be available for civilian use. Draft EIS, Appendix O p. 3-55. Meanwhile, all military flights will takeoff and land on the existing runway. Draft EIS Figure 2.4-4, Appendix O p. 3-47. Only a small number of pre-deployment and post-deployment military personnel would potentially embark and disembark from the CPA terminal. Draft EIS, Appendix O p. 3-53.

Meanwhile, the plan lacks clarity on what if any changes to the Port of Tinian land leased to the military would be available for civilian use. Draft EIS p. 2-37, Figure 2.4-5, Appendix O Figure 3.1-6. However, the plan does reference a potential new boat ramp built for military use adjacent to the existing boat ramp. Draft EIS, Appendix O p. 3-57. Beyond this and use of the existing boat ramp and wharf for embarkation and debarkation, "[o]fficial requirements for port facilities have not been developed at this time." Draft EIS, Appendix O p. 3-57.

What the Plan Will Not Do: The plan proposed in the draft EIS articulates some of what the military will not do to use and develop CPA facilities. For example, trainees on military flights in and out of Tinian International Airport would bypass the CPA terminal entirely, enplaning and deplaning from the military side of the airport. Draft EIS, Appendix O p. 3-53. The plan does not call for an increase in ARFF capabilities at the Tinian International Airport, instead relying on existing CPA capabilities. Draft EIS, Appendix O p. 3-54. Similarly, the plan does not call for installation of an Instrument Landing System ("ILS"), referencing instead the potential installation of ILS with Commonwealth funds. Draft EIS, Appendix O p. 3-40. The plan calls for installation of bulk fuel storage and a fuel pipeline from the Port of Tinian to the airport for military use only. Draft EIS Figure 2.4-4, Appendix O p. 3-54. The plan contemplates a potential aircraft control tower for Tinian International Airport, as well as short-range radar on either Tinian or Saipan, but is unclear as to whether these would be operated under civilian or military authority.⁴⁷ Draft EIS p. ES-62, Appendix O p. 3-56. However, this is referenced only as a recommendation or an alternative, with Tinian Range Control

⁴⁷ The lack of specifics in the draft EIS on any potential control tower, where it would be cited, who would pay for it, and who would staff it, is consistent with prior discussions about the potential for a control tower associated with military use on Tinian.

(military) being assigned responsibility to coordinate availability of airspace for flights in and out of Tinian International Airport and an expeditionary control tower assigned to monitor airspace for public safety. Draft EIS p. ES-62. Further, no safety threshold for installation of short-range radar or a control tower is established. The runway will neither be strengthened nor lengthened by the military. Draft EIS, Appendix O p. 3-47. The plan also provides no military budget for maintenance of shared airport facilities such as for wear and tear expenses due to increased use of the runway and pavements (though the plan does recognize the necessity for increased maintenance of the runway due to military usage (draft EIS p. 5-64)), for increased wear and tear of CPA equipment, tools, vehicles and buildings required for use to maintain the airport at a heightened level of use, or for the increase in Ports Police, ARFF, and other manpower hours or number of employees required to properly operate the airport at a heightened level of use.

As for the Port of Tinian, the plan commits to no specific improvements that would benefit civilian operations, such as repair of the wharf or dredging of the harbor, until a structural study of the port is conducted following the selection of an overall preferred alternative for military use of Tinian. Like the airport, it also commits to no maintenance budget of shared facilities. Perhaps seeking to shift some of the financial and regulatory burden for the necessary infrastructure to support the plan proposed in the draft EIS to CPA, the draft EIS also does not specifically address the upgrades the Port of Tinian would require to facilitate its plan. Yet in order to accommodate the plan proposed in the draft EIS, the Port of Tinian would require the rehabilitation of the entire breakwater, the restructuring of Fingers "A" and "B," and dredging of the turning basin, quays, and piers, and more.⁴⁸ The draft EIS also does not address the need for port improvement to separate the unloading of live munitions, to create a buffer zone for commercial activities of the port, or to fence out staging areas for cargo, equipment, wastes, and supplies. It instead merely designates the commercial port area as the military's unloading zone for all activities, including live munitions, and states that "[n]o in-water construction is proposed." Draft EIS p. 2-37. Moreover, the plan does not take into account upcoming civilian improvements already scheduled for the Port of Tinian.

Recommendation: No-Action Alternative. Beyond the no-action alternative, the plan proposed in the draft EIS would be a bad deal for CPA facilities. The plan provides limited physical benefits to CPA properties that would actually be used by civilian traffic. Meanwhile the military proposes to make use of existing CPA resources without proposing plans for any joint-use improvements (such as airstrip improvements), while deferring decisions on potential joint-use improvements until after an overall plan for military use of the Tinian is selected (such as wharf improvements), and without committing to sharing the expense of upkeep of jointly-used facilities.

⁴⁸ The draft EIS does mention the potential for dredging Tinian Harbor ("Dredging of the harbor entrance could also be done to allow larger vessels access to the port") and improvements to the fingers ("New ramps specifically for disembarkation and recovery of the AAVs may be constructed as either part of the reconstructed fender piers or adjacent to the existing ramp"), but both are mentioned without any commitment for their implementation or who would pay for them. Draft EIS, Appendix O p. 3-57.

Adverse Impact #6: Noise, Water, and Wastewater Concerns

Descriptions of adverse impacts to the current residents of Tinian and Saipan occur throughout the draft EIS. Other than those with more direct impact to CPA that have been previously discussed, noise pollution and wastewater management operations would have additional negative impact on tourism and indirectly on CPA. In addition, the doubling of Tinian's population for significant parts of the year could threaten the quality and quantity of Tinian's fresh groundwater supply.

Increased Noise Pollution: The draft EIS admits that increased noise pollution from the dramatic increase in use of the Tinian International Airport by military planes would have a significant impact on Tinian. Draft EIS p. ES-52. In addition, residents of both Tinian and Saipan could be exposed to significant noise generated from large-caliber weapons. Draft EIS p. 4-90. Moreover, CPA employees have previously described the noise from heavy equipment activities at the Port of Tinian during prior military exercises on Tinian as unbearable. The draft EIS states that there would be "only a few events per training day where noise events could be intrusive." Draft EIS p. 4-106. Yet training days could be up to forty-five weeks per year, so this intrusion could become commonplace. Noise pollution is of particular concern to CPA because of its operation of the Tinian and Saipan airports and the close proximity to the ranges and air operations. Much of this noise pollution will be attributed, correctly or no, to activities at these facilities, raising friction between community members and CPA for actions beyond its control. But more simply put, noise pollution will be the constant reminder to the average CNMI resident of the military activities on Tinian, the limits it places on enjoyment of that island, and the consequences of the military's increased use of Tinian. This adverse psychological impact is also significant.

Water Quality Risks: The draft EIS proposes several measures to protect ground and surface water quality. This includes designation of Lake Hagoi and the two Bateha wetland sites as "No Training Areas." Draft EIS p. 4-37. This also includes implementation of best management practices and standard operating procedures. Draft EIS p. 4-38. However, the plan proposed in the draft EIS poses risks to existing water resources. The construction phase would result in increased dependence on the Commonwealth water system. Draft EIS p. 4-44. More importantly, the draft EIS recognizes that planned dependence on groundwater for the up to 3000 military personnel on Tinian at any given time "could affect groundwater availability and quality." Draft EIS p. 4-49. The plan depends on the limited periods of training to allow groundwater supplies to recharge. Draft EIS p. 4-49. If this does not occur, due to increased use of the training facility towards the forty-five weeks per year mark (a possibility which, again, lacks sufficient detail in the draft EIS), the plan does not propose an alternative water source. The potential impact for the existing Tinian community caused by doubling the population of the island with military personnel is more significant than the "less than significant impact" predicted by the draft EIS. Draft EIS p. 4-50.

150 Portable Toilets: The draft EIS proposes a complex system of wastewater treatment that would have most sludge and solid wastewater refuse transported overland across Tinian and Saipan and over the ocean from Tinian to Saipan. In the operational phase, treatment of wastewater would be accomplished at the munitions storage facility via

septic tank. Draft EIS, Appendix P (Wastewater) p. 6-1. All other facilities would require some level of transport of wastewater. Wastewater from the holding tank at the port facility and from the portable facilities on the ranges would be transported via vacuum truck to the base for treatment. Draft EIS, Appendix P (Wastewater) p. 6-3. Once treated at the wastewater treatment system at the base camp, sludge and solid waste would then be packaged, transported overland to the Port of Tinian, then to the Port of Saipan via ship, then finally overland again to the Saipan landfill. Draft EIS, Appendix P (Wastewater) p. 6-1. An investment in proper wastewater disposal facilities would be more responsible and efficient than this multistep system dependent on private transportation and, ultimately, Commonwealth facilities.

The wastewater management plan proposed in the draft EIS is made worse by its dependence on 150 portable toilets scattered across the northern two-thirds of Tinian for use during military training. Draft EIS, Appendix P (Wastewater) p. 6-3. When this part of the island would be open to civilian use, these portable toilets would be eyesores amongst the natural backdrop. Additional portable toilets would be used during the construction phase of the proposed plan, adding more transported waste and eyesores. Draft EIS p. 4-415.

Recommendation: No-Action Alternative: These are just some of the many negative consequences and potential risks that can be highlighted from the draft EIS. The no action alternative avoids these risks to our natural environment, our economy, and our daily lives.

Adverse Impact #7: Solid Waste Concerns

The plan for solid waste generated by the military presence in Tinian proposed in the draft EIS is no plan at all. Rather, it is simply a proposal to pay to make it someone else's problem. This is not responsible use of Tinian land, nor responsible use of CPA facilities.

No Tinian Landfill in Compliance: At present there is not a landfill on Tinian in regulatory compliance sufficient to receive solid waste generated as a result of the military presence in Tinian proposed in the draft EIS. Draft EIS p. 3-239, 4-423. Per the draft EIS, the existing Tinian landfill is not compliant and is set to be closed, but a replacement site has not yet been selected. Draft EIS p. 5-10. The military had participated with the Commonwealth in the search for a potential joint landfill on the southern part of Tinian, outside of the land currently under military lease, but the sites were determined to be unsuitable.⁴⁹ Draft EIS, Appendix P (Solid Waste Study) p. ES-5. The closest compliant solid waste facility is the Marpi solid waste facility on Saipan. Draft EIS, Appendix P (Solid Waste Study) p. 4-2.

⁴⁹ The Commonwealth has also spent resources identifying a potential site for a facility within the Military Lease Area.

Shipping the Problem to Saipan Through CPA Ports: Rather than explore options for its own landfill for its own solid waste on its currently leased property,⁵⁰ the draft EIS proposes that military solid waste, and the waste involved with the construction of the requisite military facilities, be shipped off island. Draft EIS p. 4-416-17, 4-423. Though some solid waste would be recycled at the base camp, the remainder would be "separated, shredded, compacted, baled, and stored in holding areas." Draft EIS p. 4-423. This would result in approximately 13,020 pounds of solid waste per day stored and prepared for shipment. Draft EIS p. 4-423. However, the draft EIS is unclear where the solid waste would be stored as it awaited shipment.

Shipment of this much solid waste from Tinian to Saipan would put a strain on existing shipping stock. Tinian commodities are brought in regularly by one privately owned SN5 boat (LCM-6 type) and infrequently by tug and barge. Draft EIS, Appendix O p. 2-34. The maximum load for a LCM-6 type boat is 34 tons.⁵¹ At full load, it would have to transport a load of solid waste every seven days from Tinian to Saipan.⁵² A tug and barge could also be used, but the issue of where the waste would be stored prior to shipment would then become more important. Moreover, shipment of solid waste can run into problems, including regulatory problems⁵³ or environmental protests.⁵⁴ The draft EIS mentions two potential regulatory issues that may need to be resolved before shipments could begin to Saipan: a renewal of a permit for the Marpi landfill and "a suitable agreement between the municipal governments of Tinian and Saipan to allow inter-island

⁵⁰ Or providing a commitment to partner with Tinian in creating a compliant landfill on Tinian, as have civilian developers on the island. *See supra* n. 15.

⁵¹ *United States Navy Fact File: Landing Craft, Mechanized and Utility - LCM/LCU*, United States Navy, http://www.navy.mil/navydata/fact_display.asp?cid=4200&tid=1600&ct=4 (last visited Apr. 18, 2015).

⁵² It is important to note that solid waste separated at the wastewater treatment facility would also have to be shipped to Saipan. In addition, this shipment would take longer due to the closure of the "danger zone" of Restricted Area 7203-W that would likely be in effect at this same time.

⁵³ Michael Cooper, *Ready to Ship in Hawaii: 20,000 Tons of Garbage*, N.Y. TIMES, May 22, 2010, available at http://www.nytimes.com/2010/05/23/us/23garbage.html?_r=0.

⁵⁴ *Toronto Garbage No Longer Shipped to Michigan*, CBC NEWS, last updated Dec. 30, 2010, available at <http://www.cbc.ca/news/canada/toronto/toronto-garbage-no-longer-shipped-to-michigan-1.913880> (describing how shipment of garbage was stopped by environmental protesters).

waste disposal." Draft EIS, Appendix P (Solid Waste Study) p. 4-2. A delay in shipment, for whatever reason, would necessitate continued storage of the waste on Tinian. This storage, depending on its location, could have a significant negative impact on the Tinian community and most importantly the Port and its surrounding developments.

More importantly, this waste would be the military's problem, not the Commonwealth's, Saipan's, or CPA's. But rather than dealing with the problem itself, the military proposes to shift the burden onto Commonwealth roads, through CPA ports, and into Saipan's landfill. This is irresponsible. If transported to the Port of Saipan, these solid waste shipments would pass between Saipan and Managaha, one of Saipan's most active tourist and recreation areas, bringing the damage to tourism caused by the military activities in Tinian to the heart of Saipan's tourism economy. Further, whether the shipments went to Saipan or elsewhere, the potential for an accident causing solid waste to be lost into the ocean would still exist. Finally, solid waste awaiting shipment stored for a significant period at the Port of Tinian would be unacceptable.

Recommendation: No-Action Alternative: The draft EIS fails to responsibly deal with the solid waste generated by the proposed military use of Tinian. Short-term, temporary training exercises are categorically different from training regimens built on permanent structures and systems of support. A strategy to deal with the solid waste generated by this endeavor is one such system that a plan like the one outlined in the draft EIS requires. The military should deal with its own solid waste or assist Tinian in developing a joint landfill that meets the military's needs rather than shifting its problem onto Saipan or somewhere further down the line.

Conclusion

CPA has serious concerns regarding the plan proposed in the draft EIS. It would significantly and negatively impact CPA properties, infrastructure, air traffic, and access to seaspace. Moreover, it would introduce a paradigm shift in the island of Tinian, doubling its population for significant periods every year while closing access to many of the sights and recreational attractions that form the foundation of its tourism economy.

CPA will continue to engage in dialogue with the Department of Defense and do its part to attempt to reach a mutual agreement that meets military needs and respects Commonwealth resources. Unfortunately, the plan proposed in the draft EIS goes far beyond the temporary, reasonable, and low-impact usage coordinated with CPA and the people of the CNMI that CPA would find acceptable, and instead proposes a plan without properly evaluating its environmental consequences, alternatives, or mitigation measures. CPA respectfully submits that these defects must be remedied and an updated draft EIS circulated for additional review and comment. In any event, accommodation of future military activities along the lines of the plan outlined in the draft EIS would be difficult on CPA.

“[[CPA submitted the CPA Board Resolution No. 14-02 Regarding the U.S. Air Force Divert Activities and Exercises Initiative and Proposed Construction Project in the Northern Mariana Islands, signed 29 August 2014.]]”

-S10

List of Exhibits:

1. HERMAN B. CABRERA & ASSOCS., TINIAN CPA OFFICE BUILDING NO.1 LOCATION & VICINITY MAP, PROJECT No. 2015-01.01 (2015).
2. JUAN C. TENORIO & ASSOCS, INC. ET AL., TINIAN HARBOR MASTER PLAN (1997).
3. COMMONWEALTH PORTS AUTHORITY, "OPERATING REVENUES" (2015).
4. SHAUN R. CHRISTIAN, LETTER FROM STAR MARIANAS REQUESTING A LAND USE AGREEMENT AT THE TINIAN INTERNATIONAL AIRPORT TO CONSTRUCT A 10,000 SQUARE FOOT HANGAR (2014).
5. COMMONWEALTH PORTS AUTHORITY, TIA TERMINAL IMPROVEMENTS PROJECT SUMMARY (2015).
6. COMMONWEALTH PORTS AUTHORITY, WEST TINIAN AIRPORT: AIRPORT LAYOUT PLAN (ALP), LAND USE AND PROPERTY MAP DRAWING (2012).
7. COMMONWEALTH PORTS AUTHORITY AND BRIDGE INVESTMENT GROUP, LLC, LEASE AGREEMENT 4 (2014).
8. ACG Letters:
 - EDVON SZE, LETTER FROM ALTER CITY GROUP EXPRESSING INTEREST IN LEASE OF CPA AIRPORT PROPERTY (2015).
 - KEN T. LIN, LETTER FROM ALTER CITY GROUP REQUESTING BERTHING SPACE FOR TINIAN-Saipan FERRY (2015).
 - KEN T. LIN, LETTER FROM ALTER CITY GROUP REQUESTING INFORMATION FOR FERRY SERVICES (2015).
 - KEN T. LIN, LETTER FROM ALTER CITY GROUP REQUESTING LEASE OF CPA AIRPORT PROPERTY WITH DETAILS (2015).
9. MILTON YOSHIMOTO, LETTER FROM CORPS OF ENGINEERS TO CPA REGARDING PLANNING FOR THE TINIAN HARBOR ASSESSMENT STUDY (AND ENCLOSURES) (2014).



COMMONWEALTH PORTS AUTHORITY

Main Office: FRANCISCO C. ADA/SAIPAN INTERNATIONAL AIRPORT

P.O. BOX 501055, SAIPAN, MP 96950-1055

Phone: (670) 237-6500/1 • Fax: (670) 234-5962

E-mail Address: cpa.admin@pticom.com

Website: www.cpa.gov.mp

CPA BOARD RESOLUTION NO. 14-02

REGARDING U.S. AIR FORCE DIVERT ACTIVITIES AND EXERCISES INITIATIVE AND PROPOSED CONSTRUCTION PROJECT IN THE NORTHERN MARIANA ISLANDS

WHEREAS, on December 12, 2013 the Commonwealth Ports Authority ("Authority") Executive Director MaryAnn Q. Lizama, in a letter to Brig. General Patrick C. Malackowski, USAF, registered its position regarding the USAF Divert Activities and Exercises Initiative ("DIVERT"). In that letter, the Authority informed the USAF that the Board voted unanimously in favor of locating the DIVERT Initiative and associated airfield construction projects on Tinian, CNMI; and

WHEREAS, in support of Tinian island for DIVERT initiative, the Authority indicated its agreement to jointly prepare and submit a Tinian Airport Layout Plan (ALP) to the Federal Aviation Administration to facilitate DIVERT on Tinian; and

WHEREAS, the Authority remained willing to engage the USAF to prepare the necessary ALP and to discuss, formalize and coordinate the terms and conditions for the use of the Tinian Airport by the USAF for DIVERT in conjunction with civilian aircraft and commercial use; and

WHEREAS, the USAF and along with other branches of the U.S. Department of Defense, continued in its efforts to bring forth a Record of Decision proposing the Saipan International Airport location for DIVERT activities notwithstanding the position of the

Authority and the CNMI Government through the Honorable Governor Eloy S. Inos; and

WHEREAS, as acknowledged and explained in the DIVERT and Exercises Draft Environmental Impact Statement, the Saipan International Airport (and the Tinian International Airport) are emergency “Divert” landing locations. In fact, Air Force jets have made emergency landings at the Saipan International Airport; and

WHEREAS, one of the principle purposes for the military's leasing of property on Tinian during the Covenant to Establish a Commonwealth of the Northern Mariana Islands was to create a Joint Use Military Airfield and develop the Tinian Harbor to support that airfield and training activities which were to take place on Tinian.

WHEREAS, the Authority underscores the fact that the island of Tinian has approximately 2/3 of the island reserved for military use pursuant to the Covenant agreement with the United States and the USAF now explains that the DIVERT mission has been revised and will be limited to only serving as an alternative airfield location for USAF aircraft and limited training and refueling operations if Andersen Air Force Base in Guam becomes unavailable because of weather or for some other incapacitating reason. Nonetheless, using the Saipan location to conduct these military activities in the Saipan Island National Historic Landmark for which the cumulative effects of this proposal and the additional military activities planned to take place in the Northern Mariana Islands have not been fully resolved; and

WHEREAS, in May, 2014, the U.S. House of Representative passed the National Defense Authorization Act for FY 2015 which included the amendment by CNMI Delegate Gregorio Kilili C. Sablan (Ind.-MP) “at any suitable location in the Northern Mariana Islands” so that Delegate Sablan expressed that the amendment permits the expenditure of funds on Tinian for DIVERT airfield construction activities; and

WHEREAS, the authorized \$29.3 million for DIVERT would provide for the construction of an aircraft parking apron, a maintenance facility, and a hazardous cargo pad; and

WHEREAS, Governor Eloy S. Inos, on behalf of the people of the CNMI and with the support of the Authority, expressed that the location of DIVERT on Saipan to occupy approximately 13 hectares (130,000 square meters) within and adjacent to the Authority property is "quite an undesirable conclusion as it would impede future commercial development in the area." The Authority agrees with and supports Governor Inos' statements inasmuch as reserving and excluding such an expansive area for the military removes valuable property of the Authority and the CNMI government within and near the commercial airport complex on Saipan, causing economic stagnation and a loss and restriction of future commercial development opportunities and property at the Saipan International Airport; and

WHEREAS, in its initial assessment of the Draft Environmental Impact Statement, the U.S. Environmental Protection Agency rated the contemplated plans for DIVERT on Saipan as "insufficient" and that the predicted noise impacts to occur on residents to Saipan "are severe." Further, approximately 11,000 residents in Dandan, Saipan and surrounding neighborhoods would be exposed to excessive and dangerous noise levels to some degree, even during the reduced scope and period of use estimated to be at least eight (8) weeks per year. The EPA also observed that there is no evidence that public outreach to the affected communities has occurred and that the USAF proposes no mitigation measures. Of greater concern is that several tourist destinations and public and private schools will receive noise impacts, (Koblerville Elementary School, San Antonio Elementary School, Vicente Elementary School, William S. Reyes

Elementary School, Dandan Elementary School, Saipan International School, Hopwood Jr. High School, Southern High School, Lau Lau Bay Golf Course, Forbidden Island, Pacific Islands Club and Waterpark, Coral Ocean Point Hotel and Golf Course, Ladder Beach and Obyan Beach); and

WHEREAS, the DIVERT and Exercises Draft Environmental Impact Statement contains "low" "medium" and "high" scenarios of military activity which the USAF has indicated that today it has "scaled down" its scenario to the "low scenario" mainly of 12 KC-135 tanker planes. However, the USAF cannot guarantee that DIVERT will never expand beyond the "low scenario" but rather may eventually expand into the medium or high use scenarios consisting of additional training operations as well as extended periods of operation. The Authority, being located on the Dandan plateau adjacent to the communities that will be impacted, is greatly concerned that the noise and adverse effects of the range of military DIVERT operations will negatively affect the community residents, the schools and tourist destinations. By comparison, locating DIVERT on Tinian within the designated 2/3 of the island for military activities would not affect residents in such a detrimental way and no public schools are within the DIVERT footprint of operations; and

WHEREAS, the CNMI and United States negotiated and agreed to reserve the largest and most significant land on Tinian exclusively for military development, the preferred resolution is that DIVERT should be suited on Tinian as requested by the United States in the Covenant negotiations and as agreed to by the people of the CNMI. In the Authority's view, the best interest of the CNMI and CPA is served by having DIVERT on the military-designated area on Tinian; and

WHEREAS, the primary rationale advanced by USAF for DIVERT on Saipan is

because of the existing and developed infrastructure while the facilities on Tinian require more funds for preparation and upgrade, the Authority respectfully submits to the United States and the USAF that financial constraints and budgetary limitations do not overcome the commitment to use and develop Tinian for military purposes; and

WHEREAS, the CNMI Government and the Authority are of the same position: the appropriate and suitable location for DIVERT is on Tinian.

NOW, THEREFORE, in consideration of the foregoing recitals, the Authority through its Board of Directors resolves as follows:

BE IT RESOLVED that the Authority informs and expresses its unequivocal position to the USAF and Department of Defense that the Authority supports and shall only endorse and enter into an agreement for the location of the DIVERT and Exercises Initiative to be situated on the island of Tinian. The Authority will not support nor submit an Airport Layout Plan (“ALP”) for the Saipan International Airport for DIVERT activities; and

BE IT FURTHER RESOLVED that the Authority supports and endorses the expressed position of the CNMI Government through Governor Eloy S. Inos that the United States and USAF take all measures to site DIVERT on Tinian including appropriating the necessary funds for leasing of Authority property and the development and construction of the needed military facilities on Tinian; and

BE IT FURTHER RESOLVED that the Authority Executive Director shall provide the office of the CNMI Delegate, the Hon. Gregorio “Kili” Sablan, the Federal Aviation Administration, the USAF PACAF, and Governor Elos S. Inos with a copy of this Resolution; and

BE IT FURTHER RESOLVED that the Authority, while respectfully disagreeing

with USAF's preference as to DIVERT siting on Saipan, continues to support the interests of national security and the Department of Defense use of the designated islands in the CNMI for military purposes pursuant to and consistent with the provisions of the Covenant and to that end supports the negotiation and submission of an ALP for Tinian Airport inclusive of the DIVERT activities; and

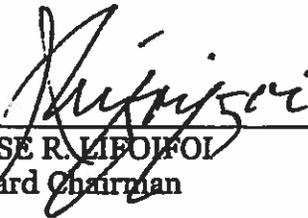
BE IT FURTHER RESOLVED that the Authority hereby establishes a "CPA Military Activities Working Group" ("Working Group") headed by the Authority Executive Director with the Port Managers for Saipan and Tinian, Legal Counsel and the Chair of the Airport Facilities Committee as members. The mission of the Working Group is to advocate for and to take the lead in discussions for the Authority with the U.S. military working group in discussions affecting the Authority's interests. The Executive Director shall coordinate the Working Group's activities and shall keep the Board informed at all times. The Authority's Board of Directors invites the participation of various stakeholders with respect to the contemplated expansion of military activities within the CNMI including the Authority's airports. The Office of the Governor, the CNMI Legislature and the CNMI Attorney General, through designated representatives, shall be invited to join the Working Group meetings as appropriate and necessary. The Offices of the Mayors of Tinian, the Northern Islands, as well as the respective Chairs of each Legislative Delegation shall be invited to participate. The Authority shall solicit the participation of the CNMI Bureau of Environmental Quality (BECQ) in Working Group meetings as necessary. Further, the Working Group shall invite the participation of the Airline Operators Committee ("AOC") with a designated representative to ensure that the AOC is informed of the proposed military activities being proposed and so that the members may provide input and comments for the

Authority's consideration in discussions with the U.S. Military.

SO ADOPTED this ^{Am 29th} ~~28~~ day of AUGUST, 2014 BY MAJORITY

OF BOARD MEMBERS PRESENT AND BY UNANIMOUS AFFIRMATIVE VOTE.

Signed:



JOSE R. LIPOFOI
Board Chairman



FRANCES C. MAFNAS
Board Secretary



Divert Activities and Exercises Revised Draft Environmental Impact Statement Public Review Period Comment Form



Location: Seipua, NMC

Date: Nov. 4th 2015

The U.S. Air Force invites you to participate in the public review period for the Divert Activities and Exercises Revised Draft Environmental Impact Statement (EIS).

Comments must be postmarked or received online by November 30, 2015 EDT/December 1, 2015 ChST for consideration in the Final EIS and the Record of Decision. Comments may be submitted at the public meetings using this form, via the project website at www.PACAFDivertMarianasEIS.com, via email at pacaf.paops@us.af.mil, or via U.S. Postal Service at the address below.

Privacy Notice: Public comments on this Revised Draft EIS are requested pursuant to the National Environmental Policy Act (42 U.S.C. 4321 et seq.). All comments received during the comment period will be made available to the public and considered during Final EIS preparation. The provision of private address information with your comment is voluntary. However, this information is used to compile the mailing list for Final EIS distribution, and failure to provide such information will result in your name not being included on the list. Private address information will not be released for any other purpose unless required by law.

Please Print

First Name: Joshua

Last Name: Castro

Organization/Title (if any): [REDACTED]

Address: _____

City: [REDACTED] State: [REDACTED] Postal Code: [REDACTED]

Primary Phone Number: _____

Primary Email Address: _____

Comments:

T1- Please provide ALL written material in Chamorro & Carolinian so our elders & others who might not fully speak & understand english can understand. And please **MORE HEARINGS!!!** I'll

T2- help everyone understand.

Please continue on reverse side...

Please hand this form in or mail by November 30, 2015 to:
Ashley Conner, PACAF/PA
25 E Street, Suite G-108
Joint Base Pearl Harbor-Hickam, HI 96853-4512
ATTN: PACAF Divert Marianas EIS

[[Sam McPhetres provided observations, which included photo documentation, regarding the history of the Marianas with respect to the Divert proposal.]]

— U1

Observation
CONCERNING THE DRAFT (revised) ENVIRONMENTAL IMPACT STATEMENT
FOR
Diverse Activities and Exercises,
Commonwealth of the Northern Mariana Islands

Introduction

As one of two "freelance" consultants to the Air Force committee surveying the question of historical artifacts and their relative value could be found during the land clearing and construction phase of a facility designed for parking area 12 US Air Force tankers aircraft and fuel storage tanks capable of refueling aircraft in times of emergency. This would include a pipeline from the tank to the aircraft as well and the infrastructure (roads from the port and base fuel oceangoing tankers and whatever ancillary security and safety features may be required. The same facility would be required on the on Tinian and both would take advantage of improvements as provided by the Air Force.

A corollary to the construction of facilities consists of surveying the grounds and environment for articles tangible and intangible of historical value to the indigenous population as well as the general history of the Marianas. It appears to me there are two parts to this caveat: 1) safeguarding artifacts of value and community culture and 2) items which could be displayed in the airport and/or museums for the enlightenment and education of visitors to the islands and the understanding and appreciation of the students who would benefit.

As a "freelance" consultant with a strong background in Marianas history, past, present & future, I have no particular constituency to appeal to (or hide from).

I'm looking at this assignment as a continuation of my dedication to the process of education will utilize available information on environment and legacies of the past. With that thought in mind I must, state clearly that all opinions expressed in this paper for my own based on 40 years of formal and informal education in the broadest sense. That said my weaknesses lie the technology involved so I will leave that to more adept commentators.¹

· Part I

A N OVERVIEW OF THE ASSIGNMENT

The United States Air Force has determined that in view future contingencies it would be advisable to prepare for possible needs for long-distance aircraft to react to humanitarian and military issues causes too far to reach the present aircraft without refueling.

It appears that the Department of Defense, more ~~part~~ particularly the Pentagon² has decided that the islands of Saipan and Tinian should be transformed into an an alternative military base in the event that

¹My experiences¹⁵ in the Peace Corps Ecuador, Ivory Coast Somalia, Micronesia and the trust territory. The question of cultural importance has been present in each of these places in various forms. This has included the development and self-government.

²An article in foreign policy quoted by the times with the headline *The Tiny Island Key to defense of China's threat..* Foreign-Policy quoting Anthony Cordesman of the Center for Strategic and International Studies in Washington. The article as reported in the Times.

there was a problem with China. Guam was targeted and removed from the battle. The Marines would use a nearby island Tinian for a launching point with F-18 hornet's.

The process of transforming the islands of Saipan entity in two major military establishments with possible extensions into the outlying islands to the north have not been described or recognize by the writers by the writers.

Which brings me to another issue that may not appear to deal with historical values but as an historian I cannot help but recognize that 40 years ago a friend of mine and State Department professional with service in Micronesia with a special assignment To the National War College Strategic Research Group in 1975 a thesis entitled *Micronesia's Future Status and the US Role in the Western Pacific: a Critical Examination of US Interests, Objectives, and Policy of ~~Mentation~~ with Recommendations for Change*. One of the underlying themes of his treatise was the danger of the arrogance of power. Henry Kissinger became famous in Micronesia for making the comment about a policy issue, I believe, that "There Are Only 90,000 people out there, who gives a damn." *implementation*

I am delighted to be working with this unit of the Air Force on the divert project.

HISTORICAL IMPORTANCE

(a) HISTORIC IMPORTANCE

2. Determining the importance of artifacts found on the ground, on the ground, and over the ground is a very inexact science. However understanding the history that brought that artifacts to lights makes it much more simple.
3. If we take Tinian first in the draft plan, I have no problem with any of the findings of techniques, valuations and other methods of preserving and displaying artifacts. However, there are things that are intangible but critical to understanding of articles which are found.
4. One of the things that we should look at is the question is how did the people get here? And when did they get there? For that we have to look at what was until recently a living legend transoceanic travel by canoe.¹
5. For centuries like religions and other the honors have been braving the open ocean using their own techniques. The man in the circle and the white shirt is named Mau Pialug, master navigator from Satawal. He was so adept at traditional navigation that he could sail anywhere in the Pacific without her having been there. To wit, he took up the challenge to guide a group of Hawaii wannabe sailors to their original islands in Tahiti. He accomplish the trip without a compass, map or GPS. About once a year or every two years it would make a voyage from Satawal to Saipan following the route of the original clearly came in 1810 try to settle in the Marianas because the type who had damage their home islands.
6. Human settlement in the Marianas has been dated back as far as 8000 BC but the first identifiable Chamorro made it in approximately 700 A.D. But the first contact with Saipan was carbon dated at 1885 BC on a Achugao Beach and the latte sets which symbolize today's Commonwealth. The ability to carve sandstone pillars and capstones of the size that are found on Tinian and Rota. and the smaller ones that have survived on Saipan and Guam symbolize a very advanced community organization.
7. That said, artifacts found on Saipan and Tinian represent the skills and talents of a very advanced sort. Not only did they cut the stone and move them long distances and erected them successfully. Where the idea came from is still a mystery although there are some stone carvings on walls in Indonesia resembling a lot of sites and it Chamorro sitting on them.²

¹ In the picture in the Annex of people sitting around on the beach with Mao Pialug recounting his latest voyage to a rapt audience.

² It is assumed that some fishermen from the Marianas blown West into Indonesia kept

8. So it is easy to understand why some artifacts around latte sets carry cultural significance to today's people.
9. If we fast-forward to the Spanish times some of the artifacts can be found could be wild tobacco, hot pepper pork and deer which were brought in from the Philippine. But the most significant Spanish artifacts is Roman Catholic religion and some of this and the churches and cemeteries.
10. Because of the Spanish-American war (the American war to the Filipinos) most of that changed
11. Germany took over the Marianas and did some very revolutionary things that people don't realize people. In their efforts to make copra the major crop and a moneymaker, the very small German government contingent required that anyone who received a homestead from the German government (the Marianas except for Rota were depopulated by the Spanish and moved to Guam. The Carolinians who had come to long and hence Saipan between 1810 1815 were the only people on the island until the 1860s with Chamorro's began coming back to their islands from Guam and found that the Carolinians occupied the best land on the coast. So the German government, in order to encourage coconut production required homesteaders to put their land in coconut trees except 25% so for local food crops. But even more important was that the Germans required that the land they received the survey. An important relic of this era are the property markers that people were required to put down. No longer was it acceptable to describe your land is that little tree in the corner marked by breadfruit which the owner planted in the Big Stone in another corner and so on. This became significant especially at the time of death of the head of a family who had to divide up his property orally before the survey.
12. Following the Japanese takeover from the Germans the islands are all put into sugarcane and other agricultural products as well as commercial fishing. One of the surviving relics of the Japanese is the train bringing the harvest into the refineries. Tinian and Rota had their own trains. Railroad tracks can still be found in unpopulated areas.
13. Of greater interest to the people today are the relics of World War II. Japan began preparing for hostilities against the United States in 1938 when they began building a military infrastructure in their league of Nations mandated territories. These included airstrips built by forced labor on major roads such as Beach Road on Saipan and Tinian and Rota. As the Americans drew closer to invasion, bomb shelters proliferated around the islands.³ Today, they are sometimes used as typhoon shelters.

languages. The languages of Micronesia are a melange of all the languages of each nationality which administered the islands at any given time. A good linguist can track it anywhere up to 10 different languages which is kind of historical artifacts as well.

APPENDIX

Due to my problem keeping the footnotes I am going to simply list them in the appendix in the order their appearance¹

1. Clipping from the quarterly foreign affairs
2. Photograph of mau pialug, master navigator
3. Remains of a chamorro village near Kagman school similar to what would be found at the Obyan sites across the fence of the airport runway.
4. Remains of the house of Taga overlooking Tinian harbor.
5. Ruins of the Japanese administration building on the airport side.
6. The remains of a destroyed American amtrak vehicle, victim of the invasion of tinian
7. Part of the Japanese bomb shelters for civilians. There are many of these structures in the immediate areas of the Saipan airports.
8. Loading pit for loading the atomic bomb into the Enola Gay at the Japanese airport on tinian.
9. This is the Enola Gay getting ready to load the bomb. Photo courtesy of col. Tibbets
10. Interview with col. Paul Tibbets now (general) as the Northern Marianas College in 2012, I believe.
11. A look at Marpi Flats immediately after the war hostilities.
12. The same Marpi Flats covered with tents for thousands of seabees left over after building the runways on Saipan and Tinian and waiting for the signal to invade Japan which never came.
13. The monument at Invasion Beach in San Antonio. Note carefully the original Latte stone and **Lusong**. This is an article found in almost every latte set and represents a gift from a person or family from one of the northern islands establishing an insurance policy. The lusong is made of basalt most of the time ~~with~~ ^{which} is found mainly in the volcanic islands to the north. Legend has it (I haven't confirmed it but it sounds good. The receiving family in the southern Marianas becomes indebted to the northerner if the person and his family needs a place live after a typhoon on his island. It constitutes a very viable insurance policy.
14. The Tinian Dynasty Hotel and Casino wanted to make a contribution to the 60th anniversary of 65th the invasion of Saipan and Tinian. The commissioned the construction of scale model replicas of the two bombs destined for Japan. Unfortunately for them they were to ~~pay~~ ^{Account} it in the

14. The Tinian Dynasty Hotel and Casino wanted to make a contribution to the 60th anniversary of the invasion of Saipan and Tinian. This commission the construction of scale model replicas of the two bombs destined for Japan. Unfortunately for them, they didn't pay to the right colors on the bombs and were turned down by the anniversary committee. They continue to set in the open air on special stands on the parking roof of the Tinian Dynasty Hotel and may be placed in the bomb pits if they get the proper paint job.

15. This C-130 the longsword admiral of the Navy who I just been given the responsibility of covering the trust territory. Along with another trust territory official, I accompanied the Adm. and his staff on this plane from Honolulu to Saipan via Majuro, Pohnpei, Chuuk, Yap, Palau, and Guam. I included this photograph to illustrate the size of the C-130 (not configured for refueling fighters midair) but which gives a much better illustration of what 12 C-130s would look like on the ground.

16 and 17 are two glass display cases, hermetically sealed, containing artifacts from Alaska's Eskimos and Indians. A careful look at the items in the Saipan Museum and compared to these would indicate there is a close resemblance of any of the artifacts. History indicates that there has been communication between Pacific Islanders and Alaskan Indians. These cases should be good examples for the kind of display medium that could be effectively used in Tinian and Saipan's airports or other appropriate areas. These are on display at the Alaska State Museum in Juneau.

THE END

7/12/15
let me know if
you have any questions

Samuel F. King
[Redacted]

[Handwritten signature]

TO DEFENCE OF China's threat

Washington – A tiny Pacific island that was the scene of a momentous World War II battle between US and Japanese forces is being viewed as key to the US military's gathering power shift against the growing might of China.

Saipan, which is 190 kilometres north of Guam, the most substantial US military base in the region, is to have an expanded airfield capable of receiving fighter jets and refuelling tankers and heavy-lift transport aircraft.

About 700 support personnel are expected to be based on the 20km-long island, which has a population of 48,220 and is part of the Northern Mariana archipelago administered by the US.

Saipan is part of a web of locations in the Asia-Pacific region where the US military is increasing its presence and building up an array of firepower and back-up capabilities.

The Pentagon has decided that the island should be transformed into an alternative military base in the event that Guam is targeted and removed from the battle plan.

China's growing number of ballistic missiles is seen as a potential threat to Guam, which supports the US Pacific Fleet and provides a bomber forward-operating base for the US Air Force.

Pentagon officials deny that President Obama's shift of strategic emphasis to the Asia-Pacific region is aimed at China.

US Defence Secretary Chuck Hagel, who last week hosted a visit to Washington by General Chang Wanquan, China's Minister of National Defence, has emphasised the importance of building trust with Beijing.

He is to visit China next year.

However, the Pentagon's "insurance" to counter-balance China's growing military power is beginning to take shape.

Apart from Saipan, the nearby island of Tinian is also being re-developed, with US Marines operating from there with FA18 Hornets.

region, all elements of the US Armed Forces are taking up new positions or planning to divert their fighting assets to fulfill President Barack Obama's defence strategy, which was announced in January last year.

The US Air Force is planning to deploy its aircraft on a regular basis to Darwin and Tindal in northern Australia, Changi East airbase in Singapore, Korat in Thailand and Thiruvananthapuram in India.

The Indian Government has denied that any US aircraft will be stationed there.

A senior US Air Force commander disclosed last month that there were also proposals to send aircraft on regular deployments to Cubi Point and Puerto Princesa bases in the Philippines, and to Indonesia and Malaysia.

Hagel, and Leon Panetta, his predecessor at the Pentagon, were sent by Obama to all these countries to negotiate the military deals.

The shift in emphasis began with the announcement that 250 US Marines were to be sent to Darwin on a rotational system.

This number will rise to 2500 by 2016. The US also hopes to send B52 bombers and F16s to Australia.

The US Navy is also planning to have 60 per cent of its warships – up from 50 per cent – in the Asia-Pacific region by 2020.

Sixteen of them will be the new Littoral Combat Ships that can operate in shallow waters.

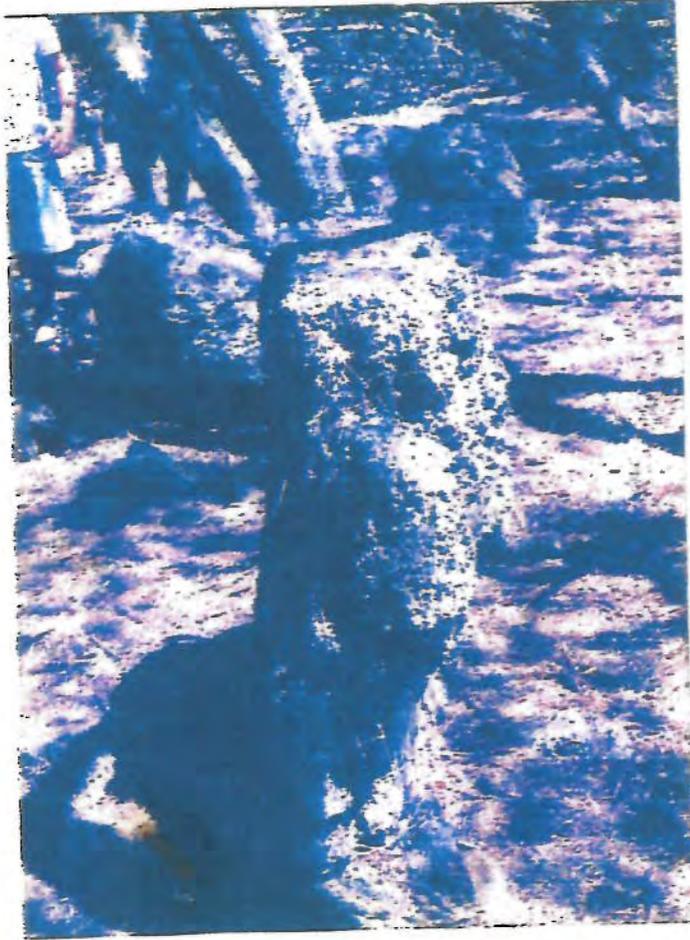
Critics of the ship claim that it is under-gunned but US Navy chiefs say it is ideal for "dash" missions, causing damage to the enemy and then swiftly departing from the action, leaving bigger warships to take over.

"You have to show people it's real at a time when so much of US power is increasingly questioned by our budget debates," Anthony Cordesman, of the Centre for Strategic and International Studies in Washington, told *Foreign Policy*

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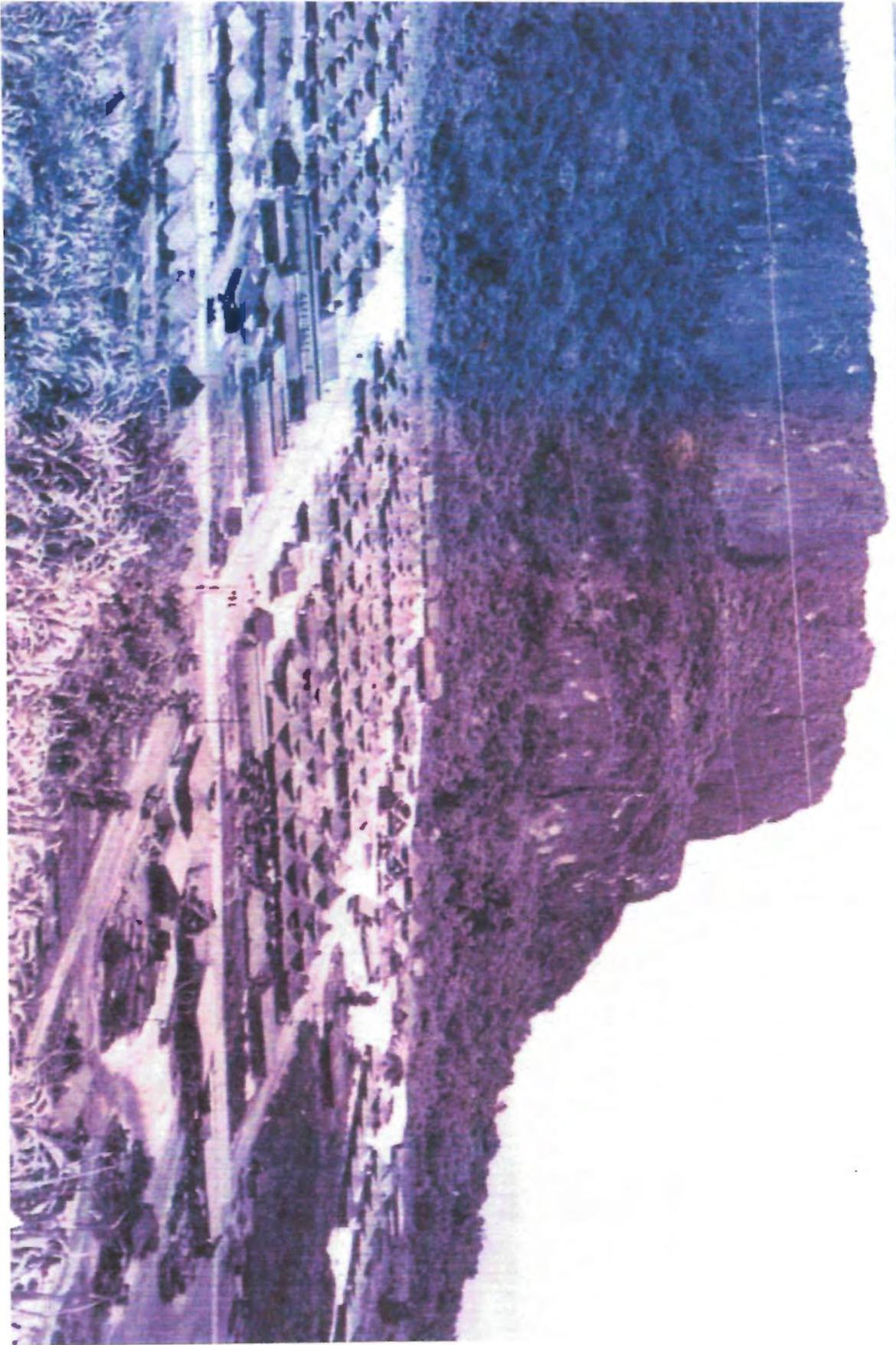








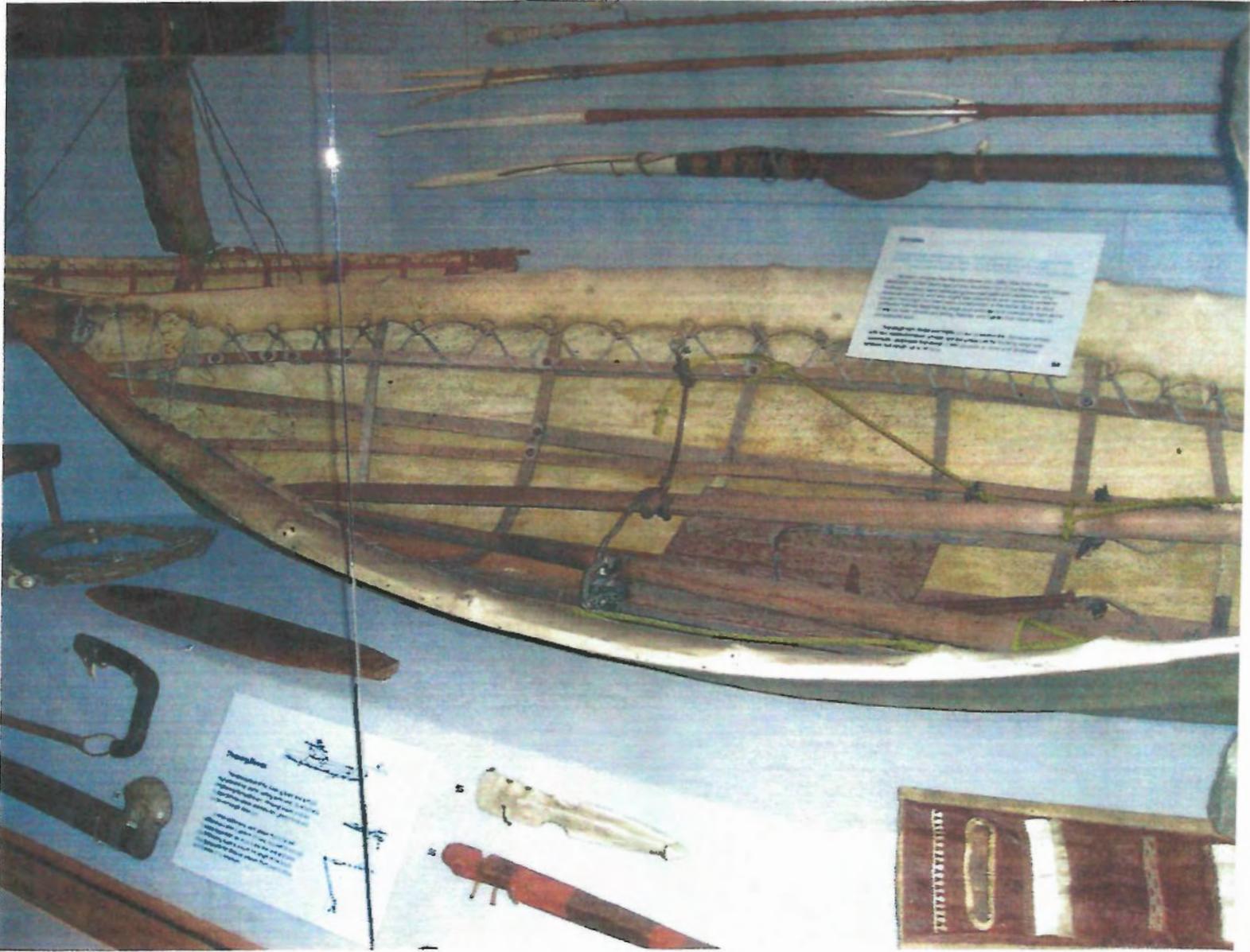














A Good Catch

The Eskimos put their villages where they could catch the most fish and seals. They hung them for 20 or 30 days. They ate from the head or tail or the middle with great care. Sometimes they stored them when they had plenty of food.

William A. Douglas
People of the Arctic

In the Arctic and Sub-Arctic, the difference between eating well or starving could be determined by the success of fishing. In addition to being a food source for people and dogs, fish provided oil for lighting, so for lighting and for making for fish.

Traditional tools for processing fish include wooden chips, wooden knives, and wooden blades of caribou horn. Several wooden bars or "bones" are used to cut the fish into strips.

Although not a fish, walrus is the primary food source of the Eskimo. Walrus is used for its skin, its blubber, its legs, and its tusks. Walrus is also used for its tusks.

Today, the traditional use of fish as a food source is reduced to ceremonial, festive, and other occasions, as well as commercial and sport fishing. These uses have become a vital element of Eskimo culture.



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| 1. Fish weight - wooden platform - 10 x 10 | 11. Fish weight - wooden platform - 10 x 10 |
| 2. Fish weight - wooden platform - 10 x 10 | 12. Fish weight - wooden platform - 10 x 10 |
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| 7. Fish weight - wooden platform - 10 x 10 | 17. Fish weight - wooden platform - 10 x 10 |
| 8. Fish weight - wooden platform - 10 x 10 | 18. Fish weight - wooden platform - 10 x 10 |
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| 19. Fish weight - wooden platform - 10 x 10 | 29. Fish weight - wooden platform - 10 x 10 |
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A1	Noise and Airspace/Air Ops	Anastasia Scott	I'd like to see stricter flight paths to prevent divert flight paths over heavily populated areas of San Vicente, Dandan, Koblerville, etc. [...] I'm mainly against fuel planes flying close to populated where I work (from home).	During the maximum 8 weeks per year of USAF exercises, USAF planes would follow existing FAA and CPA-approved flight paths into and out of Saipan International Airport. These paths would be similar to, or the same as, those flown by commercial airliners at Saipan.	Saipan Public Meeting
A2	Socioeconomics	Anastasia Scott	I'm concerned about increased military presence in the CNMI and [...].	Comment noted. The USAF is committed to being good stewards of the environment and upholding the high standards of conduct required by Air Force Instruction 1-1; Air Force Culture and Air Force Standards. This USAF policy requires self-discipline and applies to all USAF uniformed personnel (Active Duty, USAF Reserve, and Air National Guard). The policy provides specific guidance on required standards of conduct, performance, and discipline. Failure to adhere to the standards set out in instruction can form the basis for adverse personnel action (i.e. disciplinary) action under the Uniform Code of Military Justice and local/CNMI laws.	Saipan Public Meeting
A3	Geology and Soils	Anastasia Scott	I'm concerned about... the destruction of natural caves as carved up by personnel,	Comment noted. The Proposed Action on Saipan and Tinian do not include the use of any natural caves. The USAF is committed to being good stewards of the environment and upholding the high standards of conduct required by Air Force Instruction 1-1; Air Force Culture and Air Force Standards. This USAF policy requires self-discipline and applies to all USAF uniformed personnel (Active Duty, USAF Reserve, and Air National Guard). The policy provides specific guidance on required standards of conduct, performance, and discipline. Failure to adhere to the standards set out in instruction can form the basis for adverse personnel action (i.e. disciplinary action) under the Uniform Code of Military Justice and local/CNMI laws.	Saipan Public Meeting
A4	Socioeconomics	Anastasia Scott	I'm concerned about... as well as the poor behavior of the personnel towards our people when drunk.	Comment noted. The USAF is committed to upholding the high standards of conduct required by Air Force Instruction 1-1; Air Force Culture and Air Force Standards. This USAF policy requires self-discipline applies to all USAF uniformed personnel (Active Duty, USAF Reserve, and Air National Guard). The policy and provides specific guidance on required standards of conduct, performance, and discipline, including specific requirements regarding alcohol use. Failure to adhere to the standards set out in instruction can form the basis for adverse action under the Uniform Code of Military Justice and local/CNMI laws.	Saipan Public Meeting
A5	Health and Safety	Anastasia Scott	I'm very concerned about military fuel tanks creating a greater target to our enemies in time of war.	Comment noted. An increased capability and U.S. presence in the Mariana Islands region would build trust, increase transparency, reduce the risks of crisis or conflict, and encourage U.S. allies and partners to enhance their roles in humanitarian relief and multilateral security cooperation by augmenting regional rapid-response abilities and increasing the capacity of Asian partners to respond more effectively to contingencies, including humanitarian crises and natural disasters. A divert airfield in the Marianas will help train USAF forces in Asia and ensure readiness as mandated by Title 10 U.S.C. 8062, which is necessary to protect the United States successfully and keep its territories safe.	Saipan Public Meeting

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A6	Land Use	Anastasia Scott	I'm concerned about further taking of land that belonged to indigenous families which our government gave away without compensation to said families.	Comment noted. All proposed construction would be consistent with current designated land use. Alternative 1 and Alternative 3 at Saipan International Airport would occur on lands managed by the CPA and designated as Industrial by the CNMI Zoning Board. According to Article 4 of the Saipan Zoning Law of 2013, the proposed activities at the airport would be consistent with the designated Industrial land use. Alternative 1 and Alternative 3 at Saipan International Airport would also be consistent with the 2002 Saipan Airport Master Plan. The portion of Alternative 1 at the Port of Saipan would occur on lands that have been zoned by the CNMI Zoning Board as Industrial according to the Saipan Zoning Law 11 of 2013, which includes bulk 12 fuel storage as a designated use. At the Tinian International Airport under Alternatives 2 and 3, construction would occur on lands managed by the CPA and designated as urban/built-up by the CNMI DPL. All of the proposed construction activities would be consistent with this designated Industrial land use. At the Tinian seaport, construction of the fuel tanks at the Port of Tinian would occur on lands currently owned and operated by the CPA and designated as undeveloped/site in natural state and urban/built-up by the CNMI DPL.	Saipan Public Meeting
B1	Administrative	Frincess "Max" Garcia	Should specify that comparison of KC-135 to B-767 is for military to commercial aircraft. Public might think it lands/take-off from Saipan/Tinian but in reality it only passes through the islands. Need to clarify.	Comment noted. This comment was made on materials provided at the Revised Draft EIS public hearings and requires no change in the Final EIS.	Saipan Public Meeting
B2	Noise	Frincess "Max" Garcia	[In reference to KC-135 fact sheet available at public meetings]: Also need to include decibels for noise pollution questions.	A thorough analysis of impacts related to noise, including predicted decibel levels associated with implementation of each alternative is provided in Final EIS Section 4.1. Additional analysis regarding noise and compatible land use is provided in Final EIS Section 4.10.	Saipan Public Meeting
C1	For- Saipan	Frances [Not legible]	I'm in favor and I believe we the people of Saipan should all agree and give the land and improve the airport. We need the military to protect us. In God we trust.	Comment and support noted.	Saipan Public Meeting
D1	Health and Safety	Jason Wakeham	I am concerned that this proposal to use Saipan for expanded military actions would put our island at higher risk as a military target.	Comment noted. An increased capability and U.S. presence in the Mariana Islands region would build trust, increase transparency, reduce the risks of crisis or conflict, and encourage U.S. allies and partners to enhance their roles in humanitarian relief and multilateral security cooperation by augmenting regional rapid-response abilities and increasing the capacity of Asian partners to respond more effectively to contingencies, including humanitarian crises and natural disasters. A divert airfield in the Marianas will help train USAF forces in Asia and ensure readiness as mandated by Title 10 U.S.C. 8062, which is necessary to protect the United States successfully and keep its territories safe.	Saipan Public Meeting
D2	Noise	Jason Wakeham	I am also worried that the fighter planes would be loud and unattractive to tourists. People come here to see beautiful peaceful island and not to spend vacation on a military base.	Fighter planes were not included in the proposal presented in the Revised Draft EIS, and were not included in the Final EIS. Many comments received on the 2012 Draft EIS expressed concern over potential impacts related to fighter jet aircraft operations. Based on this input on the 2012 Draft EIS, the	Saipan Public Meeting

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				USAF removed fighter aircraft operations. The USAF also reduced the total number of proposed aircraft (cargo/tanker/similar aircraft) operations from 1,920 take-offs or landings to 720 take-offs or landings. Aircraft noise over 65dB would remain almost entirely on airport property under the Average Annual Day scenario. Additionally, the proposal does not include the construction of an entirely new airfield, or the full-time use of the facilities by USAF. Exercises would occur for a maximum of 8 weeks per year.	
D3	Against Saipan; For Tinian	Jason Wakeham	Please use the island you already have the rights to (Tinian) and leave Saipan for the tourists and locals to enjoy!	Comment noted. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD).	Saipan Public Meeting
E1	Against-General	Jude Hudson	I'm seriously concerned about the Air Force DIVERT proposal. You speak like slick snakeskin oil salesmen.	Comment noted. In accordance with NEPA, the USAF would only be able to proceed per the decision reflected in the ROD and as presented and analyzed in the Final EIS.	Website
E2	Translation	Jude Hudson	AND you speak/write ONLY in English – not a word of the other two official CNMI languages. How are some of our people supposed to be able to read this? I asked and was told questions in Chamorro would be answered in Chamorro. So how would someone know that IF they struggle through this voluminous document in their second language and IF they submit some questions in Chamorro they will be answered in same? I think DoD has an obligation to REQUIRE that every EIS be submitted in all the languages of the indigenous people they will impact.	Comment noted and will be considered for future materials, for example the materials to be developed under the Section 106 Programmatic Agreement. A Chamorro and Carolinian translator was available at all Divert public meetings (2011 scoping meetings, 2012 public hearings, July 2015 cultural resources meetings, November 2015 Revised Draft EIS public meetings.) Questions could be asked and answered in either Chamorro or Carolinian at all meetings. Additionally, it should be noted that all CNMI newspapers and government materials are produced in English.	Website
E3	Against-General	Jude Hudson	This single action reeks highly of prejudice toward indigenous people of the CNMI and poses a significantly negative impact on the people of Tinian and Saipan.	The USAF has remained diligent in its efforts to minimize impacts to minority and low-income populations. The USAF revised its proposal to completely remove fighter aircraft and reduced the number of proposed flights in order to reduce impacts related to noise on communities surrounding the Saipan and Tinian airports. All impacts related to socioeconomic (sociocultural issues) and environmental justice are provided in Final EIS Sections 3.14 and 4.14.	Website
F1	Purpose/Need and Cumulative	Jude Hudson	Another comment on the Air Force Divert EIS : THE REAL INTENT: The EIS actual intent is alarming. I think the 'divert' here is the DoD trying to divert our attention from their real purposes which can only be ferreted out and understood in context of all 5 (known) EIS plans (in place or pending) for this area - GUAM relocation, MITT, MIRC, CJMT & DIVERT. This DIVERT plan seems merely a small portion of that overall take-over of the entire NW Pacific that DoD proposes. It supports and even paves the way for other portions. WHO will participate? See the following lines. "5 Lead Agency U.S. Air Force (USAF), 6 Cooperating Agencies U.S. Navy, U.S. Marine Corps, 7 Federal Aviation Administration."	The environmental impact statements and environmental assessment being prepared in the region all have differing purposes and requirements. Each fulfills differing needs among the services and all are on differing timelines, because of each service's operational requirements. While the analyses of the activities are being accomplished in approximately the same time period, they deal with dissimilar activities and requirements with independent utility. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5. Additionally, status as a cooperating agency does not necessarily mean that the agency is a participant in the Proposed Action. According to CEQ regulations for implementing NEPA, a cooperating agency is Federal agency other than a lead agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed action. Cooperating agencies include the U.S. Navy, USMC, and the FAA. The	Website

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				FAA's role as a cooperating agency in the Divert EIS stems from the FAA's responsibilities pursuant to 49 U.S.C. 40101 et seq. for civil aviation and regulation of air commerce in the interests of aviation safety and efficiency. The FAA is a cooperating agency on the Divert EIS because it has special expertise and jurisdiction by law to approve proposed development at civilian airports. The U.S. Navy and USMC are cooperating agencies to ensure cumulative impacts from all proposals in the region are adequately addressed.	
F2	Cumulative-General	Jude Hudson	No matter what they call it, this is NOT an Air Force Plan it is a Multi Military Branches Plan! with FAA participation expected. Nor is it a TIQ/SPN plan only! "8 Affected Location: Mariana Islands region." AND later on the true intent! "30 Accommodate future increases in operational tempo and associated training" Clearly this is planning for expanded activities in the future. NOT just Tinian NOT just Saipan NOR even just the two combined BUT the ENTIRE REGION!	As described in the Purpose and Need of the Final EIS Section 1.3, the purpose of the Divert proposal is to establish Divert capabilities for the USAF. Other military branches could participate in the Divert exercises ONLY if those branches have conducted NEPA for their own exercises, or if their total number of operations combined with the USAF's operations does not exceed 720- as described in the Final EIS. The Divert airfield could provide a location for future exercises, as described in the Final EIS. Any exercises beyond those presented in the document would require additional NEPA analysis. The FAA's role as a cooperating agency in these Divert EIS stems from the FAA's responsibilities pursuant to 49 U.S.C. 40101 et seq. for civil aviation and regulation of air commerce in the interests of aviation safety and efficiency. The FAA is a cooperating agency on the Divert EIS because it has special expertise and jurisdiction by law to approve proposed development at civilian airports. The affected location is listed as the "Mariana Islands region" because upon initial scoping of the project, Guam International Airport and Rota International Airport were also considered for the Divert airfield. As described in the Final EIS Section 2.3, the only locations under consideration that can meet the selection standards, or can be brought to standard, are Saipan, Tinian, or a combination of both. Lastly, the Mariana Islands region is also listed as the affected region because the action would have some impacts on the region as a whole, such as socioeconomics and the revenue generated as construction, rather than just on the islands of Saipan and Tinian.	Website
F3	Cumulative-CJMT	Jude Hudson	I asked at the first meeting how this would impact the CJMT and was told it would definitely pave the way and be helpful for those plans!	If the USAF were to choose Tinian for the Divert location, the USAF-proposed facilities could provide some joint use for the Marines, such as use of the parking space; however, to operate from these facilities the Marines would still be required to complete NEPA analysis for the CJMT proposal on Tinian. Therefore, while the USAF could construct facilities that might be used by CJMT, the Marines would not be able to proceed with CJMT until their NEPA process is complete.	Website
F4	Purpose/Need and Cumulative	Jude Hudson	Divert here seems to mean - 'divert attention from the whole picture.' - 'divide and conquer'. Or - 'present it in bits and pieces so locals don't catch on'.	As described in the Purpose and Need of the Final EIS Section 1.3, the purpose of the Divert proposal is to establish Divert capabilities for the USAF. Other military branches could participate in the Divert exercises ONLY if those branches have conducted NEPA for their own exercises, or if their total number of operations combined with the USAF's does not exceed 720- as	Website

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			And this is NOT for just a couple of small operations a year but paving the way for future expansion and increased tempo.	described in the Final EIS. The Divert airfield could provide a location for future exercises, as described in the Final EIS. Any exercises beyond those presented in the document would require additional NEPA analysis.	
F5	Cumulative-General	Jude Hudson	I think the DoD has an obligation to present their ENTIRE intent in one coordinated simplified document not in bits and pieces (humongous though those bits are) as they have been doing. This 'agenda masking' is a major negative significant impact of this EIS and the whole group of EISs!	The environmental impact statements and environmental assessment being prepared in the region all have different purposes and requirements. Each action has an independent utility, requirement and timeline. Although all branches fall under the Department Defense, each proposal fulfills differing needs among the services and all are on differing timelines, because of each service's operational requirements. These actions are independent of one another and would or could proceed without the others. Broken down into their basic functions, the MITT deals with continuation of existing multi-service and multi-lateral training in the area especially focused on maritime activities; the Divert EIS deals with further development of the USAF's forward deployed capabilities, the MIRC airspace EA is a continuation of the resolution of safety concerns for the multiple users of the air and sea space around Guam and CNMI, and the CJMT is the proposal to meet unfilled joint training requirements on the islands of Tinian and Pagan. While the analyses of the activities are being accomplished in approximately the same time period, they deal with dissimilar activities and requirements with independent utility. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5.	Website
G1	Water	FAA-K. Matolcsy	Sections 1.7.2 and 3.5.1 appear to be in conflict with each other. Please verify whether this project requires a Section 401 certification. The statement is made that "No permit under the CWA, whether under Section 401, 402, or 404 (b) (1), is required under the Proposed Action." However, the CNMI administers a CWA Section 401 Water Quality Certification Program through provisions contained within the WQS Regulations. A Section 401 certification is required for every federal permit which may result in a discharge of pollutants to waters of the CNMI (all marine, fresh water bodies, and ground water in the Commonwealth) (Commonwealth of the Northern Mariana Islands Water Quality Standards). This includes EPA General NPDES Permits, such as that for discharges from construction sites larger than 1 acre. This is noted later in Section 4.5.1. Short-term, direct, minor adverse impact on surface water resources are identified under Alternative 1, and short- and long-term, minor to moderate adverse impacts on groundwater resources "could occur under Alternative 1 (page 4-57); impacts are identified under Alternative 2 and 3.	Concur with comment and discussion regarding the CNMI's water quality program and Section 401 certification. The text indicating no permit would be needed was deleted from Final EIS Section 1.7.2. Text was also revised in Final EIS Section 4.5 and throughout document, per the comment.	Email
G2	Water	FAA-K. Matolcsy	The CNMI 305(b) And 303(d) Integrated Water Quality Assessment Report reports that almost all coastal marine waters are not attaining at least one designated use. Since coastal waters are impaired, how will compliance with the Water Quality Standards (WQS) during construction and implementation be assured; also	As stated in the Final EIS Section 4.5 and Section 4.16, to ensure water quality standards are met, the USAF would implement mitigation measures during the Construction Phase and the Implementation Phase of Alternative 1, Alternative 2, and Alternative 3, regardless of alternative, to minimize or avoid impacts on water resources.	Email

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			<p>demonstrate how the WQS will not be negatively impacted due to proposed activities. (Note: WQS are being updated.)</p> <p>The DEIS reports that “Class A waters include the coastal waters of the West Takpochau (North) watershed in the area around the commercial Port of Saipan. These Class A waters are downgradient of the proposed Port of Saipan fuel site.”</p> <p>The DEIS reports that “...coastal waters surrounding Tinian serve as the ultimate discharge area for all surface runoff from the island...The coastal waters of the Puntan Daipolamanibot and Masalok watersheds are impaired (Category 5) due to orthophosphate pollution... The coastal waters of the Makpo Watershed are impaired (Category 5) ...caused by onsite treatment systems and urban runoff...All the nearshore waters surrounding Tinian are designated Class AA...The coastal waters of the Makpo Watershed, the location of the proposed fuel site at the Port of Tinian, are designated as Class A marine waters...”</p> <p>All Alternatives identify that “Long-term, direct and indirect, minor, adverse impacts on groundwater would be expected as a result of sheet runoff or petroleum spills from fuel storage and aircraft-refueling activities.”</p>		
G3	Soil and Water	FAA-K. Matolcsy	<p>The statement is made that: “Per the Northern Mariana Islands Administrative Code Chapter 65-30, Earthmoving and Erosion Control Regulations, no person shall commence or continue grading, filling, or vegetation-clearing activities without first obtaining a permit from the CNMI DEQ.” Yet, under construction phase for “Geologic Resources and Soils” the statement is made that “A U.S. Environmental Protection Agency (USEPA) Construction General Permit and a CNMI DEQ Noncommercial Earthmoving permit might need to be submitted prior to the start of any construction activities.” Since erosion and sedimentation are associated with soils, identify need for permit here rather than under “Water Resources” (or both sections).</p> <p>Please provide the regulatory reference for the following statement: “Before work begins on any project to be located wholly or partially within an APC, a valid coastal permit is required. This is not applicable to Federal-lease lands or federally owned submerged lands.”</p> <p>[§ 1513. Coastal Resources Management Program: Territorial Jurisdiction § 15-10-1 Exceptions to CRM Permit Requirements]</p>	<p>Information on the Earthmoving permit has been added in the Final EIS Section 3.4.1. The earthmoving permit is also described under the description of geological resources mitigation measures in Section Final 4.4. Reference to Final EIS Section 3.4 was also provided in Final EIS Section 3.5.</p> <p>Sentence regarding APCs were revised in the Final EIS to described applicability to Federal agencies. “Before work begins on any project to be located wholly or partially within an APC, a federal coastal consistency determination is required. If the CRMO does not issue a written response within sixty days, to the agencies consistency determination, the Federal agency may presume DCRM’s concurrence that the activity is consistent with the CRM program. ”</p>	Email
G4	Socioeconomics	FAA-K. Matolcsy	<p>With respect to the “area of impact” and “primary effect area”, would this not include negative economic impacts as well?</p>	<p>The analysis of socioeconomic effects within the primary effect area includes the analysis of all potential impacts, both adverse and beneficial. Clarified in the Final EIS Section 3.14.2, per the comment.</p>	Email
G5	Noise and Land Use	FAA-G. Wong	<p>Please include a table showing the number of residences (if any) affected by noise above 65DNL</p>	<p>This information is provided in the Final EIS Section 4.10 (Land Use). Specifically, for Alternative 1 on Saipan, the number of residences within the 65dBA DNL contours under both the Average Annual Day and Average Busy Day scenarios is provided in Final EIS Section 4.10.1.2.</p>	Email

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				For Alternative 2 on Tinian, the number of residences within the 65dBA DNL contours under both the Average Annual Day and Average Busy Day scenarios is provided in Final EIS Section 4.10.2.2. The same information is repeated for Saipan and Tinian under Alternative 3 in Final EIS Section 4.10.3.2. This information was also added in Final EIS Section 4.1 and also refers to Final EIS Section 4.10 where a table was inserted for easier reference.	
G6	Air	FAA-K. Matolcsy	Please correct reference to 25,000 metric tons of carbon dioxide (CO ₂) equivalent (CO ₂ e).	Revised throughout the Final EIS per comment.	Email
G7	Water	FAA-K. Matolcsy	Amend to add "due to development and implementation of a an SWPPP...".	Final EIS Section 4.5 has been rewritten based on comments received during the RDEIS public review period and based consultation with NMFS, to better define mitigation measures for stormwater management and control. This comment was not explicitly incorporated into the document due to the extensive revisions, however, discussion of SWPPP is included in Final EIS Section 4.5.1.1.	Email
G8	Water	FAA-K. Matolcsy	Both refer to construction activities. Please clarify that proper implementation of the SWPPP should prevent contaminated stormwater runoff. Section states that: "Due to the development of an SWPPP, the vegetated surrounding area of Saipan International Airport and the Seaport, and the high infiltration rates of the island, the impacts would not be significant." Next page says: "Additionally, indirect impacts may result from an increase in impervious areas, which may increase the potential for contaminated storm water runoff to infiltrate the groundwater."	Final EIS Section 4.5 has been rewritten based on comments received during the RDEIS public review period and based consultation with NMFS, to better define mitigation measures for stormwater management and control. This comment was not explicitly incorporated into the document due to the extensive revisions, however, discussion of SWPPP is included in Final EIS Section 4.5.1.1.	Email
G9	Water	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.1.1.1; PAGE 4-129; LINES 21-23, 28-30 SECTION 4.12.1.1.1; PAGE 4-130; LINES 3-15 How will water during heavy rain events be managed if not stored within these depressions; diverted by some means? The Revised DEIS states "Flood Zones. No impacts on floodplains would be expected from the construction activities proposed under the Alternative 2 North Option. Although the area designated as Flood Zone A within the proposed taxiway would need to be filled, no impacts on flood hazard would be expected. Because these flood zone areas are only designated as such due to their potential to hold water during heavy rain events and because these are not associated with floodplains of surface water bodies, these areas would not be protected under EO 11988, Floodplain Management."	During and after construction, water from heavy rain events would be addressed by permit conditions of the CGP and the associated SWPPP. This information was added to Final EIS Sections 4.5.2.1.1 and 4.13.2. However, no references to this language was found in Final EIS Section 4.12 (Hazardous Waste) as was indicated in the comment; PACAF assumes that "Section 4.12" should have been written as "Section 4.13" in the comment.	Email
G10	Water	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.1.1.1; PAGE 4-130; LINES 3-15 SECTION 4.12.2.2; PAGE 4-134; LINE 4	The fire suppression system will use only water. This was clarified in Final EIS Sections 2.2.1 and 2.4.2.	Email

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			SECTION 4.12.3.1.2.2; PAGE 4-138; LINE 8 SECTION 4.13.2.1.1; PAGE 4-148; LINE 32-40 The fire suppression system will use water only, no AFFF; correct?		
G11	Marine Bio	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.1.1.1; PAGE 4-130; LINES 3-15 SECTION 4.12.2.2; PAGE 4-134; LINE 4 SECTION 4.12.3.1.2.2; PAGE 4-138; LINE 8 SECTION 4.13.2.1.1; PAGE 4-148; LINE 32-40 Coastal water quality issues include damage to coral reefs (including sedimentation); according to the CWA 305(b) reports for CNMI, coastal waters are most significantly impacted by sedimentation and nutrients. How minor is minor? Can maintenance/non-exceedance of current WQS due to runoff be assured? With regards to: "No construction would occur in the marine waters surrounding Saipan. As such, no impacts on marine biological resources would occur under the Construction Phase of Alternative 1. As discussed in Section 4.5.1.1, DOD policies, compliant with Federal and CNMI regulations, would be followed to minimize erosion and sedimentation during construction and to manage storm water runoff after construction. By implementing those policies, adverse impacts of sedimentation and runoff would be minor. Therefore, EFH, coral species, and other nearshore resources are not discussed in this section because indirect or direct impacts are not expected."	The Final EIS was revised in Section 4.5, Final EIS Section 4.7, and Final EIS Section 4.13, to describe that the USAF would implement mitigation measures during the Construction Phase and the Implementation Phase of Alternative 1, Alternative 2, and Alternative 3, regardless of alternative, to minimize or avoid impacts on water resources. The mitigation measures applicable to all alternatives are described in the Final EIS in the above referenced sections and in the EFH Assessment provided in Final EIS Appendix B. Additionally, the USAF completed EFH consultation with NMFS HCD and completed ESA consultations with NMFS PIRO for the Preferred Alternative, as described in Final EIS Section 4.7.2. Although the USAF consulted only on Tinian, the USAF would remain committed to mitigating potential adverse effects should they select Alternative 1 or Alternative 3 and would be required to initiate Section 7 and EFH consultation.	Email
G12	Hazardous Materials	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.1.2; PAGE 4-128; LINES 31-33 SECTION 4.12.2.1.1; PAGE 4-130; LINE 28-35 SECTION 4.12.2.1.2; PAGE 4-132; LINE 22-28 According to the Revised DEIS: "Contractors would be responsible for the storage, handling, and disposal of hazardous wastes in accordance with Federal, CNMI, and USAF hazardous waste management regulations. As such, Saipan International Airport's RCRA SQG status would not be affected. Because only limited quantities of hazardous wastes would be generated during construction of Alternative 1, the additional hazardous wastes would not be expected to exceed the capacities of existing hazardous waste disposal streams available to Saipan." Please clarify whether contractors will be considered generators of hazardous waste during construction activities; as such contractor would be required to assume all generator responsibilities including obtaining a RCRA generator ID. Multiple contractors may be challenging to manage. Will USAF assume responsibility for an accumulation point? Is the intent to deliver hazardous wastes to Saipan International Airport for ultimate disposal? Or will hazardous	All collection, storage, and management of hazardous wastes by the contractor will be defined in the actual contract with the construction contractor. Additionally, all collection, storage, and management of hazardous wastes, whether by the contractor or the USAF, would be completed in coordination with CPA and the CNMI government. This was clarified in the Final EIS Section 4.12.	Email

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			wastes generated during construction be stored at a satellite accumulation point prior to delivery to the Airport main accumulation point? Will the contractors or the USAF be then considered a co-generator? Does the Airport's RCRA status allow for this? Is the Airport willing to assume the liability? Who will be the generator during the implementation phase; USAF? Or a co-generator with the Airport?		
G13	Hazardous Materials	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.1.2; PAGE 4-128; LINES 31-33 SECTION 4.12.2.1.1; PAGE 4-130; LINE 28-35 SECTION 4.12.2.1.2; PAGE 4-132; LINE 22-28 In accordance with the CNMI Administrative Code 65-50, Part 200, Standards Applicable to Importers of Hazardous Materials, hazardous materials have specific import requirements/notifications. In addition to the discussion of other permits that may or may not be required during construction and implementation, please discuss the applicability of the requirements and notification for importing hazardous materials. "All hazardous materials would be stored and handled in accordance with applicable Federal, CNMI, and USAF hazardous materials management regulations."	Final EIS Section 4.12 was revised to clarify that all hazardous materials would be imported, collected, stored and handled in accordance with applicable Federal, CNMI, and USAF hazardous materials management regulations.	Email
G14	Hazardous Materials	FAA-K. Matolcsy	What are estimated quantities of oil products that will be stored during construction? Will an SPCC Plan be required? Please discuss the need for an SPCC Plan for the HRS and associated fuel storage tanks.	The estimated amount of oil that would need to be stored onsite will vary depending on what elements of the proposed action are being constructed and over what period of time. The amount will vary on a day to day basis and can not be estimated because of the different types of equipment and infrastructure that will be constructed. In accordance with NEPA, the USAF would only be able to proceed per the decision reflected in the ROD and as presented and analyzed in the Final EIS. An actual construction plan with this information would not be developed until a ROD is issued and funding is available. An SPCC would be developed and implemented, as discussed in Final EIS Sections 3.4, 4.4, 3.5, and 4.5. Information regarding the SPCC plan has been added to these sections.	Email
G15	Hazardous Materials	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.2.1.1; PAGE 4-131; LINES 2-5; 21-22 SECTION 4.12.2.1.2; PAGE 4-132; LINE 34-39 Check with CNMI BECQ Site Assessment and Remediation Branch for information on locations of existing contaminated areas or Brownfield areas. A visual survey may not identify contaminated areas or UXO areas. Review of as-builts, historical records, and current (remediation) reports would provide better insight as to probability of encountering these sites.	CNMI BECQ provided comments on the RDEIS but provided no further information on locations of existing contamination. All available historical records and reports on existing hazardous waste conditions were reviewed and are described in Final EIS Section 3.12.	Email

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G16	Hazardous Materials	FAA-K. Matolcsy	The statement is made that if environmental contamination is encountered, site plans should be revised to avoid contamination or remediate them as practicable. Are funds available to remediate any contaminated sites? Suggest reversing the order of actions upon discovery. Stop work first, report discovery and implement safety measures. THEN revise plans etc. as appropriate.	Availability of funds would be determined based as need for remediation is identified, and would be based on the type and level of remediation required. Remaining text in Final EIS Section 4.12.1.1 was reorganized per comment.	Email
G17	Hazardous Materials	FAA-K. Matolcsy	How would Alternative 1 be unlikely to affect identified contaminated areas because "they are primarily soil contamination sites"? If disturbed, there is a possibility of erosion and sedimentation offsite. Or contaminating clean soils and transfer of contaminated material via vehicles and equipment. Would these areas be delineated so there is no chance of disturbance?	All identified existing contamination areas are described in Final EIS Section 3.12.1. Soil-disturbing activities would not occur at these sites because they are not identified within the construction footprint.	Email
G18	Hazardous Materials	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.1.1.1; PAGE 4-130; LINES 3-15 SECTION 4.12.2.2; PAGE 4-134; LINE 4 SECTION 4.12.3.1.2.2; PAGE 4-138; LINE 8 SECTION 4.13.2.1.1; PAGE 4-148; LINE 32-40 Although the Puerto Rico Dump may not impact Alternative 1, activities associated with Alternative 1 may add to existing groundwater contamination from the Dump (assuming flow direction is the same). The discussion in the paragraph is unclear as to whether Alternative would or would not impact groundwater. The paragraph first make a declarative statement that there is an impact to the Puerto Rico Dump; then the discussion implies that activities associated with Alternative 1 would not impact groundwater at the Puerto Rico Dump and further downstream.	Impacts on groundwater are discussed in Final EIS Section 4.5. This section was clarified to state that several areas of existing contamination have been identified near the Alternative 1 areas but that Alternative 1 is unlikely to affect these contaminated areas because they are primarily soil contamination sites and ground-disturbing activities would not occur at these sites. However, the Puerto Rico Dump has soil and groundwater contamination. The Puerto Rico Dump is 200 feet west of and seaward of the Alternative 1 seaport bulk fuel storage area; therefore, it is assumed that any groundwater contamination associated with the Puerto Rico Dump has and would flow towards the ocean and not impact the Alternative 1 seaport bulk fuel storage area. As described in Final EIS Section 4.5, impacts on water resources during construction would be minimized through the use of mitigation measures and would not be expected to add to groundwater contamination.	Email
G19	Hazardous Materials	FAA-K. Matolcsy	THIS COMMENT ALSO APPLIES TO: SECTION 4.12.2.2; PAGE 4-134; LINE 4 SECTION 4.12.3.1.2.2; PAGE 4-138; LINE 8 SECTION 4.13.2.1.1; PAGE 4-148; LINE 32-40 Visual surveys may not identify areas of ACM or LBP. Review of as-builts and other historical records would provide better insight as to probability of encountering these materials. If ACM is encountered, warning signs are required (also for LBP). Are funds available for remediation?	All available historical records and reports on existing hazardous waste conditions were reviewed and are described in Final EIS Section 3.12. Availability of funds would be determined as need for remediation is identified, and would be based on the type and level of remediation required.	Email
G20	Hazardous Materials	FAA-K. Matolcsy	Sentence states that no impacts on pesticides would be expected. Do you mean no cumulative impacts from increased use of pesticides? Or minimal increase and frequency of pesticide application?	Revised throughout Final EIS Section 4.12, per comment, to clarify that "No impacts on existing pesticide use, or from the proposed use of pesticides, would be expected."	Email
G21	Hazardous Materials	FAA-K. Matolcsy	How will water during heavy rain events be managed if not stored within these depressions; diverted by some means?	During and after construction, water from heavy rain events would be addressed by mitigations for stormwater management and control. This information has been added to Final EIS Sections 4.5 and 4.13. However, no	Email

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			The Revised DEIS states "Flood Zones. No impacts on floodplains would be expected from the construction activities proposed under the Alternative 2 North Option. Although the area designated as Flood Zone A within the proposed taxiway would need to be filled, no impacts on flood hazard would be expected. Because these flood zone areas are only designated as such due to their potential to hold water during heavy rain events and because these are not associated with floodplains of surface water bodies, these areas would not be protected under EO 11988, Floodplain Management."	references to this language was found in Final EIS Section 4.12 as was indicated in the comment. Assumption is that Final EIS Section 4.12 in the reviewer's comment should have been written as Final EIS Section 4.13.	
G22	Hazardous Materials	FAA-K. Matolcsy	Please discuss offloading and surface transportation safeguards during fuel transport. Quantity stored at Port; require SPCC Plan?	Impacts related to fuel transport could be avoided or minimized through mitigation measures including proper secondary containment and maintenance of fuel storage and delivery equipment; through implementation of the SPCC plan; and through planned implementation of the various applicable Federal and CNMI storm water management, pre-treatment, and filtering requirements, so that petroleum and other contaminants are prevented from reaching the underlying aquifer. This information was added to Final EIS Section 4.12. Fuel storage tank size is described in Final EIS Section 2.4.	Email
G23	Hazardous Materials	FAA-K. Matolcsy	Mention is made of increased vehicular traffic. Will there be a requirement for use of ULSD? How will air quality be impacted? Surface deposition of particulates could be carried and deposited via runoff.	ULSD would not be required but is available on Saipan and therefore, likely would be used. Air quality impacts related to traffic are provided in Final EIS Section 4.2.	Email
G24	Hazardous Materials	FAA-K. Matolcsy	Will there be a Hazardous Materials Management Plan and/or SPCC Plan to address spills, leaks and other releases or storage of incompatible materials?	Unclear on comment based on referenced section. An SPCC plan would be developed and is now referenced in Final EIS Section 4.12.	Email
G25	Hazardous Materials	FAA-K. Matolcsy	How will water during heavy rain events be managed if not stored within these depressions; diverted by some means? The Revised DEIS states "Flood Zones. No impacts on floodplains would be expected from the construction activities proposed under the Alternative 2 North Option. Although the area designated as Flood Zone A within the proposed taxiway would need to be filled, no impacts on flood hazard would be expected. Because these flood zone areas are only designated as such due to their potential to hold water during heavy rain events and because these are not associated with floodplains of surface water bodies, these areas would not be protected under EO 11988, Floodplain Management."	During and after construction, water from heavy rain events would be addressed by mitigations for stormwater management and control. This information was added to Final EIS Sections 4.5 and 4.13. However, no references to this language was found in Section 4.12 (Hazardous Waste) as was indicated in the comment. Assumption is that reviewer intended comment to be made on Section 4.13, rather than Section 4.12.	Email
G26	Hazardous Materials	FAA-K. Matolcsy	Sentence states that no impacts on pesticides would be expected. Do you mean no cumulative impacts from increased use of pesticides? Or minimal increase and frequency of pesticide application?	Revised throughout Final EIS Section 4.12, per comment, to clarify "No impacts from the proposed use of pesticides would be expected."	Email
G27	Water	FAA-K. Matolcsy	Please verify whether fuel storage facilities will require an Industrial Stormwater NPDES permit(s) and associated SWPPP as a Sector P facility (ies) (petroleum bulk oil stations and terminals).	A stormwater NPDES permit and SWPPP would be developed for both the construction and implementation phase of the project. This was clarified throughout the text in the Final EIS Sections 4.5, 4.12, and 4.13.	Email
G28	Hazardous Materials	FAA-K. Matolcsy	Please verify (and discuss) whether the to-be-constructed vessel off-loading terminal(s) would require a marine transfer facility plan and approval from the U.S. Coast Guard.	A vessel off-load terminal was not being proposed under any of the alternatives. All fuel tankers would use existing manifolds at the port.	Email

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G29	Administrative	FAA-K. Matolcsy	Please define “short-term” as in short-term effects. Does this refer to temporary, i.e., impacts considered to have reversible effects, or time as in the Construction Phase lasting 3 years (“short-term” use). Irreversible effects could occur during the 3 year construction phase.	Short-term means that these effects would only occur during a finite period of time (i.e., during construction or during exercises). Short-term effects are not necessarily reversible or irreversible. For example, construction equipment would produce air emissions during construction. These emissions cannot be reversed, but they would dissipate such that effects would no longer be expected following the period of activity. Irreversible effects from implementing the proposed action are discussed in the Final EIS Section 5.7.	Email
G30	Cultural Resources	FAA-G. Wong	Will the outcome will be discussed in the Final EIS and the PA included in an appendix? Under Section 106 of the National Historic Preservation Act (NHPA), the USAF is formally consulting with the CNMI Historic Preservation Office (HPO) and other parties such as the Advisory Council on Historic Preservation (ACHP). The USAF will complete Section 106 consultation prior to implementing any actions in this EIS, resulting in an agreement document among the consulting parties. As a result, the design of proposed construction projects on Saipan or Tinian will include all possible planning to minimize the risk of potential harm to Section 4(f) resources resulting from the USAF’s use of Saipan International Airport or Tinian International Airport.	Impacts related to historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, and other consulting parties. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. Results of the completed 106 consultation are provided in the Final EIS Sections 4.8 and 4.16.	Email
G31	Proposed Action	FAA-K. Matolcsy	Please discuss the maintenance activities anticipated – corrosion control, etc.; mainly to address anticipated hazardous materials and wastes.	Maintenance activities would occur on an as needed basis during a Divert or military exercise. USAF is not planning to conduct maintenance at Saipan or Tinian International Airport on a regular basis. As described in Final EIS Section 4.12, all maintenances activities would follow USAF, CNMI, and Federal regulations regarding hazardous materials importation, collection, storage, and use. Potential hazardous materials could include hydraulic fluids, lead-acid batteries, solvents, and other chemicals.	Email
G32	Airspace/ Airport Ops	FAA-G. Wong	Coordination with commercial airlines is referred to in the text. Will there be (or is there) a section that explicitly describes how commercial airlines will be affected?	Final EIS Section 4.3, as a whole, addresses potential impacts on commercial operations from both construction and military exercises. Details from the Aeronautical Study were incorporated into the Final EIS, as appropriate. However, USAF does not anticipate having a major impact on commercial operations. Final EIS Section 4.3 was revised to clarify this matter.	Email
G33	Administrative	FAA-G. Wong	FAA requires submission of the ALP by CPA for review and approval.	Comment noted. This requirement is discussed in Final EIS Sections 1.6 and 1.7.1.	Email
G34	Cultural Resources	FAA-G. Wong	Section 106 consultation is ongoing. CNMI SHPO’s 26Oct2015 letter did not concur with finding of “no direct effect”	Noted. SHPO’s letter was discussed during Section 106 meetings in CNMI the week of 3-6 November. The USAF and SHPO agreed that there was the potential for adverse effects on the NHL on Saipan. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the Revised Draft EIS public review period was complete. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement	Email

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				document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16.	
H1	Noise	BECQ-F.Rabauliman	BECQ is very concerned that increased noise could have a detrimental impact to the people and wildlife on Saipan and Tinian. More information on the baseline noise levels and number of people likely to be affected by the Divert Activities should be included in the FEIS.	Baseline noise levels are provided in the Final EIS Section 3.1. Analysis of potential noise from the Alternatives on Saipan and Tinian are provided in Final EIS Sections 4.1 and 4.10 for effects on residents; and Final EIS Section 4.6 for effects on biological resources. Significant adverse impacts on people and biological resources are not expected under any alternative.	Website
H2	Noise and Land Use	BECQ-F.Rabauliman	For example, the Noise chapter of the DEIS notes the increase in acres that will be affected by the Divert Activities but not the increase in people to be affected. Later in the DEIS, it is noted that "a population of less than 12 would be exposed to the 65 dBA noise level on Saipan." (p.4-97). The DEIS also later notes that, "a noise level of 67- 71 dBA could be intermittently heard at the border of the village of Dandan" (4-172). The Noise chapter should clearly lay out how many people will be affected by how much noise, how often, and where.	This information is provided in Final EIS Section 4.10. Specifically, for Alternative 1 on Saipan, the number of residences within the 65dBA DNL contours under both the Average Annual Day and Average Busy Day scenarios is provided in Final EIS Section 4.10.1.2. For Alternative 2 on Tinian, the number of residences within the 65dBA DNL contours under both the Average Annual Day and Average Busy Day scenarios is provided in Final EIS Section 4.10.2.2. The same information is repeated for Saipan and Tinian under Alternative 3 in Final EIS Section 4.10.3.2. This information was also added in Final EIS Section 4.1 and also refers to Final EIS Section 4.10 where a table was inserted for easier reference.	Website
H3	Noise and Land Use	BECQ-F.Rabauliman	Information on the number of acres and people affected should also be given for the Average Busy Day (ABD), currently only acres affected for the Average Annual Day (AAD) is noted. This information would be especially useful for Tinian as the ABD contours are much larger and overlap shorelines. There would likely be more 'noise receptors' on Tinian under the ABD.	Average Busy Day noise contours and analysis, including the number of residences and noise sensitive receptors within the noise contours, have been added to Final EIS Section 4.10.	Website
H4	Noise	BECQ-F.Rabauliman	The DEIS uses 65-70 dB contour lines on its noise maps. This is likely under the assumption that 12-22% of people would be 'highly annoyed' within the 65-70 dBA contour (p. 4-1) as described by Finegold et al (1994).However, as noted earlier in the DEIS, a 'Residential area in a small town or quiet suburban area' typically experiences levels of 50 dBA. BECQ suggests using 50dBA as its baseline for comparisons. Residents and visitors to Saipan and Tinian put a premium on peace and quiet in the area. Loud noises will likely cause a higher rate of annoyance on the islands.	The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF Instructions, and FAA orders. The noise analysis presented is a conservative (overestimate) depiction of potential noise from tanker aircraft that might operate under the Proposed Action, but actual noise would be much less as explained in the Final EIS. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either the same or only slightly louder at noise sensitive locations under all alternatives. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels.	Website
H5	Noise and Land Use	BECQ-F.Rabauliman	The American National Standards Institute (ANSI) notes that Finegold et al set a standard in 1994 and this standard remains relevant today. However there are now qualifications to the dose-response function set by Finegold et al. For example:	The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF Instructions, and FAA orders, which take the referenced citation into account in determining the procedures for air operations noise analysis. FAA requirements, particularly 14 CFR Part 150 and FAA Order 1050-1E, requiring the use of 65 dB to	Website

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			<ul style="list-style-type: none"> • "In newly created situations, especially when the community is not familiar with the sound source in question, higher community annoyance can be expected. This difference may be equivalent to up to 5 dB. • Research has shown that there is a greater expectation for and value placed on "peace and quiet" in quiet rural settings. In quiet rural areas, this greater expectation for "peace and quiet" may be equivalent to up to 10 dB. • The above two factors are additive. A new, unfamiliar sound source sited in a quiet rural area can engender much greater annoyance levels than are normally estimated by relations like equation (F.1). This increase in annoyance may be equivalent to adding up to 15 dB to the measured or predicted levels." (ANSI 2005) <p>BECQ recommends PACAF use the updated ANSI qualifications in its analysis for Saipan and Tinian. Illustrating the change in the 50dBA contour line from the current baseline to the Divert Activities' AAD and ABD would be informative.</p> <p>Reference: ANSI. (2005). "Quantities and Procedures for Description and Measurement of Environmental Sound - Part 4: Noise Assessment and Prediction of Long-Term Community Response." American National Standards Institute and Acoustical Society of America. ANSI S 12.9-2005/Part 4. <http://archive.leg.state.mn.us/docs/2015/other/150681/PFEISref11ANSI%202005.pdf>.</p>	<p>assess impacts were followed as FAA is the governing authority for both the Saipan and Tinian airports. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either the same or only slightly louder at noise sensitive locations under all alternatives. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels.</p>	
H6	Noise	BECQ-F.Rabauliman	BECQ also recommends using Best Available Technology to reduce noise impacts. This should include regular maintenance, on-the-ground monitoring, and reporting of noise (ambient and peak) to BECQ when requested.	The mitigation measures to reduce or eliminate noise impacts on the ambient environment are provided in Final EIS Sections 4.1 and 4.16 and include use of measures such as the restriction of construction normal working hours, and the use of equipment exhaust mufflers. During exercises, the USAF will notify the local government and public in advance of the exercises per existing procedures. USAF will coordinate with BECQ during construction and exercises as requested and able.	Website
H7	Against Saipan; For Tinian	BECQ-F.Rabauliman	Given that Saipan is a more populated island and the noise effects would be greater on Saipan, BECQ recommends Tinian as the preferred alternative.	Comment noted. The alternatives presented in the Final EIS and the corresponding analysis for each alternative will be provided to the USAF decisionmaker. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will also become part of the Final EIS administrative record.	Website
H8	Air	BECQ-F.Rabauliman	BECQ is concerned that the Divert Activities will have a negative impact on the CNMI's air quality. As noted in the DEIS, "PACAF will coordinate with CNMI DEQ to obtain the necessary stationary source permits prior to commencing construction of any potential stationary source, to include the bulk fuel storage areas" (pp. 4-20, 4-28, 4-36).BECQ looks forward to working with PACAF to ensure stationary sources of air emissions comply with CNMI regulations. BECQ also encourages efforts be taken to reduce emissions of air pollutants wherever possible, including non-stationary sources during the implementation phase.	Comment noted. Analysis presented in Final EIS Section 4.2 indicates that only minor impacts on CNMI's air quality would be expected from any of the alternatives.	Website

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H9	Air	BECQ-F.Rabauliman	The DEIS states that "significance criteria thresholds are not expected to be reached for either phase [Construction or Implementation]" for all Alternatives (pp. 4-27, 4-34, 4-42). However, CO2 emissions in the Implementation Phase "would reach the threshold of 25,000 metric tonnes described in guidance issued by the EPA EPA guidance does not propose this as an indicator of a threshold of significant effects." (pp. 4-27, 4-34, 4-42). The proposed CO2 emissions of 166,305 metric tonnes per year greatly exceed the EPA's reporting threshold. Further, these emissions would be concentrated to a span of 8 weeks rather than spread out over a year. BECQ recommends monitoring of air quality and health impacts over the course of operations.	As stated in the Final EIS, exceeding 25,000 metric tonnes of CO ₂ -equivalent is not an indicator of significant effects related to greenhouse gas emissions, according to EPA guidance. Additionally, analysis of greenhouse gas emissions is not an indicator of impacts on local air quality, but rather on greenhouse gas emissions worldwide. Analysis presented in Final EIS Section 4.2 indicates that only minor impacts on CNMI's air quality would be expected from any of the alternatives. During construction, the USAF would implement appropriate fugitive dust-control measures during construction activities to suppress emissions. The USAF would also submit and abide by all conditions of the CNMI DEQ air quality construction permit.	Website
H10	Air	BECQ-F.Rabauliman	BECQ would also like to see more information on how emissions estimates were calculated. Currently, Appendix E does not provide sufficient details.	All air calculations are provided in Final EIS Appendix E, definitions and baseline air quality data is provided in Final EIS Section 3.2, and all assumptions and analysis is provided in Final EIS Section 4.2.	Website
H11	Air	BECQ-F.Rabauliman	Several acronyms, reports, and models are cited in this section but not explained or referenced further. Particularly confusing is the calculation of PM10 and PM2.5. On page E-3 the "Total Project Annual Emission Rates" are listed as 0.44 tons for PM10 and 0.43 tons for PM2.5, while on page E-4 the project emissions are listed as 48.52 tons PM10 controlled and 3.88 PM2.5 controlled. More explanation on how the numbers on page E-3 relate to those on page E-4 would be appreciated.	Final EIS Appendix E Page E-3 is a continuation of p. E-2 and is still part of the Combustion Emissions; "Continuation" was added to the heading. The title "Total Project Annual Emission Rates" refers to totals just for Combustion Emissions; however, the name has been changed and resized for clarity along with other headings. A new page heading has been added to Final EIS Appendix E Page E-3 and other similar pages to clarify. Final EIS Appendix E Page E-4 is providing emissions just for Construction Fugitive Dust as indicated in the heading on this page.	Website
H12	Air	BECQ-F.Rabauliman	It also appears that 1996 data was used for construction activities modeling PM10 (p. E-4) - is this the latest modeling data available?	The data presented in the Final EIS are a combination of a study from 1996, as well as the EPA's 2001 and 2006 National Emissions Inventory. The 1996 reference is the latest source for calculating fugitive PM-10 emissions in this manner. If a more recent rigorous model was used, not enough detailed data would be available to effectively use the model or the results would not be expected to be significantly different.	Website
H13	Air	BECQ-F.Rabauliman	Moreover, the EPA's National Emissions Inventory documentation was applied for PM in nonattainment areas. Modeling documentation that reflects the fact that this area is considered an "in-attainment" zone should be used to ensure there is no degradation of existing air quality.	The emission factors for PM (tons/acre-month) are not dependent on whether the emissions occur in an attainment area or nonattainment area; they are applied in the same manner for both areas.	Website
H14	Air	BECQ-F.Rabauliman	Further, on page E-6 there is a calculation for "Construction/Staff Commuter Emissions". It is assumed that 1500 staff will travel 40 miles daily on Saipan under Alternative 1. However in the DEIS it states that "It is estimated that the number of construction workers associated with Alternative 1 would not exceed 500 at any given time." (p.4-108). The Appendix assumes 2000 people and 40 miles daily travel for Tinian under Alternative 2, but the DEIS states that the construction workers under Alternative 2 "would not exceed 750 at any given time" (p.4-111) for the North Option and "would not exceed 500" (p.4-113) under the South Option. The FEIS should explain why an alternate number was used in the Appendix.	The revised number of construction workers was incorporated into the Final EIS Worker Commuter emission calculations, as suggested.	Website

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H15	Air	BECQ-F.Rabauliman	Also, the DEIS notes that workers could come from Guam or the Federated States of Micronesia, or be transported from Tinian or Rota (p.4- 170). The commute from other islands should be included in calculations, especially if workers would be commuting daily from Tinian or Rota to Saipan.	It was assumed that any workers from Guam or FSM would travel only once to Saipan (or Tinian under Alternative 2 and/or 3) and then would remain on the island through the construction period. All travel to/from Guam or FSM would be on existing commercial flights or carriers and additional flights would not be required. Although commuting <i>could</i> occur from other islands, it is highly unlikely and cost prohibitive to construction personnel. The number of workers that would commute daily is assumed to be negligible and that the majority would remain on the island chosen for construction. Any transport between Saipan and Tinian would be within the confines of existing charter flight operations. This information was clarified in Final EIS Section 4.14.	Website
H16	Air	BECQ-F.Rabauliman	Construction emissions should be adjusted to include emissions from anticipated travel for each proposed action.	Analysis of construction emissions in the Revised Draft EIS did take into account anticipated on-island travel for each action. Final EIS Section 4.2 was revised to clarify that construction transportation is included in the analysis. Specifics are provided in Final EIS Appendix E.	Website
H17	Air	BECQ-F.Rabauliman	BECQ is concerned that air emissions are averaged over a year rather than over the 8 weeks of operations. Emissions from operations should be averaged over 8 weeks to show the localized increases over that time frame.	Air emissions were calculated for 8 weeks of operations. Emissions are presented as "per year", but these numbers represent operating only 8 weeks/year. The numbers provided are not annual averages, rather, they are the total amount of emissions for that year.	Website
H18	Air	BECQ-F.Rabauliman	BECQ recommends PACAF use Best Available Technology to reduce air quality impacts, including requirements for high MPG vehicles, regular maintenance, installation of buffers and HEPA filters, and on-the-ground monitoring and reporting of air quality to BECQ when requested (w/in 24hrs of request). Implement idling restrictions for operating vehicles, especially large equipment (during construction) and fuel vehicles (during implementation).	Potential impacts on air quality from all alternatives is expected to be minor. Mitigation for minor impacts would result in only negligible changes to potential emissions. Additionally, use of best available technology would be dependent upon the construction contractor. However, the USAF would ensure that the contractor abide by all applicable air quality regulations. The USAF would implement appropriate fugitive dust-control measures during construction activities to suppress emissions. The USAF would also submit and abide by all conditions of the CNMI DEQ air quality construction permit.	Website
H19	Airspace/ Airport Ops	BECQ-F.Rabauliman	BECQ would appreciate more information on the following claim: "beneficial impacts would be expected because the fueling system would provide a more efficient fueling operation." (p.4-45).	The analysis in Final EIS Section 4.3 was revised to remove this statement.	Website
H20	Airspace/ Airport Ops	BECQ-F.Rabauliman	Are there any restrictions to commercial airlines using military fuel tanks?	This analysis in the Revised Draft EIS was based on the USAF's initial consideration to work with CPA to develop fuel and infrastructure share agreements. However, after development of the Final EIS, it was determined that this responsibility falls with the Defense Logistics Agency, which would be the fuel supply agent. The Defense Logistics Agency, not the USAF, would have to navigate the approval process to sell fuel to commercial entities and they must first make a formal determination that doing so is in the public interest in accordance with federal laws. Therefore, the analysis in Final EIS Section 4.3 was revised to remove this statement.	Website
H21	Airspace/ Airport Ops	BECQ-F.Rabauliman	To what extent could commercial planes use the military fuel tanks?	This analysis was based on the USAF's initial consideration to work with CPA to develop fuel and infrastructure share agreements. However, after development of the EIS, it was determined that this responsibility falls with the Defense Logistics Agency, which would be the fuel supply agent. The	Website

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				Defense Logistics Agency, not the USAF, would have to navigate the approval process to sell fuel to commercial entities and they must first make a formal determination that doing so is in the public interest in accordance with federal laws. Therefore, the analysis in Final EIS Section 4.3 was revised to remove this statement.	
H22	Geology and Soils	BECQ-F.Rabauliman	As noted in the DEIS, the Divert Activities could lead to excessive erosion and compaction of soils during the construction phase and "compaction of soil, degradation in soil productivity, alteration of storm water drainage and the percolation of rainwater" (p. 4-53) during the implementation phase. The DEIS proposes to handle these impacts largely through BMPs. The DEIS does state that: "All construction BMPs would follow the guidelines provided in Federal and CNMI permitting processes and regulations; a USEPA Construction General Permit and a CNMI DEQ Noncommercial Earthmoving permit might need to be submitted prior to the start of any construction activities under Alternative 1." (p. 4-53) BECQ is concerned by the inclusion of the word 'might' and encourages PACAF to apply for a Noncommercial Earthmoving permit to improve communication between the CNMI and DoD, and to ensure all environmental impacts are avoided or minimized.	Concur. Text was revised in Final EIS Section 4.4 to state that PACAF would apply for these permits.	Website
H23	Water	BECQ-F.Rabauliman	Stormwater management facilities that will address frequent heavy rain events must be installed.	During and after construction, water from heavy rain events would be addressed by mitigation measures for stormwater management and control. This information has been added to Final EIS Sections 4.5. and 4.13.	Website
H24	Water	BECQ-F.Rabauliman	According to the DEIS, "Impacts on surface water could result from a reduction in water quality, increased storm water runoff, and altered hydrologic conditions." (p. 4-56) Under Alternative 2 North and South Option "impacts on surface water resources would be similar to, but greater than, Alternative 1 due to the larger construction footprint" (pp. 4-59, 4-60).Impacts would largely be dealt with by implementing sediment and erosion controls and storm water management BMPs. The DEIS says construction BMPs would follow CNMI DEQ Earthmoving and Erosion Control Regulations and permit, and the CNMI DEQ/GEP A Stormwater Management Manual. We look forward to working with USAF on their permit.	Comment noted.	Website
H25	Water	BECQ-F.Rabauliman	According to the DEIS, "a temporary increase in storm water runoff, erosion, and sedimentation would be expected during the proposed construction activities." (p. 4-57) On Saipan, this increase will be dealt with by developing a Storm Water Pollution Prevention Plan (SWPPP).The DEIS says "Storm water management and infiltration features should be designed in accordance with the CNMI DEQ/GEPA Stormwater Management Manual" (4-57). BECQ looks forward to working with USAF on the development of their stormwater management plan.	Comment noted.	Website
H26	Water	BECQ-F.Rabauliman	In the DEIS, storm water for Alternative 2 is handled under the 'Surface Water' heading. The DEIS notes that predevelopment site hydrology will be maintained to the maximum extent technically feasible. According to the DEIS, "This would	Comment noted.	Website

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			likely require the existing storm water management features at Tinian International Airport to be resized or supplemented to accommodate the increase in storm water runoff from the improved areas." (4-60). BECQ offers its expertise to USAF to ensure water quality is maintained.		
H27	Water	BECQ-F.Rabauliman	BECQ is very concerned that the Divert Activities could negatively impact groundwater on Saipan or Tinian. According to the DEIS, <ul style="list-style-type: none"> • "Under Alternative 1, replacement of pervious surfaces with impervious surfaces could result in depletion of groundwater resources and increased salt water intrusion to drinking water wells." (4-58) • "Due to the high permeability of the limestone on Saipan, the Mariana Limestone Aquifer could be very susceptible to contamination." (4-58) • Under Alternative 2, "the underlying aquifer could be very susceptible to contamination. Therefore, storm water directed from these areas could require substantial pre-treatment and filtering prior to infiltration to protect the quality of groundwater resources." (4-60, 4-61). Any contamination to the groundwater lens would be considered more than a "moderate" impact. If the Divert Activities move forward, USAF should take all steps possible to reduce the threat of groundwater or surface water contamination. 	Comment noted. As stated throughout the document in Final EIS Sections 4.5, 4.12, and 4.13, the USAF would follow mitigation measures during construction and implementation to avoid or minimize impacts on groundwater. Examples of mitigation measures include preparation and implementation of an erosion and sediment control plan (ESCP), stormwater pollution prevention plan (SWPPP), and spill control and countermeasure plan.	Website
H28	Water	BECQ-F.Rabauliman	The DEIS does note that, "One of the key BMPs required under the SPCC is the use of secondary containment systems to contain spills and leaks." (p. 4-58) BECQ recommends installing monitoring wells and ensuring BMPs are in place to report and contain any fuel leaks or spills. Leaks or spills must be reported to BECQ's DEQ, and the monitoring and reporting plan should be shared with the agency to ensure compliance with local and national requirements.	Comment noted. The SPCC will include all applicable requirements related to spill prevention and countermeasure, including reporting requirements. All applicable Federal and CNMI laws and regulations will be followed, specifically 40CFR part 112.7	Website
H29	Water	BECQ-F.Rabauliman	BECQ looks forward to working with USAF in addressing these impacts under the DEQ Earthmoving Permit. BECQ recommends installing monitoring wells and ensuring staff are trained in spill prevention and clean-up to reduce threats of negative impacts to water resources.	Comment noted. The SPCC will include all applicable requirements related to spill prevention and countermeasure, including training requirements. All applicable Federal and CNMI laws and regulations will be followed in accordance with 40CFR part 112.7	Website
H30	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	The DEIS notes that six species were proposed for listing as endangered in October 2014, however, "None of those species would occur in the mowed field, tangantangan forest, park, disturbed or paved areas, or agricultural vegetation communities found at and surrounding Saipan International Airport" (p.4-68) It is unclear how USAF came to this conclusion. Were surveys conducted for these species?	Surveys were not conducted specifically for these species. A survey was conducted in 2012 to characterize and map vegetation and habitat within and surrounding the airports. That information was used to determine if the areas proposed to be disturbed could contain habitat for listed species.	Website
H31	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	[The DEIS notes that six species were proposed for listing as endangered in October 2014, however, "None of those species would occur in the mowed field, tangantangan forest, park, disturbed or paved areas, or agricultural vegetation communities found at and surrounding Saipan International Airport" (p.4-68) It is unclear how USAF came to this conclusion...] What is known about the habitat of these species?	Text was added to Final EIS Section 3.6 to describe the habitat of the recently proposed species that occur on Saipan.	Website

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H32	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	[The DEIS notes that six species were proposed for listing as endangered in October 2014, however, "None of those species would occur in the mowed field, tangantangan forest, park, disturbed or paved areas, or agricultural vegetation communities found at and surrounding Saipan International Airport" (p.4-68) It is unclear how USAF came to this conclusion...] The FEIS should include specifics on why these newly listed endangered species would not be affected.	Text has been added to Final EIS Section 3.6 to describe the habitat of the recently proposed species that occur on Saipan, and to justify that they do not occur in the areas that would be disturbed for planned activities.	Website
H33	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	BECQ is particularly concerned about possible effects to the nightingale reed-warblers surrounding the Saipan International Airport. As the DEIS notes, "the USAF has concluded that this alternative [Alternative 1] is likely to adversely affect nightingale reed-warblers" (p. 4-68) In addition to the mitigation measures currently proposed, BECQ recommends only clearing in Saipan outside the main nesting season for reed-warblers and conducting surveys prior to clearing to ensure no birds are present or have moved since the last survey.	All construction activities on Saipan would be conducted in compliance with the Biological Opinion issued by the U.S. Fish and Wildlife Service for this project. In accordance with that document, clearing of vegetation would only occur during October through December, or April through June, which is outside of the main nesting season for reed-warblers. That document does not require additional surveys for reed-warblers prior to construction.	Website
H34	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	[BECQ is particularly concerned about possible effects to the nightingale reed-warblers surrounding the Saipan International Airport. As the DEIS notes, "the USAF has concluded that this alternative [Alternative 1] is likely to adversely affect nightingale reed-warblers" (p. 4-68)...] In the previous DEIS, USAF offered to purchase a credit in the Saipan Upland Mitigation Bank prior to any construction of the east parking apron. The east parking apron is no longer proposed for the revised DEIS. Will USAF consider purchasing a credit in the Saipan Upland Mitigation Bank prior to other construction surrounding Saipan International Airport?	The east parking apron would not be constructed, therefore, impacts on the reed-warbler territory in the area would be avoided. In accordance with the Biological Opinion, and as confirmed by the U.S. Fish and Wildlife Service in a letter sent to the USAF in October 2015, purchase of a credit in the Saipan Upland Mitigation Bank is no longer required, and the USAF no longer plans to purchase such a credit.	Website
H35	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	[BECQ is particularly concerned about possible effects to the nightingale reed-warblers surrounding the Saipan International Airport. As the DEIS notes, "the USAF has concluded that this alternative [Alternative 1] is likely to adversely affect nightingale reed-warblers" (p. 4-68)...] Although reed warblers were not detected in the 2012 surveys in the areas for the proposed fuel tanks, maintenance facility, hydrant system and cargo pad, birds do move around. Reed-warbler territories were detected "partially within or adjacent to the proposed location of the fuel tanks." (p. 4-68) As territories do move, BECQ recommends surveying the area prior to clearing and purchase of a credit in the Saipan Upland Mitigation Bank.	All construction activities on Saipan would be conducted in compliance with the Biological Opinion issued by the U.S. Fish and Wildlife Service for this project. That document does not require additional surveys for reed-warblers or the purchase of a credit in the Saipan Upland Mitigation Bank. However, the USAF is required to ensure that no unauthorized take of reed-warblers would occur and to stop all activities that may result in take.	Website
H36	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	Chapter 3.6 notes that "biologists located a black noddy (Anous minutus) rookery at Saipan International Airport" (p. 3-49), however this rookery is not addressed in Chapter 4.6. The black noddy is listed in the Migratory Bird Treaty Act (MBT A) and should be addressed.	As stated in Final EIS Section 4.6.1, "black noddy and other birds in the area of the rookery ... might temporarily avoid areas surrounding construction sites." Text has been added to that section to clarify that the rookery is distant from any construction sites and would not otherwise be directly or indirectly affected by construction activities.	Website

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H37	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	Under Alternative 2, the Tinian Monarch could be affected by Divert Activities. As the DEIS notes, "Although this bird species was federally delisted in 2004 (69 FR 56367), and delisted by the CNMI government in 2009, this endemic species could be threatened by habitat loss." (p. 4-72) There appear to be no mitigation measures proposed for the protection of the Tinian Monarch. Activities should ensure any habitat is disturbed to the least extent possible.	The proposed locations of facilities at the Tinian airport have been selected, to the extent possible, in areas that have been cleared of vegetation or otherwise disturbed. For example, under Alternative 2 from about 20 to 40 percent of the footprint of facilities would be located in mowed fields or existing developed areas. Additional facilities cannot be located in those cleared or developed areas because of the presence of existing airport facilities or for safety reasons. Additionally, construction activities would be conducted during times of year when bird nesting activity is low, surveys for nesting birds would be conducted and areas where active nests are found will be avoided, or other measures would be taken to avoid harming any migratory birds, nests, or eggs.	Website
H38	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	BECQ is also concerned about the possibility of airstrikes to migratory birds. The DEIS notes that this is a possibility (pp. 4-69, 4-73, 4-76). BECQ recommends that airstrikes be reported to DFW for improved communication, monitoring, and response.	The USAF would follow FAA regulations for reporting of birdstrikes that occur at public airfields. The FAA maintains a Wildlife Strike Database that can be used by DFW staff to monitor those strikes reported at CNMI airports.	Website
H39	Marine Bio	BECQ-F.Rabauliman	The DEIS states that: "No construction would occur in the marine waters surrounding Saipan. As such, no impacts on marine biological resources would occur under the Construction Phase of Alternative I." (p.4-78) The same is stated for Tinian (p. 4-80). Although there is no in-water construction proposed for this project, run off from construction on land could have impacts in marine waters. The DEIS previously addresses having erosion and stormwater controls. Such controls must be implemented and monitored to protect marine resources.	As described in Final EIS Section 4.4, 4.5., and 4.7, the USAF would implement extensive mitigations for erosion and sediment control and stormwater management control, both during and after construction. The mitigations must be sufficient to ensure that water quality standards are maintained and that any stormwater released from the site would have low concentrations of sediments.	Website
H40	Marine Bio	BECQ-F.Rabauliman	The DEIS further mentions that "military aircraft would also conduct training over the ocean within the MIRC. ... These training exercises are covered under the Programmatic Biological Opinion on military readiness activities the U.S. Navy proposes to conduct within the MIRC and the MITT" (p. 4-79). Multiple Department of Defense projects are occurring or proposed for the CNMI (MIRC, MITT, CJMT, Guam Relocation, Divert Activities, etc.). It is very confusing how these various projects connect and overlap. A clear description of all Department of Defense activities and how they overlap would be appreciated.	Comment noted. The Divert EIS analyzes the take-off and landing of aircraft during divert exercises at the airport or airports proposed for improvements. All flight activity after take-off (i.e., above 10,000 feet) would occur within the Mariana Islands Range Complex and is covered in the MITT EIS. Final EIS Section 4.7 was clarified to state that training exercises within the MIRC would be covered under the analysis provided in the MITT EIS and its associated Biological Opinion. This information was also clarified in Final EIS Section 2 in the description of the Proposed Action and Alternatives.	Website
H41	Marine Bio	BECQ-F.Rabauliman	This section of the DEIS repeatedly says the "U.S. Navy proposes to conduct within the MIRC and the MITT from August 2015 to August 2015" (pp. 4-78, 4-80, 4-81, 4-82) Are these dates correct?	Transcription error. Revised to "August 2015 to August 2020"	Website
H42	Cultural Resources	BECQ-F.Rabauliman	BECQ defers to the Historic Preservation Office (HPO) for comments on Cultural Resources. As the DEIS notes, Alternative 1 would be near Aslito/Isley Field NHL and could "alter the viewshed of nearby historic structures. Such visual intrusions could impact integrity of, setting and feeling of those historic structures and the NHL as a whole" (4-86). Meanwhile, the "construction at Tinian International Airport under the Alternative 2 North and South Options could impact one archaeological site, TN-6-0030 (also sometimes referred to as Site 3005), the American administration-period West Field" (p. 4-86) The DEIS	Comment noted. Impacts related to historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, and other consulting parties. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation	Website

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			goes on to say that "The Implementation Phase of Alternative 2 would have no impact on cultural resources". (p.4-87) BECQ suggests that Tinian is a small island, all of which is culturally important to the people that have called it home for centuries. Increased military air traffic could also represent a visual intrusion to an island that values peace and tranquility.	to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the completed 106 consultation are provided in the Final EIS Sections 4.8 and 4.16. Impacts related to noise on recreation are provided in Final EIS Section 4.9.	
H43	Recreation	BECQ-F.Rabauliman	For Alternative 1, the DEIS notes that "Military exercises would generally be conducted on land designed for that purpose, and previous military exercises throughout the region have not precluded fishing or recreational use, even during peak fishing season." (p. 4-91) This is a misleading sentence as the land (current airport) has not been designed for military exercises but would be modified for the Divert Activities should they go forward.	Sentence revised for clarity in Final EIS Section 4.9 to state "Military exercises would be conducted from Saipan International Airport, which is land designed for aircraft use. "	Website
H44	Recreation	BECQ-F.Rabauliman	[For Alternative 1, the DEIS notes that "Military exercises would generally be conducted on land designed for that purpose, and previous military exercises throughout the region have not precluded fishing or recreational use, even during peak fishing season." (p. 4-91)...] Further, while previous military exercises may not have precluded recreational use, they may have and could affect the quality of recreational use.	Concur. Text in Final EIS Section 4.9 states that increased noise levels (although below 65dB) noise levels at Coral Ocean Point Golf Course and Ladder Beach could result in minor direct impacts on recreation.	Website
H45	Recreation	BECQ-F.Rabauliman	The DEIS notes that the "noise levels at Coral Ocean Point Golf Course and Ladder Beach would increase to 60-64 and 55-59 dBA DNL, respectively" (p. 4-91). As noted in the Noise chapter of these comments, a 50dBA baseline should be used for comparisons given the quiet nature of the CNMI and preference for tranquility at tourist resorts.	The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF Instructions, and FAA orders. Furthermore, the USAF significantly reduced the proposed noise impacts from its previous 2012 proposal by removing fighter jet operations and reducing the number of operations that would be flown by tanker aircraft during a given military exercise. Noise levels experienced at these locations on Saipan would be similar to the noise from commercial jet aircraft that already land or take off at Saipan's international airport.	Website
H46	Recreation	BECQ-F.Rabauliman	The DEIS states that "Fewer recreational resources are found in the immediate vicinity of Tinian International Airport" (p.4-92) and thus impacts from construction and implementation would be negligible. No mention is made of the planned Plumeria Resort by the Alter City Group and how the Divert Activities could affect future tourism on the island. The FEIS should note potential affects to the Plumeria Resort and to future tourism in general.	Future development on Tinian and impacts of the Proposed Action on future tourism and recreation are addressed in Final EIS Section 5 (Cumulative Impacts). Specifically, cumulative impacts on recreation are addressed in Final EIS Section 5.3.9, and on socioeconomics in Final EIS Section 5.3.14.	Website
H47	Land Use	BECQ-F.Rabauliman	The DEIS notes that "it is assumed that a population of less than 12 would be exposed to the 65 dBA noise level on Saipan" (p.4-97) and "There are no schools that would be exposed to noise levels at or above 65 dBA DNL and, therefore, no impacts on children's health or learning would be expected." (p. 4-99) BECQ recommends in its Noise comments above that a lower threshold be used given the CNMI's tranquil nature. Fortunately, Table 4.10-1 "Alternative 1 Noise Levels at Noise-Sensitive Locations around Saipan" puts nearby schools at below the 50dBA level. Noise mitigation would still be appreciated to maintain tranquility around Coral Ocean Point and Ladder Beach.	The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF Instructions, and FAA orders. FAA requirements, particularly 14 CFR Part 150 and FAA Order 1050-1E, requiring the use of 65dB to assess impacts were followed as FAA is the governing authority for both the Saipan and Tinian airports. The noise analysis presented is a conservative (overestimate) depiction of potential noise from tanker aircraft that might operate under the Proposed Action, but actual noise would be much less as explained in the Final EIS. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either	Website

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				the same or only slightly louder at noise sensitive locations under all alternatives. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels. Noise levels experienced at these locations identified in the comment on Saipan would be similar to the noise from commercial jet aircraft under existing conditions.	
H48	Land Use	BECQ-F.Rabauliman	In its "Climate Change" section, the DEIS states that: "coastal flooding due to sea level rise could have an adverse impact on proposed fuel tanks located near the seaports of Saipan and Tinian. If a rise were to occur suddenly, fuel tanks could become inundated, and this could lead to a release of fuel into the environment." (p.5-43) USAF should work with BECQ, CPA, and other agencies to ensure that storm surge and sea level rise models are considered when planning locations of facilities in order to minimize risks and ensure long-term sustainability.	The proposed locations for the fuel tanks are locations that CPA recommended to the USAF. The proposed locations are also adjacent to existing similar tanks. The USAF would work further with BECQ and CPA to verify these locations prior to construction. All fuels infrastructure proposed in the EIS would be constructed according to the most stringent applicable Federal and CNMI requirements, which would reduce the likelihood of spills or spill migration into the environment. Mitigation measures related to spill prevention and countermeasures control are provided in the Final EIS Section 4.12.	Website
H49	Land Use	BECQ-F.Rabauliman	Under Alternative 2, the DEIS says: "While the CPA owns some north of Tinian International Airport on which construction would occur, additional acres of LBA land would be required. This LBA land is currently used for cattle grazing, and agriculture/grazing leases and permits might need to be terminated. This permit revocation and the displacement of ranches would create an economic hardship on the affected ranchers." (pp. 4-177 - 4-178) This is of particular concern as the CJMT has also proposed moving ranchers. Is there enough space for all the displaced ranchers? Where will they be moved to? What is the quality of the new grazing land?	After a review of existing grazing leases near the airport in Tinian, the USAF Divert proposal would not displace any existing cattle/agricultural leasees. The Final EIS has been edited throughout the document, to reflect this updated information.	Website
H50	Transportation	BECQ-F.Rabauliman	Impacts to traffic from construction and implementation should be avoided. BECQ suggests USAF work with the Department of Public Works to conduct traffic surveys to identify problem intersections and address congestion. This will have the added benefit of reducing associated emissions from unnecessary idling. Wherever possible USAF should coordinate transportation of personnel to non-"high use/rush hour" periods.	USAF disagrees that surveys are necessary. Only minor transportation impacts are expected under each of the 3 alternatives, as described in Final EIS Section 4.11. Impacts to transportation are considered minor if "the level of service LOS would not degrade as a result of the additional traffic or if the increase in traffic volume was less than 10 percent." Notwithstanding the finding of only minor transportation impacts, the USAF looks forward to working with the CNMI Department of Public Works to ensure potential traffic impacts are minimized or avoided.	Website
H51	Hazardous Materials	BECQ-F.Rabauliman	The DEIS notes that "additional hazardous wastes would not be expected to exceed the capacities of existing hazardous waste disposal streams" (pp. 4-124, 4-129); however, these streams are not identified in the DEIS. The FEIS should identify what hazardous waste disposal streams the USAF intends to use.	Existing hazardous waste streams and status is provided in the Final EIS Section 3.12.2 for both Saipan and Tinian.	Website
H52	Hazardous Materials	BECQ-F.Rabauliman	[The DEIS notes that "additional hazardous wastes would not be expected to exceed the capacities of existing hazardous waste disposal streams" (pp. 4-124, 4-129); however, these streams are not identified in the DEIS...]	Comment noted.	Website

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			If necessary, USAF should work with BECQ-DEQ, Tinian's Mayor's Office, and Department of Public Works to determine if hazardous wastes can be stored at the Tinian Transfer Station or if the military needs to construct its own hazardous waste management facility.		
H53	Hazardous Materials	BECQ-F.Rabauliman	In regards to the storage of petroleum products, the DEIS says: "Contractors would obtain an AST Permit to Install and an AST Permit to Operate from the CNMI DEQ for all ASTs needed to support construction." (4-124) BECQ-DEQ is prepared to work with USAF and its contractors should the Divert Activities move forward.	Comment noted. The USAF would coordinate with CNMI agencies during the final project planning and design stage.	Website
H54	Infrastructure/ Utilities	BECQ-F.Rabauliman	The DEIS states that there could be negative impacts to fuel supplies, electrical systems, communications systems, and sewer systems. Negative impacts should be avoided and interruptions should be coordinated with CPA and CUC. Examples of impacts include: <ul style="list-style-type: none"> • Any buried utility lines on the site [Saipan and Tinian Ports] of the proposed fuel tanks would have to be permanently relocated. (pp. 4-142, 4-148, 4-151) • ... extension of electrical lines to and the relocation or upgrading of any buried electrical lines These short-term impacts could include potential power disruptions when new facilities and lighting systems are connected to the power grid (pp. 4-142, 4-147, 4-151) • temporary shutoff of sewer lines during the connection of a 6-inch sewer line from the proposed maintenance facility to the sewer main line. (pp.4-143, 4-149) • Short-term, direct, negligible, adverse impacts on the communications system would occur as the permanent facilities at Saipan International Airport are connected to the existing telephone line system at the airport (p.4-145) 	Comment noted. Any disruptions to these services would be short-term lasting only the duration needed to connect the described utilities. USAF would coordinate with CNMI agencies to ensure minimal disruptions.	Website
H55	Infrastructure/ Utilities	BECQ-F.Rabauliman	BECQ is particularly concerned about the disposal of construction waste. Currently the DEIS proposes to dispose of un-recyclable waste at the Marpi Landfill under Alternatives 1 and 3, or to ship waste off island under Alternatives 2 and 3. It is unclear where waste would actually be shipped to under Alternatives 2 and 3. The FEIS should have a clear plan and state where construction debris will be shipped off to.	Comment noted. The USAF would coordinate with CNMI agencies including BECQ to ensure waste is properly stored and disposed of and that any construction contractor follows proper waste disposal streams. The USAF would utilize recycling streams, as available, as described in Section 4.13.	Website
H56	Infrastructure/ Utilities	BECQ-F.Rabauliman	Further, the islands are small with limited space. Filling the Marpi landfill with an "estimated 1,025 tons over a period of approximately 3 years" (4-145) is more than a minor impact. More information on how USAF plans to reduce and recycle waste would be appreciated.	As stated in Final EIS Section 4.13.1, the debris generated from the proposed construction activities associated with Alternative 1 would total an estimated 1,025 tons over a period of approximately 3 years. This means that only approximately 342 tons would be generated per year. According to the CNMI Initial Technical Assessment from July 2011, the MSWF can process at least 40,000 tons of solid waste per year and uses state-of-the-art waste reduction and diversion technologies. Therefore, the estimated debris generated from the Proposed Action per year would be 0.8% of the processing capability of MSWF. Therefore, the USAF concludes that this would be a minor impact. The USAF will utilize recycling streams, as available.	Website

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H57	Infrastructure/ Utilities	BECQ- F.Rabauliman	BECQ-DEQ is prepared to work with USAF on its SWPPP and Individual Wastewater Disposal System Permit Application should the Divert Activities go forward.	Comment noted.	Website
H58	Environmental Justice	BECQ- F.Rabauliman	<p>BECQ is concerned that the Divert Activities could have disproportionate impacts on minority and low-income populations. As the DEIS notes, "Approximately 98 percent of the population of Saipan is considered a minority, and approximately 53 percent of the population is low-income." (4-172), and "Approximately 98 percent of the population of Tinian is considered a minority, and 44 percent of the population is low- income." (p. 4-180). BECQ is particularly concerned about noise effects. As the DEIS points out:</p> <ul style="list-style-type: none"> • Disproportionately high and adverse impacts could occur on minority and low income populations during implementation of Alternative 1 due to noise generation. (p. 4-175) • Elevated noise levels could be experienced in the vicinity of the construction activities, but a noise level of 67-71 dBA could be intermittently heard at the border of the village of Dandan (p. 4-172) • Noise from exercises could result in minor impacts on the island's general tranquility and standard of living, but only in the areas that fall within the 65 dBA DNL contour and higher. (p. 4-175) <p>As pointed out in our Noise section above, the CNMI has a greater sensitivity to noise impacts. The ANSI standards should be used, taking into account the expectation for and value placed on "peace and quiet" in quiet rural settings. We recommend using a 50dBA contour and quantifying how many people will be impacted and how often, at that level for all Alternatives.</p> <p>ANSI. (2005). "Quantities and Procedures for Description and Measurement of Environmental Sound - Part 4: Noise Assessment and Prediction of Long-Term Community Response." American National Standards Institute and Acoustical Society of America. ANSI S 12.9-2005/Part 4. http://archive.leg.state.mn.us/docs/2015/other/150681/PFEISref11ANSI%202005.pdf.</p>	<p>The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF instructions, and FAA orders. FAA requirements, particularly 14 CFR Part 150 and FAA Order 1050-1E, which require the use of 65 dB to assess impacts were followed as FAA is the governing authority for both the Saipan and Tinian airports. The noise analysis presented is a conservative depiction of potential noise from tanker aircraft that might operate under the Proposed Action, but actual noise would be much less as explained in the Final EIS.</p> <p>As described in the Final EIS Section 4.14.1, significant impacts and elevated noise levels were identified in the 2012 Draft EIS on the communities in Districts 1 and 2 on Saipan due to the consideration of fighter aircraft in the proposal. Community outreach to potentially impacted communities with high minority and low-income populations on Saipan occurred prior to the 2012 Draft EIS public hearing on Saipan. After release of the 2012 Draft EIS, the USAF reevaluated their proposal and removed all fighter aircraft operations from the Proposed Action and each of the three Modified Alternatives. The removal of fighter aircraft operations, resulted in a major reduction in expected noise levels on the communities in Districts 1 and 2. Significant adverse impacts would not be expected on disproportionately high minority and low-income populations under Alternative 1, 2, or 3.</p> <p>On Tinian, as described in Section 4.14.2, environmental justice impacts from noise are not expected. Short-term, minor to moderate, adverse environmental justice impacts could occur during implementation on Tinian due to moderately increased population and related traffic.</p>	Website
H59	Socioeconomics	BECQ- F.Rabauliman	The DEIS states that 500 workers would be required for construction under Alternative 1 on Saipan and 750 under Alternative 2 on Tinian. Different numbers (1500 people on Saipan, 2000 on Tinian) are listed in Appendix E for construction/commuter emissions. This inconsistency should be addressed.	Operations are described as "up to 720" and "up to 8 weeks per year," and existing annual training exercises such as Valiant Shield and Cope North are provided as examples. Following those examples, there could be as many as 36 operations per day.	Website
H60	Socioeconomics	BECQ- F.Rabauliman	As housing and employment are issues on Saipan and Tinian, USAF should work with the Mayors' Offices and the CNMI Department of Commerce to ensure as many local workers are hired as possible.	Comment noted.	Website
H61	Socioeconomics	BECQ- F.Rabauliman	On Tinian, "some construction would occur on land within the LBA, and require the termination of agriculture/grazing leases and permits in the LBA west and north of Tinian International Airport" (p. 4-179). The DEIS says that, "This impact could be minimized by providing the affected ranchers leases elsewhere in the	After a review of existing grazing leases near the airport in Tinian, the USAF Divert proposal would not displace any existing cattle/agricultural leasees. The Final EIS has been edited to reflect this updated information.	Website

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			LBA" (4-182). This is not mentioned in the "Mitigation Measures" chapter or in the "Cumulative and Other Effects" chapter. Given that the CJMT has also proposed terminating grazing leases, this issue should be given more attention by the DoD.		
H62	Socioeconomics	BECQ-F.Rabauliman	The DEIS also notes that Divert Activities could affect the provision of public services, measures should be taken to avoid negative impacts to the residents of Saipan and Tinian should the Divert Activities go forward.	Comment noted.	Website
H63	Health and Safety	BECQ-F.Rabauliman	This chapter largely addresses construction hazards and the importance of fencing. Are there any environmental impacts that could lead to health hazards?	No health hazards related to fencing have been identified. Fencing would be installed similar to the current airport security fencing, which is in place to protect the public and to protect airport operations.	Website
H64	Health and Safety	BECQ-F.Rabauliman	The FEIS should note whether air pollution could affect residents - using data that is averaged over 8 weeks rather than a year.	Air pollution impacts are described in Final EIS Section 4.2 for all alternatives. Air emissions are calculated for 8 weeks of operations. Emissions are presented as "per year", but these numbers represent operating only 8 weeks/year. The numbers are not "averaged" over the year, but are rather the total amount of emissions for that year.	Website
H65	Health and Safety	BECQ-F.Rabauliman	Air pollution impacts should also address the effects of increased levels of particulate pollution including ultrafine particles (UFP).	Air pollution impacts are described in Final EIS Section 4.2 for all alternatives.	Website
H66	Mitigation Measures	BECQ-F.Rabauliman	Currently the "Mitigation Measures" chapter of the DEIS only lists measures for Terrestrial Biological Resources and notice that Cultural Resources will be handled under the Section 106 consultation process. BECQ recommends USAF consider further mitigation measures to offset impacts to Saipan and Tinian residents should the Divert Activities go forward. In particular, USAF could do more to offset Noise Impacts and impacts to Terrestrial Resources as outlined above.	The USAF reduced its proposed number of operations and removed fighter aircraft from the proposed action to alleviate impacts related to noise. This has made a significant reduction in the noise from proposed aircraft operations at Tinian International Airport. Final EIS Section 4.16 was revised to include all proposed mitigations.	Website
H67	Mitigation Measures	BECQ-F.Rabauliman	The Mitigation Measures chapter describes extensive reporting to USFWS. BECQ recommends that the annual reports to USFWS be shared with the CNMI natural resource agencies and that the CNMI natural resource agencies also be invited to annual coordination meetings with the DoD. BECQ would like to see increased coordination and communication with the DoD.	Information has been added to Final EIS Section 4.16 that the USAF would coordinate with CNMI natural resource agencies regarding the annual reports to USFWS and annual meetings.	Website
H68	Mitigation Measures	BECQ-F.Rabauliman	BECQ-DEQ looks forward to working with USAF with its earthmoving permit, stormwater management plan, and stationary source air pollution permit.	Comment noted.	Website
H69	Cumulative-General	BECQ-F.Rabauliman	There are currently multiple Department of Defense projects occurring or proposed for the CNMI (MIRC, MITT, CJMT, Guam Relocation, Divert Activities, etc.). Compared to the other proposed projects, the Divert Activities are relatively small. However, this does not mean that the added cumulative effect of the Divert Activities is unimportant. As noted above in the Marine Biology section, BECQ recommends the Department of Defense issue clear documentation of the many ways in which these projects overlap and inter-connect. In what way are the Divert Activities connected to the MITT? As the DEIS notes- "military aircraft would also conduct	Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5. The Divert Final EIS addresses only the ground movements and immediate approaches and departures at the airport or airports selected for improvement (e.g., takeoffs and landings) during exercises. Actual air warfare and air logistics training (i.e., above 10,000 feet) are addressed by the MITT EIS.	Website

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			training over the ocean within the MIRC. ... These training exercises are covered under the Programmatic Biological Opinion on military readiness activities the U.S. Navy proposes to conduct within the MIRC and the MITT" (p. 4-79).		
H70	Cumulative-General	BECQ-F.Rabauliman	It is not clear how the many projects of the Department of Defense overlap in the CNMI. BECQ looks forward to continued communication in order to protect the CNMI's natural resources.	Comment and request for continued DOD communication noted.	Website
H71	Against Saipan; For Tinian	BECQ-F.Rabauliman	As outlined in the attached comments, if the Divert Activities and Exercises go forward, BECQ's preferred alternative is Alternative 2 - Modified Tinian Alternative.	Comment noted. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will become part of the Final EIS administrative record.	Website
H72	Administrative	BECQ-F.Rabauliman	BECQ encourages PACAF to continue working with all of the CNMI environmental agencies to ensure military projects are conducted with minimal impact to the environment. BECQ is available to work with the Department of Defense to inform and improve the Divert Activities and Exercises. Please contact us with any questions.	Comment noted. The USAF would reach out to all appropriate Federal and CNMI agencies as this project continues.	Website
H73	Against Saipan; For Tinian	BECQ-F.Rabauliman	If the Divert Activities and Exercises (henceforth 'Divert Activities') move forward, BECQ's Preferred Alternative is "Alternative 2 - Modified Tinian Alternative". As outlined in the sections below, BECQ is of the opinion that the Divert Activities would have fewer impacts on Tinian than in Saipan.	The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will be part of the Final EIS administrative record.	Website
H74	Against Saipan; For Tinian	BECQ-F.Rabauliman	BECQ advises against placing the Divert Activities on Saipan for the following reasons: <ul style="list-style-type: none"> • More people would likely be affected by construction and aircraft noise • Noise could affect tourism and recreation at Coral Ocean Point and southern beaches • Impacts to the nightingale reed-warbler and black noddly rookery near the airport • Impacts to the Aslito/Isley Field NHLD 	The Saipan alternative was carried forward for analysis in the Final EIS as a reasonable alternative in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. In the Final EIS and RDEIS, the USAF reduced the scope of their proposal from the 2012 Draft EIS on Saipan to reduce overall environmental impacts related to construction and to reduce land requirements and retain a minimum land interest in accordance with the Covenant. The USAF has analyzed potential impacts related to noise, recreation, the tourist economy, biological resources, and cultural resources for all alternatives presented in the Final EIS. This comment will become part Final EIS administrative record.	Website
H75	Mitigation Measures	BECQ-F.Rabauliman	The Divert Activities would have many similar impacts whether placed on Saipan or Tinian. BECQ outlines its concerns in the comments below. If the Divert Activities move forward, the United States Air Force (USAF) should propose further mitigation to offset effects to noise receptors, air quality, terrestrial resources, and socioeconomic impacts.	Comment noted.	Website
H76	Airspace/Airport Ops	BECQ-F.Rabauliman	BECQ defers to the Commonwealth Port Authority for comments on the Airspace and Airfield Environment.	Comment noted.	Website
H77	Bio Resources (Terrestrial)	BECQ-F.Rabauliman	The primary impacts appear to be the possible introduction of the brown treesnake, the removal of habitat for construction, and noise impacts during operations.	Impacts on Terrestrial Biological Resources are analyzed in Final EIS Section 4.6.	Website

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H78	Recreation	BECQ-F.Rabauliman	According to the DEIS, the main effects to recreation include increased travel times due to the number of vehicles on the road during the construction phase, and noise, traffic, and decreased lodging for tourists during the implementation phase.	Comment noted.	Website
H79	Infrastructure/Utilities	BECQ-F.Rabauliman	This chapter contains a section on storm water, noting "An SWPPP approved by the DEQ would be required and must contain an NPDES permit declaration." (p.4-144) This chapter also notes that septic systems will be used for personnel on Tinian under Alternative 2. The DEIS states: "One or more septic systems would need to be constructed to handle up to 265 personnel for Alternative 2 North Option. An Individual Wastewater Disposal System Permit Application from CNMI DEQ would be obtained for each septic system." (4-149) The same would be done for the Alternative 2 South Option.	The Final EIS states in Section 4.13 that a SWPPP would be required and must contain an NPDES permit declaration. The septic system would only need to be constructed for use during military exercises, and is described under Alternative 2, Implementation Phase, which is for both the North and South Options.	Website
11	Proposed Action and Alternatives	DLNR-R. Seman, M. Pangelinan	<p>NEED (Section 1.3.2)</p> <ul style="list-style-type: none"> • Ensure airfield accessibility if access to Andersen AFB or other western Pacific airfields is limited or denied. • Provide for contingency operations to include humanitarian relief efforts. • Accommodate future increases in operational tempo and associated training. • Achieve and sustain readiness. <p>The USAF has not identified a preferred alternative. Section 2.6 states "The USAF has not identified a preferred alternative at this time. Upon completion of the EIS, the USAF decisionmaker will use the EIS to support the decision about how best to satisfy the stated purpose and need within mission constraints. The final decision will be documented in the ROD." Does the no-action alternative meet these needs?</p>	The Final EIS Section 2.6 includes the USAF's preferred alternative, as announced in February 2016.	Website
12	Proposed Action and Alternatives	DLNR-R. Seman, M. Pangelinan	The maps depicting Saipan International Airport and Tinian International Airport only show the footprint of the runways, taxiways, parking aprons and some buildings etc., but claim that these footprints represent the boundaries of "Saipan International Airport" and "Tinian International Airport. This is misleading. These maps need to show the actual boundaries of the airports, not just the footprints of structures and runways.	GIS data for CNMI are limited. The USAF used existing data to the extent that they were available.	Website
13	Proposed Action and Alternatives	DLNR-R. Seman, M. Pangelinan	The DEIS must indicate the maximum number of operations per day, not just state there will be up to 720 annual operations. The true environmental impact will result from the maximum number of operations per day, not the annual amount over a year.	Operations are described as "up to 720" and "up to 8 weeks per year," and existing annual training exercises such as Valiant Shield and Cope North are provided as examples. Following those examples, there could be as many as 36 operations per day. However, military training must remain flexible. Therefore, there could be fewer operations per day depending on military planners and training goals.	Website

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14	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The wildlife surveys of the project area were insufficient. The DEIS relies heavily on “incidental observations” from “reconnaissance surveys” conducted in 2011 (Tables 3.6-2 and 3.6-5) of terrestrial fauna for Saipan and Tinian airports, with no description of the survey methods to determine the presence/absence of species, nor who did the surveys.	A survey was conducted in 2011 to characterize and map vegetation and habitat within and surrounding the airports. All areas to be disturbed or where project activities will occur are within or immediately adjacent to an operational airport. The level of surveys was sufficient to identify and understand the types of plants and animals that could be impacted and to determine specifically whether threatened or endangered species could occur there. Where necessary, additional species-specific surveys were conducted, such as for nightingale reed warblers and Mariana common moorhens. Text was added to Final EIS Section 3.6 to describe the surveys.	Website
15	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The “reconnaissance surveys” were only conducted over 2 days on Tinian: October 7-8 2011, and 3 days on Saipan: October 4-6 2011. Additional information on wildlife species present at Saipan airport is taken from the 2012 Nightingale reed-warbler surveys (MES 2012). We are unable to gauge the completeness of Tables 3.6-2 and 3.6-5 in terms of ESA-listed species, MBTA-listed species, CNMI DFW-listed species and species of conservation concern, particularly for Tinian. Two days of “reconnaissance surveys” on Tinian is vastly insufficient for determining the species that will be impacted by these activities. Micronesia Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	All areas to be disturbed or where project activities would occur are within or immediately adjacent to an operational airport. The level of surveys was sufficient to aid in identifying and understanding the types of plants and animals that could be impacted and in determining specifically whether threatened or endangered species could occur there. Conclusions regarding the presence or absence of listed species were confirmed with the U.S. Fish and Wildlife Service.	Website
16	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	In addition, apart from the 2012 Nightingale reed-warbler surveys on Saipan, there were no surveys specifically targeting ESA-listed species.	Site specific surveys for other ESA-listed species were not required because the vegetation communities and associated levels of disturbance in the areas within and immediately adjacent to the airports do not support those other species. These conclusions were confirmed during consultation with the U.S. Fish and Wildlife Service.	Website
17	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included. The DEIS needs to depict the locations of detected Nightingale reed-warblers, as well as their estimated home ranges, in relation to areas to be cleared.]] Figures 4.3 and 5.1 in the DEIS Volume II (from MES 2012) show where individuals were detected during the 2012 surveys, but does not depict the home range of each individual detected. Micronesia Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	Effects on nightingale reed warblers would be avoided, minimized, and mitigated in accordance with the Biological Opinion for this project. Potential impacts on that species are summarized in Final EIS Section 4.6 and in Final EIS Appendix B. Those sections describe in detail the potential direct and indirect effects from habitat loss, operational noise, human activities, etc. from planned activities. Regarding the figures showing locations of reed-warblers, depicting home ranges in the figures (e.g., adding polygons around each set of locations) would provide no additional information as the locations of each reed-warbler are defined and the areas used during the surveys are identified.	Website
18	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included. The DEIS needs to depict the locations of detected Nightingale reed-warblers, as well as their estimated home ranges, in relation to areas to be cleared...] Section 5.1.1 of Volume II of the DEIS states “The area used by reed-warblers within those territories during the surveys was calculated by measuring the minimum-sized convex polygon encompassing all observations”. However these	Final EIS Appendix B shows the locations of reed-warblers detected during the 2012 surveys that were used to calculate home range size. Those figures also show the boundaries of each territory, and thus provide the information necessary to identify the area used within each territory during the survey.	Website

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			territories are not shown as polygons anywhere in the DEIS Volume I or II figures.		
19	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	<p>[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included. ...]</p> <p>Section 4.6.1.1 states that "Two of the territories detected in 2012 are partially within or adjacent to the proposed location of 1 the fuel tanks. About 3.7 acres of the 8.6-acre site where the fuel tanks would be installed has been cleared and was used as a materials storage area during past construction at Saipan International Airport. Because a portion of that site has been cleared, and the remaining vegetated area does not appear to be used, or is used infrequently, by nightingale reed-warblers, there would be no or minimal direct effects on those territories."</p> <p>It is very possible that this site has regrown to a point where it now contains suitable habitat for Nightingale reed-warblers. The partially revegetated habitat within the 3.7 acres may offer feeding areas for Nightingale Reed-warblers. We do not accept that there will be no or minimal effects on these birds.</p>	Final EIS Section 4.6.1 acknowledges that there could be some direct and indirect effects to nightingale reed-warblers in that area. However, much of the area in question was substantially disturbed and is immediately adjacent to existing fuel storage facilities. The USAF consulted with the U.S. Fish and Wildlife Service in 2016 to confirm that the effects to reed-warblers described in the Biological Opinion and Final EIS remain valid.	Website
110	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	<p>[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included. ...] Although Nightingale Reed-warblers were not detected within the areas to be cleared in the revised DEIS during 2012 surveys, (MES 2012), Nightingale Reed-warblers were detected in vegetation directly opposite the proposed fuel storage clearance area in both Alternatives 1 and 3, across a narrow road, as close as 20m away from the area to be cleared. The figures in Volume II depicting Nightingale Reed-warbler observations do not indicate the boundaries of each home range. Given the home range of the Nightingale Reed-warbler is estimated at 4.4 ha (Mosher 2006), it would be reasonable to expect that individuals might use the fuel storage area that is to be cleared, even if they were not detected within that area during the 2012 surveys.</p> <p>Micronesia Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.</p> <p>Mosher, S. M. 2006. Ecology of the endangered Nightingale Reed-Warbler (<i>Acrocephalus luscini</i>) on Saipan, Micronesia. MSc Thesis. University of Idaho</p>	Final EIS Section 4.6.1 acknowledges that that a portion of the area where fuel tanks could be located might be used occasionally by reed-warblers and the text of that section was modified to clarify that those areas could be used periodically by reed-warblers.	Website
111	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	<p>[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...]</p> <p>Section 4.16.1.1.1 [mitigation measures] states that "The USAF will purchase one credit in the Saipan Upland Mitigation Bank prior to any construction of the east parking apron if that apron is to be constructed". Although the revised DEIS excludes the east parking apron, DLNR asserts that Nightingale Reed-warbler habitat will still be cleared and credits are still required.</p>	Effects on nightingale reed warblers would be avoided, minimized, and mitigated in accordance with the Biological Opinion for this project. In 2016 USAF informally consulted with the U.S. Fish and Wildlife Service and confirmed that the purchasing of a credit in the SUMB would not be required if the east parking ramp was not constructed. Final EIS Section 4.16 was updated to reflect this information.	Website

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I12	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	<p>[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...]</p> <p>The revised DEIS Alternative 1 includes 6.57 acres of tangantangan forest, and 4.18 acres of "cleared and partially revegetated" habitat at the Saipan International Airport, both potentially used by adjacent the Nightingale Reed-warblers . Again, it is impossible to tell unless the home ranges of these birds are depicted.</p>	<p>Potential impacts on the nightingale reed warbler are summarized in Final EIS Section 4.6 and are addressed in Final EIS Appendix B. The locations of reed-warblers detected during the 2012 surveys and used to calculate home range size are shown in Final EIS Appendix B. In addition to the survey conducted in support of the BA, the USFWS used additional data to estimate potential NRW territories as represented in the "Status and Environmental Baseline of the Species" section of the biological opinion for the Divert project.</p>	Website
I13	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	<p>[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...]</p> <p>The south portion of the fuel storage area (4.17 acres) is described in the Revised DEIS as "disturbed/mowed" (Table 4.6-1 of the EIS) or "cleared and partially revegetated" (Section 4.6.1.1 of the EIS). It is not indicated in the EIS when the clearing took place. This revegetated area could be used by the Nightingale Reed-warbler, especially since individuals were detected only 20 m away across the road (MES 2012).</p> <p>Micronesia Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.</p>	<p>The text in Final EIS Section 4.6.1.1 was clarified to explain that the area where the fuel storage facility could be located was cleared in about 2010-2011.</p>	Website
I14	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	<p>[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...]</p> <p>The remaining 6.6 acres on the north portion of the proposed fuel storage area to be cleared had no Nightingale Reed-warbler detections within it in 2012, but a Nightingale Reed-warbler was detected only 50 m to the east, in similar habitat to that which is to be cleared. This is well within the distance a bird might fly for foraging.</p>	<p>Final EIS Section 4.6.1 was modified to clarify that this area could be used periodically by nightingale reed-warblers from nearby territories.</p>	Website
I15	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	<p>[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...]</p> <p>The DEIS does not adequately avoid and minimize impacts of vegetation clearing on Nightingale Reed-warblers. Section 4.16.1.1.1 [mitigation measures] states "Clearing of vegetation at the east parking apron will only occur between October through December or April through June, when nightingale reedwarbler nesting activity is not at its peak". This should apply to all clearing activities in the construction phase for Saipan Alternatives 1 and 3 (fuel storage area, hydrant system, maintenance area and cargo bay), not just the clearing for the east parking apron which was not part of the revised DEIS, since all clearing sites that feature tangantangan and revegetated areas are potential habitat for the Nightingale Reed-warbler.</p>	<p>Construction activities on Saipan would be conducted in accordance with the Biological Opinion issued for this project. The USAF confirmed with the U.S. Fish and Wildlife Service in 2016 that reinitiation of consultation is not required to modify that Opinion, and thus that the Opinion and related Conservation Measures are adequate for the protection of nightingale reed-warblers. Final EIS Section 4.16 was updated to reflect this information.</p>	Website

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I16	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...] The DEIS must state that all clearing around Saipan Airport will occur outside Nightingale Reed-warbler peak breeding season as an impact minimization measure.	To avoid and minimize effects on reed-warblers, construction activities on Saipan would be conducted in accordance with the Biological Opinion issued for this project.	Website
I17	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...] In addition, the USAF must conduct surveys immediately prior to clearing to determine whether Nightingale Reed-warblers are present. Nightingale Reed-warblers can fly, and cannot be expected to be in the exact same locations as they were recorded in the MES 2012 survey. Micronesia Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	To avoid and minimize effects on reed-warblers, construction activities on Saipan would be conducted in accordance with the Biological Opinion issued for this project.	Website
I18	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[Nightingale Reed-warbler impacts have not been adequately addressed, nor has adequate avoidance, minimization and mitigation of impacts been included...] Due to Super typhoon Soudelor in August 2015, the habitat around the Saipan International Airport has been severely altered, and it can be expected that territories have shifted as a result. The USAF needs to specify these avoidance and minimization strategies in Table ES- 2 and elsewhere as appropriate.	Final EIS Sections 4.6.1 and 4.6.3 have been modified to better clarify that a portion of the area where the fuel tanks could be located might be used occasionally by reed-warblers detected in adjacent areas. Final EIS Section 4.16 lists the measures that would be implemented to avoid and minimize adverse effects to reed-warblers. Final EIS Table ES-2 is not intended as a list of mitigation measures; it is a summary of potential effects.	Website
I19	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Other ESA-listed species were not surveyed for. Section 4.6.1.1 states that "Six species that were proposed for listing as endangered in October 2014 currently occur on Saipan or have been documented there in the past (Table 3.6-1). None of those species would occur in the mowed field, tangantangan forest, park, disturbed or paved areas, or agricultural vegetation communities found at and surrounding Saipan International Airport (Section 3.6.3.1). Thus, there would be no adverse effects to these proposed species from construction or other planned activities on Saipan." These proposed species have now been listed under the Endangered Species Act (DOI 2015). Surveys have not yet been conducted within the Saipan or Tinian project areas for these now listed species. Tables 3.6-2 and 3.6-6 states there is no suitable native forest habitat near Saipan or Tinian International Airport. However, these species are not restricted to native limestone forest. Humped Tree Snail and Dendrobium guamense has been found in non-native and secondary forest on Saipan and Rota. The USAF must conduct actual surveys by qualified biologists to determine if these species are present within the areas to be cleared, instead of assuming their absence, for Alternatives, 1, 2 and 3.	Text throughout the Final EIS was modified to update the status of these species. Although the humped tree snail and D. guamense have been documented in secondary limestone forests on Saipan and elsewhere, there is no evidence that they would be found in the disturbed tangantangan thicket or other vegetation communities adjacent to the Saipan airport. This conclusion has been confirmed by the U.S. Fish and Wildlife Service in a letter provided by that agency in 2015 (Rounds 2015) and during completion of informal consultation for revised project activities in 2016.	Website

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			Department of the Interior (DOI). 2015. 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Endangered Status for 16 Species and Threatened Status for 7 Species in Micronesia; Final Rule. 80 Federal Register 190 (1 October 2015), pp. 59424-59497.		
I20	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The DEIS does not address impacts on MBTA-listed species. There is no description of the impacts on the MBTA-listed species in Section 4 that are described in Sections 3.6.3.1 or 3.6.3.2 even though the MBTA is referenced at Section 1.7.2. The impacts of all MBTA-listed species that are known to occur in the project area of all three alternatives must be identified and presented. In particular, the USAF needs to fully address the adverse impacts and provide avoidance/minimization/mitigation strategies on the Black Noddy rookery at Saipan International Airport, an MBTA-listed species.	Final EIS Section 4.6.1 acknowledges that construction activities could temporarily adversely affect birds, including migratory birds, and other wildlife. Text has been added to Final EIS Section 4.6 to clarify that the rookery is outside of the area to be disturbed and would not be directly affected by construction activities.	Website
I21	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Brown Tree Snake and other invasive species Interdiction and Response. The USAF needs to provide funding to Division of Fish and Wildlife's Brown Tree Snake Program for prevention, early detection and rapid response to Brown Treesnakes on Saipan and/or Tinian. This needs to include detector dog programs, and monitoring of prey bases around the airports. The proposed activities in the DEIS will increase the risk of Brown Treesnakes and other invasive species entering the CNMI, and to minimize the risk, the USAF must provide such interdiction measures within the CNMI.	The risk of causing the introduction of brown tree snakes and other species would be minimized and managed in accordance with the requirements of the Biological Opinion for this project, including coordination with the U.S. Department of Agriculture and with the CNMI Department of Land and Natural Resources. Those measures are listed in both the Final EIS Section 4.16 and in Appendix B.	Website
I22	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[Brown Tree Snake and other invasive species Interdiction and Response.] The USAF needs to also provide funding for Brown Treesnake research in the CNMI.	The interdiction and response measures to be implemented for this project have been developed in coordination with the U.S. Fish and Wildlife Service, and are listed in Final EIS Section 4.16. Those measures do not include providing funding for research in the CNMI.	Website
I23	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Table 1.5-1 claims "The Proposed Action would not have a significant impact on migratory birds". There is no analysis of the significance of the impact on MBTA-listed species, so we cannot accept this claim. Even the species lists are not complete (see comments on Tables 3.6-2 and 3.6-5 below). For example, the MES 2012 survey indicates the presence of a black noddy rookery within the project area, but the impacts of the proposed action alternatives on this rookery are not presented anywhere in the Draft EIS. Micronesian Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	The text in Final EIS Section 3.6 was clarified to indicate that the rookery is located outside of the areas to be disturbed and would not be directly affected by construction activities.	Website
I24	Noise and Land Use	DLNR- R. Seman, M. Pangelinan	Table 3.1-1 does not give indications of potential harm i.e. temporary or permanent hearing damage to people or wildlife.	Commentor refers to a table in Final EIS Section 3, which provides background information on the existing environment. Impact assessments are contained in the Final EIS Section 4.	Website
I25	Airspace/Airport Ops	DLNR- R. Seman, M. Pangelinan	This section needs updating. Freedom Air no longer operates, but new airline Arctic Circle Air provides charter and cargo between Saipan and Rota. Star Marianas continues to operate passenger and cargo services from Saipan to both Tinian and Rota.	Text revised per comment in Final EIS Section 3.3.3.1.	Website

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126	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	What is the source of the information for the vegetation maps in Figure 3.6-1? Was this a referenced source -if so the USAF needs to cite the source of the information for verification.	Text was added in Final EIS Section 3.6 clarifying that the information is based on surveys conducted for this project in October 2011.	Website
127	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Is the map developed from on-ground surveys – if so the USAF needs to provide details on who did the surveys and what methods were used. Conclusions of species presence and impacts rely heavily on claims about vegetation types, so it is essential that we are able to verify the accuracy of this information.	Text was added in Final EIS Section 3.6 clarifying that the information presents a characterization of flora occurring within the Project Area, including at Saipan International Airport and the Port of Saipan. A survey was conducted in October 2011 to characterize and map vegetation community types at and surrounding the airports. Biologists from HDR, Inc familiar with vegetation and animals in the Mariana Islands classified and mapped vegetation communities on and surrounding the airport, documented dominant plant species within the vegetation communities, and recorded animals incidentally observed.	Website
128	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	What is the source of the vegetation mapping data in Figure 3.6-3? It is not stated in the map or text. These data appears very different in the CNMI Joint Military Training Draft Environmental Impact Statement (DON 2015) figure 3.9-1, which depicts the following vegetation communities in the Tinian International Airport: tangantangan, mixed introduced forest, beach strand, and herbaceous-scrub, and is a much finer scale depiction. Department of the Navy (DON). 2015. Commonwealth of the Northern Mariana Islands Joint Military Training Draft Environmental Impact Statement/Overseas Environmental Impact Statement	Text was added in Final EIS Section 3.6 clarifying that the information is based on surveys conducted in October 2011. The map is consistent with information presented in the CJMT DEIS, which shows that the area at and surrounding the airport is developed land, tangantangan, herbaceous scrub, mixed introduced forest, and Casuarina forest.	Website
129	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The USAF needs to include the most up-to-date and accurate information on vegetation communities for both Figures 3.6-3 and 3.6-1.	The maps presented in the Final EIS accurately depict the vegetation communities that occur within the project areas. Although these maps use some classifications that differ from those used in more recent maps (such as that in the CJMT DEIS), these maps all show that the areas that could be used by the project are developed, have maintained vegetation, or are secondary scrub/tangantangan forests.	Website
130	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Table 3.6-2 indicates Mariana Common Moorhen was observed at the Saipan International Airport project area. However elsewhere in the document it is stated that this species, which is federally listed, is not present and will not be impacted. If the species was observed there, then the impacts must be presented and evaluated.	Final EIS Section 3.6.3.1 states that no moorhens were seen during nine avian surveys of the airport area, and that a single moorhen was observed at a nearby golf course pond. Consistent with that information, Final EIS Section 4.6.1 concludes that this species would not be affected because no wetlands or other habitat that might be used by this species would be disturbed.	Website
131	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	It is not clear where these Table 3.6-2 “reconnaissance surveys” occurred. The text indicates these were at the Saipan International Airport and harbor. The table itself needs to clearly indicate where these surveys took place.	Text was added in Final EIS Section 3.6 to better describe the surveys and clarify the difference between the 2011 surveys by HDR and the 2012 NRW surveys by MES.	Website
132	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[It is not clear where these Table 3.6-2 “reconnaissance surveys” occurred. The text indicates these were at the Saipan International Airport and harbor...] In addition, there needs to be more information on where they surveys were conducted in relation to the construction sites, how these surveys were	Text was added in Final EIS Section 3.6 to better describe the surveys. Surveys conducted for nightingale reed-warblers (<i>Acrocephalus lusinus</i>) and other avian species from January through April 2012 were conducted by biologists from Micronesian Environmental Services trained and experienced in the Mariana Islands. The methods and results were coordinated with	Website

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			performed, who performed them, and whether they are sufficiently trained and experienced in endangered/threatened/migratory species surveys.	USFWS and can be found in the 2012 MES Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands. A survey was conducted in October 2011 to characterize and map vegetation community types at and surrounding the airports. Biologists from HDR, Inc familiar with vegetation and animals in the Mariana Islands classified and mapped vegetation communities on and surrounding the airport, documented dominant plant species within the vegetation communities, and recorded animals incidentally observed	
133	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The DEIS needs to use the most up-to-date accepted names for species to avoid confusion. The Collared Kingfisher has been known as <i>Todiramphus chloris</i> (not <i>Halcyon chloris</i> as appears in Table 3.6-2) for many years now. The species has had a recent name change to <i>Todiramphus albicilla</i> or Mariana Kingfisher (Anderson et al. 2015). Andersen, M.J., H.T Shult, A. Cibois, J-C Thibault, C.E. Filardi, and R.G. Moyle. 2015 Rapid diversification and secondary sympatry in Australo-Pacific kingfishers (Aves: Alcedinidae: <i>Todiramphus</i>). R. Soc. open sci. 2: 140375. http://dx.doi.org/10.1098/rsos.140375	Text was added in Final EIS Section 3.6 to update the names of species	Website
134	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The Black-necked Stilt (Table 3.6-2) is extremely unlikely to occur in the Mariana Islands. The species has never been recorded here. This record is most likely a result of misidentification of the Black-winged Stilt. Again we question who did these surveys, and whether they qualified to conduct wildlife surveys in the CNMI.	Text was modified in Final EIS Section 3.6 as suggested. Surveys conducted for nightingale reed-warblers (<i>Acrocephalus lusinius</i>) and other avian species from January through April 2012 were conducted by biologists from Micronesian Environmental Services trained and experienced in the Mariana Islands. The methods and results were coordinated with USFWS and can be found in the 2012 MES Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	Website
135	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Table 3.6-2 indicates that the surveys occurred in February through March 2012. However the text describing the table indicates January through April 2012 – which is it?	Text was added to Final EIS Section 3.6 to better describe the surveys. Surveys conducted for nightingale reed-warblers (<i>Acrocephalus lusinius</i>) and other avian species from January through April 2012 were conducted by biologists from Micronesian Environmental Services trained and experienced in the Mariana Islands. The methods and results were coordinated with USFWS and can be found in the 2012 MES Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	Website
136	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The MES 2012 report itself states that the Nightingale Reed-warbler surveys at the Saipan International Airport were conducted during 10–29 March 2012 only, while the water catchment survey was completed between 28 January and 24 March 2012. These dates need to be clarified as timing is important in biological surveys. Micronesian Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	Text was added to Final EIS Section 3.6 to better describe the surveys. Surveys conducted for nightingale reed-warblers (<i>Acrocephalus lusinius</i>) and other avian species from January through April 2012 were conducted by biologists from Micronesian Environmental Services trained and experienced in the Mariana Islands. The methods and results were coordinated with USFWS and can be found in the 2012 MES Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	Website

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137	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Table 3.6-2 indicates that some of these observations resulted from Nightingale Reed-warbler surveys conducted in Feb-Mar 2012 (or Jan-Apr 2012 – information is conflicting). Yet the Nightingale Reed-warbler is not included in this table. Nightingale Reed-warblers were definitely observed during the Nightingale Reed-warbler surveys (see MES 2012). This species is a federally endangered species and its omission from the table needs to be corrected. Micronesia Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	Final EIS Table 3.6-2 was updated as, suggested	Website
138	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Both Table 3.6-2 and 3.6-5 includes Rufous fantail <i>Rhipidura rufifrons saipanensis</i> . If using subspecies here, then the table also need to do the same for the Micronesian Honeyeater (for Table 3.6-2 only), Bridled White-eye and Micronesian Starling for consistency.	Species names were modified throughout the Final EIS for consistency	Website
139	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Table 3.6-2 omits the following MBTA-listed species detected in the primary survey area by MES (2012): Eurasian Wigeon, Northern Shoveler, Green-winged Teal, Little Egret, Peregrine Falcon, and Wood Sandpiper (Table 5, MES 2012). Table 3.6-2 also excludes numerous other MBTA-species that Section 3.6.3.1 shows occur in the study area: including Wood Sandpiper, Sharp-tailed Sandpiper, Mongolian Plover, Rufous-necked Stint, Black-bellied Plover, Cattle Egret, Little Egret, Intermediate Egret, Great Egret, Tufted Duck, and Northern Pintail. Micronesia Environmental Services (MES). 2012. Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	Final EIS Table 3.6-2 lists wildlife incidentally observed during October 2011 surveys. This list was not intended to serve as a comprehensive list of all migratory birds and other wildlife on Saipan. Final EIS Section 3.6.3.1 acknowledges that Saipan supports a diverse variety of migratory shorebirds.	Website
140	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The USAF needs to update Tables 3.6-3 and 3.6-6, as these proposed species have now been listed as of November 2015 (DOI 2015). Department of the Interior (DOI). 2015. 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; Endangered Status for 16 Species and Threatened Status for 7 Species in Micronesia; Final Rule. 80 Federal Register 190 (1 October 2015), pp. 59424-59497.	Final EIS Tables 3.6-3 and 3.6-6 and the corresponding discussion of ESA-listed species was updated, as suggested.	Website
141	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Again, it is not clear exactly where these “incidental observations” from “reconnaissance surveys” were performed. The table only states “Tinian” but the text describing this table says “Project Area”. The USAF needs to specify exactly where these surveys were conducted in relation to the proposed construction sites.	Text was modified in Final EIS Section 3.6 to better describe the surveys. A survey was conducted in October 2011 to characterize and map vegetation community types at and surrounding the airports. Biologists from HDR, Inc familiar with vegetation and animals in the Mariana Islands classified and mapped vegetation communities on and surrounding the airport, documented dominant plant species within the vegetation communities, and recorded animals incidentally observed.	Website
142	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The USAF also needs to provide details on who did the surveys, and whether they were experienced and trained to perform biological surveys in the Mariana Islands, particularly in endangered/threatened/migratory species surveys.	Text was modified in Final EIS Section 3.6 to better describe the surveys. A survey was conducted in October 2011 to characterize and map vegetation community types at and surrounding the airports. Biologists from HDR, Inc familiar with vegetation and animals in the Mariana Islands	Website

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				classified and mapped vegetation communities on and surrounding the airport, documented dominant plant species within the vegetation communities, and recorded animals incidentally observed. Surveys conducted for nightingale reed-warblers (<i>Acrocephalus lusinius</i>) and other avian species from January through April 2012 were conducted by biologists from Micronesian Environmental Services trained and experienced in the Mariana Islands. The methods and results were coordinated with USFWS and can be found in the 2012 MES Biological Report: Saipan International Airport Project Site, Saipan, CNMI. Saipan, Commonwealth of the Northern Mariana Islands.	
143	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	We cannot accept "incidental observations" over a 2-day period as a reliable tool in determining project impacts on wildlife and plant species on Tinian. A two-day set of incidental observations is a grossly inadequate biological survey for an environmental impact statement of this nature. There needs to be standard methodology used, and the biologists must be trained and experienced in both the methods and the species that they are surveying for.	The surveys were conducted to identify the vegetation communities that occur in the project area (and the text has been modified to clarify this). The analysis of effects in the Final EIS was based on a large base of information about the species that occur on Saipan and Tinian in those vegetation communities.	Website
144	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Table 3.6-5 lists the Collared Kingfisher twice – once as <i>Halcyon chloris</i> and once as <i>Todiramphus chloris</i> . These are the same species -please remove one and use the most recent accepted name, <i>Todiramphus albicilla</i> (Mariana Kingfisher).	Final EIS Table 3.6-5 was corrected, as suggested.	Website
145	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Table 3.6-5 excludes numerous MBTA-species that Section 3.6.3.5 states occur in the study area: Cattle Egret, Little Egret, Intermediate Egret, Great Egret and Black Noddy.	Final EIS Table 3.6-5 lists wildlife incidentally observed during October 2011 surveys. It was not intended to serve as a list of all migratory birds and other wildlife on Tinian.	Website
146	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The USAF needs to indicate location of black noddy rookery (an MBTA-listed species) on maps and assess the impacts on this MBTA-listed species.	The text in Final EIS Section 3.6.3.1 gives detailed information about where the rookery is located. The text in Final EIS Section 4.6 was clarified to indicate that the rookery would not be directly affected.	Website
147	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	"Migratory Birds" subsection This subsection is very confusing. It describes migratory birds but in same section discusses nonnative birds and forest birds, which are not migratory. The USAF needs to correct this – separate the non-native bird and forest birds discussion into their own titled subsections from the Migratory Birds subsection.	Final EIS Section 3.6.3.1 was clarified to indicate that the section describes all birds, not just migratory birds.	Website
148	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Again, this has a subsection titled "Migratory Birds" but this subsection confusingly discusses all bird species including resident non-native and native forest birds here. The USAF needs to separate migratory bird subsection from the other bird groups included here.	Final EIS Section 3.6.3.2 was clarified to indicate that the section describes all birds, not just migratory birds.	Website
149	Noise	DLNR- R. Seman, M. Pangelinan	"To estimate the AAD, the total number of operations was divided by 365 days, which equals 3 5.26 operations per day with the KC-135." This is extremely misleading. The training will occur within an 8-week period. The operations will not occur evenly spread out over a 365-day period. This section needs to be reanalyzed using the average operations over an 8-week period, not a 52-week period.	The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF Instructions, and FAA orders. The metrics used include both the average annual day (yearly) and the average busy day (exercise). Community noise annoyance studies are based on average annual day, which is the FAA and USAF standard for analysis. The analysis presented in the Final EIS is a conservative	Website

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				(overestimate) depiction of potential noise from tanker aircraft that might operate under the Proposed Action, but actual noise would be much less as explained in the Final EIS. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either the same or only slightly louder at noise sensitive locations under all alternatives. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels.	
150	Noise	DLNR- R. Seman, M. Pangelinan	[To estimate the AAD, the total number of operations was divided by 365 days, which equals 3 5.26 operations per day with the KC-135. This is extremely misleading. The training will occur within an 8-week period...] It should also include an indication of the maximum number of operations per day that could be expected within the 8- week period. 720 take-offs per year over 8 weeks = 12.8/day.	The analysis in Final EIS Section 4.1 assumed the 720 operations would be spread over 8 weeks per year.	Website
151	Noise	DLNR- R. Seman, M. Pangelinan	[To estimate the AAD, the total number of operations was divided by 365 days, which equals 3 5.26 operations per day with the KC-135. This is extremely misleading. The training will occur within an 8-week period...] How concentrated are these? If all 720 occur in 1 day, impact would be far more extreme than if they were spread out evenly. It is impossible to assess the impacts of the proposed action unless this is clarified.	The analysis in Final EIS Section 4.1 assumed the 720 operations would be spread over 8 weeks per year. Analysis was also provided for the average busy day.	Website
152	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Section 4.6.1 contains no analysis of impacts or discussion of avoidance/minimization/mitigation strategies on the MBTA-listed species that are present within the proposed action areas.	Text was added to Final EIS Section 4.6 to clarify that "To comply with the MBTA, surveys and/or monitoring for nesting birds during construction would be conducted and areas where active nests are found would be avoided, or other measures would be taken to avoid harming any migratory birds, nests, or eggs."	Website
153	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	"All the terrestrial species listed in Table 3.6-5 have the have the potential to be present in the Project Area". Table 3.6-5 refers to species in the Tinian project area, not the Saipan project area. This should reference Table 3.6-2, not 3.6-5.	The sentence was deleted in Final EIS Section 4.6.1.1, as suggested.	Website
154	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[All the terrestrial species listed in Table 3.6-5 have the have the potential to be present in the Project Area...] Without a detailed description of how the surveys for Table 3.6.2 were conducted, including the 2011 reconnaissance surveys, it is impossible to say how complete these surveys were and what additional species might also occur in the project area.	Final EIS Section 3.6 was modified to better describe that the surveys were conducted to identify and map vegetation communities within and surrounding areas that could be disturbed. As stated in the Final EIS Section 3.6, Tables 3.6-2 and 3.6-5 are lists of species incidentally observed during the October 2011 surveys, and were not intended to serve as complete lists of species that could occur in the project areas.	Website
155	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	[All the terrestrial species listed in Table 3.6-5 have the have the potential to be present in the Project Area...]	Effects on the Mariana common moorhen are described in the subsection on Threatened and Endangered Species in Final EIS Sections 4.6.1 and 4.6.3.	Website

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			Table 3.6-2 indicates the Mariana Common Moorhen, a federally listed species under the ESA, was observed inside the project area, yet there is no discussion of impacts on this species.		
156	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Vegetation. How were the cleared areas calculated?	The estimates of vegetation communities to be cleared were based on the proposed facility footprints and the map of vegetation presented in Final EIS Section 3.6.	Website
157	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The "Disturbed" vegetation category is not indicated on Figure 3.6-1 – only tangantangan, mowed, park, unmowed and agriculture/grazing. This table indicates 8.6 acres of "disturbed/unmowed" area will be cleared. In Section 4.6.1.1 above it is indicated that this "disturbed/unmowed" area includes "an additional 4.17 acres where the airport fuel tanks and hydrant system would be located was cleared in the past and is partially revegetated". However there is no indication about when the area was cleared. Satellite images and Google Earth indicates that this area is regrown tangantangan. It is highly likely that this 4.17 acres is suitable for the Nightingale Reed-warbler.	The disturbed areas within proposed facility footprints at the airport is mapped in Final EIS Figure 3.6.1 as part of the footprint of airport, as it is adjacent to the airport and disturbed for construction activities. The remaining 4.17 acres of disturbed area is at the seaport and is not mapped. USAF disagrees that the 3.7 acre area at the airport is regrown tangantangan, as 2015 aerial photographs show that it remains void of dense thickets of vegetation found in the surrounding area.	Website
158	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	"All of the terrestrial bird species listed in Table 3.6-2 have the potential to be present in the Project Area." This should refer to Table 3.6-5, not 3.6-2.	The sentence was deleted from Final EIS Section 4.6.2.	Website
159	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	"Those areas are not suitable habitat for the Mariana fruit bat, Micronesian megapode, Mariana moorhen, or any proposed species that have potential to occur on Tinian." These species are not restricted to native limestone forest, as claimed in table 3.6-2 and Table 3.6-6. For example, the Dendrobium guamense known to occur on Tinian is in tangantangan vegetation.	Conclusions about the likelihood of these species being present were based on the presence and composition of vegetation communities that occur in the project areas, information on the habitat characteristics where the species are found, and information provided by the U.S. Fish and Wildlife Service. The conclusions presented in the Final EIS were confirmed with the U.S. Fish and Wildlife Service during informal consultation in 2016 regarding revised project activities.	Website
160	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	["Those areas are not suitable habitat for the Mariana fruit bat, Micronesian megapode, Mariana moorhen, or any proposed species that have potential to occur on Tinian..."] The USAF must conduct surveys to determine the presence or absence of these species, and not just assume their absence.	Conclusions about the likelihood of these species being present were based on the presence and composition of vegetation communities that occur in the project areas, information on the habitat characteristics where the species are found, and information provided by the U.S. Fish and Wildlife. The conclusions presented in the Final EIS were confirmed with the U.S. Fish and Wildlife Service during informal consultation in 2016 regarding revised project activities.	Website
161	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Section 4.6.2 contains no analysis of MBTA-listed species impacts, nor of avoidance/minimization/mitigation strategies.	Text was added to Final EIS Section 4.6 to clarify that "To comply with the MBTA, surveys and/or monitoring for nesting birds during construction would be conducted and areas where active nests are found would be avoided, or other measures would be taken to avoid harming any migratory birds, nests, or eggs."	Website
162	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	"As described in Sections 4.6.1 and 4.6.2, no other terrestrial threatened, endangered, or 24 proposed species would be adversely affected by construction on Saipan or Tinian". The USAF cannot claim this until surveys for these species are completed. MES	The USAF disagrees with this comment. The ESA-listed species occur on Tinian in beach, forested, wetland, or other restricted and unique habitat that does not occur within the areas where facilities could be located. This conclusion was confirmed during consultation with the U.S. Fish and Wildlife	Website

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			2012 only appeared to survey for federally-listed and candidate species, not (then) proposed species and MBTA-listed species. The MES 2012 report did not include surveys for listed snails, lizards, butterflies or plants.	Service, as described in Final EIS Section 4.6.3.	
163	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	Section 4.6.3 contains no analysis of MBTA-listed species impacts.	The analysis of effects on wildlife was modified in Final EIS Section 4.6.3 to address impacts on migratory birds.	Website
164	Bio Resources (Terrestrial)	DLNR- R. Seman, M. Pangelinan	The MES 2012 report needs to be included in the Appendices, as well as the reports from the "reconnaissance survey" conducted in 2011.	The results of the MES 2012 survey are described in the Biological Assessment that is included in Final EIS Appendix B, including figures showing where threatened and endangered species were found.	Website
J1	For- Saipan	Z. Zajrdhara	<p>This is my comment on the tentative airfield on Saipan. If Uncle Sam does not take serious, and I do mean serious, steps to place a military presence here, then we might as well let these people sell this place to the Chinese and Filipinos and call it a day. I'm sure that you are well aware by now that these "Local" politicians are nothing but mouthpieces for their Chinese patrons/investors. I'm sure that you know by now that the larger picture calls for the place to become a 5th line of defense for the Chinese. This place is already 60% Chinese and Filipino, neither of which have any loyalty to our way of life. Why are we bickering with these traitors, Period. Why don't we utilize directive or its recent bill? We should not wait until it's too late, we need this presence now, before we can't save these island for our use.</p> <p>S.1059 -106th Congress (1999-2000): National Defense Authorization Act for Fiscal Year 2000</p> <p>https://www.congress.gov/bill/106th-congress/senate-bill/1059</p>	Comment and support noted.	Email
K1	Translation	AZC - P. Perez, C. Kaipat	<p>The revised draft EIS fails to meet EIS public outreach requirements.</p> <p>The purpose of the National Environmental Protection Act (NEPA) is to promote informed decision-making by federal agencies by making "detailed information concerning significant environmental impacts" available to both agency leaders and the public. The proposed Divert Activities and Exercises are to take place in the Commonwealth of the Northern Mariana Islands (CNMI) where English is a second language for the majority of the public. The majority of the permanent local population are ethnic Chamorro and Refaluwasch (Carolinians). Yet, the revised draft EIS is provided only in the English language. This is despite numerous calls in recent years and even recent months for the agencies under the DOD to provide EIS documents in Chamorro and Carolinian languages. The USAF failed to fulfill its requirement under NEPA to inform the public by not providing translations of the EIS in local languages. The consequences of this failure is that many people in the community--those who cannot read English or who have difficulty reading and comprehending materials written in English--cannot understand and evaluate the implications and impacts of the proposed activities. They are effectively disenfranchised and excluded from the NEPA process. The EIS must be redone in local languages with implementation of an effective outreach program designed with measures in place to ensure success.</p>	A Chamorro and Carolinian translator was available at all Divert public meetings (2011 scoping meetings, 2012 public hearings, July 2015 cultural resources meetings, November 2015 Revised Draft EIS public meetings.) Questions could be asked and answered in either Chamorro or Carolinian at all meetings. Additionally, it should be noted that all CNMI newspapers and government materials are produced in English.	Website

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K2	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The revised draft EIS fails to meet EIS public outreach requirements...] The intent and spirit of NEPA's public outreach requirements is to ensure the local government and public's full understanding of the nature and impacts of proposed activities and to encourage their participation in the decision-making process by providing their perspectives and concerns. It is contrary to this intent and spirit for the USAF to present information in such a way as to be misleading and to make their intent obscure. The USAF states in ES 5, Preferred Alternative, "The USAF does not identify or determine a preferred alternative in this Revised Draft EIS." This statement is misleading. It implies that the USAF does not have a preferred alternative when, in actuality, based on the public discussions held at the USAF open house on Saipan, it is clear that the USAF prefers Alternative 1 – Modified Saipan Alternative and Alternative 3 – Hybrid Modified Alternative in that order.	There was no preferred alternative at the time that the Revised Draft EIS was released for public review. Regulations that implement NEPA state that a preferred alternative must be disclosed in the Draft EIS if it has been determined at that time, or at least in the Final EIS. The Final EIS discloses the USAF preferred alternative, which is not necessarily the alternative that would be chosen. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD).	Website
K3	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The revised draft EIS fails to meet EIS public outreach requirements...] By not stating a preferred alternative in the revised draft EIS, the USAF both avoids a more detailed discussion in the EIS as to why it prefers the Saipan alternatives and leads CNMI government leaders and the public to the false assumption that the USAF will accept the local community's strong preference for Alternative 2 – Modified Tinian Alternative. As a result, it can be expected that there will be less apparent public opposition to the USAF plans both in public debate and comments submitted. Whether this is intentional manipulation or not, the result is the same. The seriousness of the impacts to the CNMI community is downplayed when attention is diverted away from those alternatives that the community does not support.	There was no preferred alternative at the time that the Revised Draft EIS was released for public review. Regulations that implement NEPA state that a preferred alternative must be disclosed in the Draft EIS if it has been determined at that time, and must be in the Final EIS. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). The Final EIS includes the preferred alternative, announced by the USAF in February 2016.	Website
K4	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The revised draft EIS fails to meet EIS public outreach requirements...] The USAF's choice of an alternative in its Record of Decision will be based in part on this community response. To comply with NEPA's intent and spirit, the EIS must be redone with the USAF's preferred alternatives clearly named and the reasons for the preference fully discussed.	There was no preferred alternative at the time that the Revised Draft EIS was released for public review. Regulations that implement NEPA state that a preferred alternative must be disclosed in the Draft EIS if it has been determined at that time, and must be in the Final EIS. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). The Final EIS includes the preferred alternative, announced by the USAF in February 2016.	Website
K5	Cumulative-General	AZC - P. Perez, C. Kaipat	The U.S. military has intentionally broken its large-scale development of the Mariana Islands and surrounding waters into the world's largest live-fire training range into multiple proposals with the resulting effect of misleading the public and minimizing apparent impacts. Prior to the approval of the Mariana Islands Range Complex (MIRC) proposal in 2010, the U.S. military already held and occupied extensive areas of the Marianas. This includes fully half of the northern third of Guam along with huge areas in the south, including the Island's only lake, most of the land around Apra Harbor, and numerous other large areas of Guam that, together, make up a third of Guam's entire land mass. Here in the CNMI, they held a long-term lease on two-thirds of Tinian, land around Tanapag Harbour and the entire island of Farallon de Medinilla (FDM). The MIRC created a half-million-square nautical	Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5.	Website

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			<p>mile live-fire training range that surrounds Guam, Rota, Tinian, Saipan and all but the furthest islands to the north. The MIRC authorized live-fire on and in the land, air, and sea throughout the training range. It also expanded the small-arms scope of the Tinian ranges into four range complexes inclusive of artillery, grenade, and high-impact zones. On July 30, 2015, the U.S. Navy announced its Record of Decision for another proposal—the Mariana Islands Training and Testing Area (MITT) that doubled the area of the MIRC to nearly a million square nautical miles. It also greatly increased the level of the Navy’s deadly sonar and live-fire ordnance testing and training in CNMI waters. The MITT plan allows the Navy to damage or kill over 6 square miles of endangered coral reefs plus an additional 20 square miles of coral reef around FDM through the use of highly explosive bombs. It ups the rate of explosive bombing from 2,150 bombs per year to over 6,000 bombs per year, increasing the Navy’s bombing of FDM by roughly 300%. On September 2, 2015, the Navy signed the Record of Decision for another proposal, the Guam and CNMI Military Relocation proposal, approving a new Marine Base in Guam, a new Live-Fire Training Range Complex, or LFTRC, and a separate hand-grenade range. Another separate proposal is the CNMI Joint Military Training (CJMT) proposal that would allow the military to use two-thirds of Tinian for their second highest level of live-fire training range and to take the entire island of Pagan and use it for their highest level of live-fire training. Taken together, these proposals surround the CNMI with live-fire ranges; in Guam to the south; Tinian in the west, FDM and Pagan to the north, and all around us on and in the ocean. The proposed Divert Activities and Exercises is another US Military expansion. Its primary purpose is training. It will move more land and airspace from the CNMI government’s jurisdiction to the USAF.</p>		
K6	Cumulative-General	AZC - P. Perez, C. Kaipat	<p>[The U.S. military has intentionally broken its large-scale development of the Mariana Islands and surrounding waters into the world’s largest live-fire training range into multiple proposals with the resulting effect of misleading the public and minimizing apparent impacts...]</p> <p>The Divert Activities and Exercises EIS is presented independent of other training-related proposed and recently approved activities. Yet, it is clearly and intimately related to them, particularly the MERC and MITT that will involve nearly a million square miles of ocean around the Marianas, large patches of airspace above and near CNMI islands, and live-fire aerial bombardment of FDM. In fact, while the EIS ignores this relationship, it inadvertently reveals this relationship when the EIS refers readers who want to understand how the Divert Activities and Exercises proposal affects other military training operations to the EIS documents of the MERC/MITT proposals. The MIRC, MITT, Guam and CNMI Relocation, LFTRC, CJMT and Divert Activities and Exercises all contribute to the creation of the world’s largest live-fire training range. Breaking them into separate activities with their own independent EIS disclosures has, for all intents and purposes, allowed the Navy, Air Force and Marines to circumvent the intent of the NEPA process. Public and government stakeholders were unaware of the full extent of the military’s intentions. The cumulative impacts</p>	<p>Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. While all branches fall under the Armed Forces and Department of Defense, the purpose and need of each proposal in the Marianas is to meet the individual branches’ requirements under Title 10 of the USC. Each proposal fulfills differing needs among the services and all are on differing timelines, because of each service’s operational requirements. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5.</p>	Website

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			were thereby obscured. Decision makers in the U.S. military who approve each proposal do so based in part upon the feedback and comments of stakeholders – in this case, under-informed stakeholders.		
K7	Cumulative-General	AZC - P. Perez, C. Kaipat	[The U.S. military has intentionally broken its large-scale development of the Mariana Islands and surrounding waters into the world's largest live-fire training range into multiple proposals with the resulting effect of misleading the public and minimizing apparent impacts...] The Divert Activities and Exercises must be abandoned and a new proposal drafted that accurately describes the U.S. military's large-scale live-fire training expansion in the Marianas so that stakeholders may understand and comment on the cumulative impacts as required by NEPA.	The various actions proposed by the Air Force and the Marine Corps each have independent utility; the Air Force's proposal does not rely on the Marine Corps proposal to come to fruition.	Website
K8	Cultural Resources and Recreation	AZC - P. Perez, C. Kaipat	The proposed activities will have a negative impact on the local tourist industry. The main economic engine of the CNMI is its tourist industry. Tourists come to the CNMI to see a group of Micronesian islands and to experience its land, waters and people. In many ways, the tourist experience is our product and its value depends upon a continuing positive visitor experience from the moment a tourist arrives in the CNMI to the moment that that tourist boards a plane home. Tourists choose their destinations based on many factors. We know from 40 years of interactions with our tourists that our history is important to them; i.e., our ancient history, our colonial period history, and our World War II history where our islands played a prominent role in Japanese and American history. Anything that diminishes our image as a small Micronesian island damages our tourist product. Anything that destroys or diminishes our historic properties damages our tourist product. The proposed activities will result in loss and damage to World War II historic areas, artifacts, landmarks, and buildings.	There are no data to indicate that implementing the Divert proposal would have an adverse effect on tourism. The Final EIS Section 4.9 describes potential impacts on recreation and Final EIS Section 4.14 provides potential impacts on CNMI socioeconomics, including tourism. Impacts on historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. The PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. These actions will also help mitigate impacts on tourism, and include items that would benefit tourism, such as an interpretive plan. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16.	Website
K9	Cultural Resources and Recreation	AZC - P. Perez, C. Kaipat	[The proposed activities will have a negative impact on the local tourist industry...] They will change the initial impressions of tourists as they arrive at Saipan International Airport. The drive from the airport is currently along a green belt dotted with historic buildings. Visitors "feel" like they've arrived on a small Micronesian island. The Japanese buildings and bunkers provide a glimpse of World War II. The two alternatives that involve the use of land around Saipan's airport will change this aspect and initial experience.	Comment noted. The USAF recognizes either alternative on Saipan would impact visitor experience of the NHL. Impacts related to historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties. Although the USAF consulted on all three alternatives to the Proposed Action, Alternatives 1 and 3 were removed from the Divert PA upon request of the CNMI governor after identification of Alternative 2 as the Preferred Alternative. The Divert PA requires the USAF to re-initiate Section 106 consultation should Alternatives 1 or 3 be selected for the proposed action. The Final EIS Section 4.8 was revised to include this information.	Website
K10	Recreation	AZC - P. Perez, C. Kaipat	[The proposed activities will have a negative impact on the local tourist industry...] We will lose green areas to paved tarmac and parked military aircraft.	Comment noted. The Final EIS presents an analysis of habitat loss and figures that represent proposed infrastructure for each alternative.	Website

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K11	Noise	AZC - P. Perez, C. Kaipat	[The proposed activities will have a negative impact on the local tourist industry...] We will lose peace and quiet to jet noise from military training exercises.	Comment noted. The noise generated by the proposed action is shown in Final EIS Section 4.1 and 4.10 to be less than significant.	Website
K12	Airspace/Airport Ops	AZC - P. Perez, C. Kaipat	[The proposed activities will have a negative impact on the local tourist industry...] Tourists will also suffer delays and added air travel time and expense as a result of commercial flights having to accommodate regular military aircraft use of our airport and airspace.	The Final EIS Section 3.3 was revised to clearly describe potential impacts on commercial operations during divert military exercises. Additionally, the USAF would notify the local government and public in advance of the exercises per existing procedures.	Website
K13	Environmental Justice	AZC - P. Perez, C. Kaipat	[The proposed activities will have a negative impact on the local tourist industry...] The proposed activities will not only damage our historic assets, but they are contrary to the intent of Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The CNMI community is overwhelmingly ethnic minorities and the CNMI is a low-income community with one of the highest levels of poverty in the United States. The proposed activities will put an unfair burden on our community.	Impacts related on historic properties were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. The PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16. Regarding environmental justice concerns, the environmental justice area of impact is the area within which potential impacts from a proposed action could occur. As defined by the CEQ, the environmental justice area of impact is considered to have disproportionately high percentage of minority or low-income residents if the percentage of persons characterized as being a minority or low-income within the area of impact is either greater than 50 percent, or is disproportionately higher than the community of comparison. CEQ also states, "A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds (CEQ 1997)." The Final EIS environmental justice areas of impact are the election districts that encompass the Proposed Action activities at Saipan International Airport, Tinian International Airport, Ports of Saipan and Tinian, and the proposed fuel truck routes (Saipan Districts 1, 2, and 3 and Tinian District 6), and the communities of comparison are the islands of Saipan and Tinian. As described in the Final EIS Section 4.14.1, significant impacts and elevated noise levels were identified in the 2012 Draft EIS on the communities in Districts 1 and 2 on Saipan due to the consideration of fighter aircraft in the proposal. Community outreach to potentially impacted communities with high minority and low-income populations on Saipan occurred prior to the 2012 Draft EIS public hearing on Saipan. After release of the 2012 Draft EIS, the USAF reevaluated their proposal and removed all fighter aircraft operations from the Proposed Action and each of the three	Website

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				Modified Alternatives. The removal of fighter aircraft operations, resulted in a major reduction in expected noise levels on the communities in Districts 1 and 2. Significant adverse impacts would not be expected on disproportionately high minority and low-income populations under Alternative 1, 2, or 3. On Tinian, as described in Section 4.14.2, environmental justice impacts from noise are not expected. Short-term, minor to moderate, adverse environmental justice impacts could occur during implementation on Tinian due to moderately increased population and related traffic.	
K14	Socioeconomics	AZC - P. Perez, C. Kaipat	[The proposed activities will have a negative impact on the local tourist industry...] Because the proposed activities will damage our historic properties and otherwise have a negative impact on the tourist experience when tourism is our primary industry and our main source of self-generated income, the proposed activities should not move forward.	Historic properties would be protected under any alternative chosen. The USAF worked with the CNMI Historic Preservation Office and individual local consulting parties under Section 106 of the National Historic Preservation Act to develop a programmatic agreement that contains legally binding stipulations for the protection of historic properties. There is no evidence to indicate that implementation of the Divert Proposed Action would negatively impact tourism or tourist experiences. Impacts related to historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, and other consulting parties. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. Results of the completed 106 consultation are provided in the Final EIS Section 4.8 and 4.16.	Website
K15	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	The Tinian lease area is incorrectly excluded from consideration. The northern two-thirds of Tinian currently under lease to the DoD was excluded from consideration as a potential divert airfield location because it lacks "existing infrastructure." This requirement of existing infrastructure is arbitrary. Infrastructure can be built by the USAF.	As described and analyzed in Section 2.3 of the Revised Draft and Final EIS, PACAF considered several additional planning options to meet the purpose of and need for the Proposed Action, in response to comments on the 2012 Draft EIS. Additional options include evaluation of former World War II airfields and closed military airfields on Guam and in CNMI. Specifically, the USAF considered North Field and the portions of West Field located within the Military Lease Area. While North Field does meet several of the selection standards, it does not provide existing airport infrastructure that the USAF can expand upon. Other than the deteriorated runways, there is no remaining infrastructure at these facilities. In summary, North Field lacks any infrastructure upon which to build the additional divert capabilities and would require the development of an entirely new functional USAF airfield and installation beyond the purpose and need for the Proposed Action analyzed in this EIS. The purpose and need of the Proposed Action is to only use existing facilities on as-needed basis and does not include a permanent full-time beddown or installation location. The purpose also does not include the construction of an entirely new airfield, or the full-time use of the facilities by the USAF. By locating the facilities at an existing operating airfield or airport, the location itself provides a level of physical security and maintenance unavailable at closed or abandoned facilities. In addition, the development of facilities on an existing commercial airport provides the potential for future shared use.	Website

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K16	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The Tinian lease area is incorrectly excluded from consideration...] Furthermore, use of the lease area for the divert airfield is an appropriate, productive use of the Tinian lease area. The area obviously has merit for use as an airfield since it includes the old World War II airfields.	As described and analyzed in Section 2.3 of the Revised Draft and Final EIS, PACAF considered several additional planning options to meet the purpose of and need for the Proposed Action, in response to comments on the 2012 Draft EIS. Additional options include evaluation of former World War II airfields and closed military airfields on Guam and in CNMI. Specifically, the USAF considered North Field and the portions of West Field located within the Military Lease Area. While North Field does meet several of the selection standards, it does not provide existing airport infrastructure that the USAF can expand upon. Other than the deteriorated runways, there is no remaining infrastructure at these facilities. In summary, North Field lacks any infrastructure upon which to build the additional divert capabilities and would require the development of an entirely new functional USAF airfield and installation beyond the purpose and need for the Proposed Action analyzed in the Final EIS. The purpose and need of the Proposed Action is to only use existing facilities on as-needed basis and does not include a permanent full-time beddown or installation location. The purpose also does not include the construction of an entirely new airfield, or the full-time use of the facilities by the USAF. By locating the facilities at an existing operating airfield or airport, the location itself provides a level of physical security and maintenance unavailable at closed or abandoned facilities. In addition, the development of facilities on an existing commercial airport provides the potential for future shared use.	Website
K17	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The Tinian lease area is incorrectly excluded from consideration...] If the reason for the requirement of existing infrastructure is the cost of building such infrastructure, then it begs the question, "how important can the divert airport be for the USAF if it is not willing to pay the costs of renovating and providing infrastructure?" If it is not important enough to spend the money, then asking the CNMI to give up land for the divert project seems unreasonable. It is essentially asking the CNMI government to subsidize a USAF project that is not important enough for the USAF to spend its own, far greater financial resources on.	As described and analyzed in Section 2.3 of the Revised Draft and Final EIS, PACAF considered several additional planning options to meet the purpose of and need for the Proposed Action, in response to comments on the 2012 Draft EIS. Additional options include evaluation of former World War II airfields and closed military airfields on Guam and in CNMI. Specifically, the USAF considered North Field and the portions of West Field located within the Military Lease Area. While North Field does meet several of the selection standards, it does not provide existing airport infrastructure that the USAF can expand upon. Other than the deteriorated runways, there is no remaining infrastructure at these facilities. In summary, North Field lacks any infrastructure upon which to build the additional divert capabilities and would require the development of an entirely new functional USAF airfield and installation beyond the purpose and need for the Proposed Action analyzed in the Final EIS. The purpose and need of the Proposed Action is to only use existing facilities on as-needed basis and does not include a permanent full-time beddown or installation location. The purpose also does not include the construction of an entirely new airfield, or the full-time use of the facilities by the USAF. By locating the facilities at an existing operating airfield or airport, the location itself provides a level of physical security and maintenance unavailable at closed or abandoned facilities. In addition, the development of facilities on an existing commercial airport provides the potential for future shared use.	Website

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K18	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	Alternative sites outside the CNMI are arbitrarily excluded. The revised draft EIS states that a divert airfield is needed "...in the event of a disruption of operational capabilities at Andersen AFB or other western Pacific locations." This implies that there are other airfields in other western Pacific locations. The EIS needs to list all other Pacific locations, including non-USA locations and explain why each cannot meet the need.	Final EIS Section 2.3 provides the selection standards for the selection of Site Alternatives to the Proposed Action and why other Pacific locations with airfield assets were considered and dismissed from analysis.	Website
K19	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[Alternative sites outside the CNMI are arbitrarily excluded. The revised draft EIS states that a divert airfield is needed "...in the event of a disruption of operational capabilities at Andersen AFB or other western Pacific locations." This implies that there are other airfields in other western Pacific locations....] The EIS should also consider new alternative airfields that could potentially be built on foreign soil.	Selection standards for alternatives, provided in Final EIS Section 2.3, include the condition that a proposed location be on U.S. soil.	Website
K20	Purpose and Need	AZC - P. Perez, C. Kaipat	The USAF's justification for the Divert Activities and Exercises project is not compelling as most of the needs cited are already met. The project appears to be a desired but unnecessary expansion of existing capability. Emergency response justification should be removed entirely. FAA Airport Sponsor Assurance C. 27 already authorizes the use of any of the CNMI's commercial airports in an emergency.	The Divert Proposed Action would support the USAF's existing capabilities in the event of contingencies that are explained in the Final EIS. Emergency response would be greatly enhanced while allowing existing civil air transportation to continue uninterrupted.	Website
K21	Purpose and Need	AZC - P. Perez, C. Kaipat	[The USAF's justification for the Divert Activities and Exercises project is not compelling as most of the needs cited are already met. The project appears to be a desired but unnecessary expansion of existing capability...] Divert landings already occur at A.B. Won Pat International Airport, Guam; Saipan International Airport, and Rota International Airport.	Comment noted.	Website
K22	Purpose and Need	AZC - P. Perez, C. Kaipat	[The USAF's justification for the Divert Activities and Exercises project is not compelling as most of the needs cited are already met. The project appears to be a desired but unnecessary expansion of existing capability...] Currently, planned joint military exercises occur within the MIRC and Mariana Islands using Andersen AFB and the surrounding airspace and range area. It is unclear why it is necessary to also provide support from Saipan or Tinian.	The purpose and need for the proposed action is stated in the Final EIS Section 1.3, as required by CEQ's regulations implementing NEPA at 40 CFR 1500-1508.	Website
K23	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The USAF's justification for the Divert Activities and Exercises project is not compelling as most of the needs cited are already met. The project appears to be a desired but unnecessary expansion of existing capability...] Humanitarian airlift staging can already occur at Andersen AFB or A.B. Won Pat International Airport, Guam. FAA Airport Sponsor Assurance C. 27, allows for use of Saipan International Airport and Tinian International Airport as well.	Comment noted. Final EIS Section 1.3 provides the purpose and need for the project. Selection standards for the alternatives are provided in Final EIS Section 2.3.	Website
K24	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The USAF's justification for the Divert Activities and Exercises project is not compelling as most of the needs cited are already met. The project appears to be a desired but unnecessary expansion of existing capability...] The DoD has 30 million acres that it currently uses for training purposes*. It is difficult to imagine that they need to take additional land from the CNMI to meet	Comment noted. Final EIS Section 1.3 provides the purpose and need for the project. Selection standards for the alternatives are provided in Final EIS Section 2.3.	Website

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			its training land needs. The CNMI only has 177 square miles of land. Of this, the US Military already controls 30.4 square miles. This is in addition to the 1/3 of Guam's entire landmass that is under military control. *source: https://www.serdp-estcp.org/Program-Areas/Resource-Conservation-and-Climate-Change/Natural-Resources		
K25	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	The CNMI is a poor choice of location for staging a humanitarian aid effort. While the need to support emergency humanitarian efforts is cited as justification for establishing a divert airfield in the CNMI, the CNMI has few local resources to support any significant emergency humanitarian aid effort. Guam, where there are far more of the materials, supplies and resources required and on hand for such an effort, is a far better choice. The CNMI can offer only limited support and, in fact, Rota, Tinian and Saipan airports are already available for humanitarian assistance via FAA Airport Sponsor Assurance C. 27.	Humanitarian assistance is one component of the Proposed Action. Please refer to Final EIS Section 1.3 which provides the purpose and need for the project. Selection standards for the alternatives are provided in Final EIS Section 2.3.	Website
K26	Proposed Action and Alternatives	AZC - P. Perez, C. Kaipat	[The CNMI is a poor choice of location for staging a humanitarian aid effort...] Furthermore, the CNMI government is highly unlikely to deny use over the limits of C. 27 in a true emergency.	Humanitarian assistance is one component of the Proposed Action. Please refer to Final EIS Section 1.3 which provides the purpose and need for the project. Selection standards for the alternatives are provided in Final EIS Section 2.3.	Website
L1	Administrative	NOAA- G. Davis	Due to the many project level changes in the RDEIS, comments provided here supersede those provided by NMFS during the 2012 DEIS comment period.	Comment noted.	Email
L2	Proposed Action and Alternatives	NOAA- G. Davis	Although the RDEIS did not propose a preferred alternative, the USAF stated at the November 4, 2015, public meeting on Saipan that \$29.3 million dollars appropriated by Congress for this project in 2014 is only authorized for improvements on Saipan. The CNMI Delegate has been unable to get the funding expanded to cover Tinian. The fact that these funds remain unavailable for Tinian suggests that the preferred alternative needs to include improvements on Saipan, limiting the options to either the Modified Saipan or Hybrid Modified Alternatives (Saipan Tribune, November 5th 2015). If funding availability is important for defining the preferred alternative, then we recommend this item be more clearly explained in the FEIS.	The alternatives presented in the Final EIS and Revised Draft EIS were developed through discussions with FAA, CNMI agencies (e.g., CPA) and the CNMI Office of the Governor to provide an additional reasonable alternative to those proposed in the 2012 DEIS. All reasonable alternatives were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The Final EIS presents the USAF's preferred alternative, taking into consideration all input received on the RDEIS. The RDEIS did not announce a Preferred Alternative because the USAF considered all possible options studied in the RDEIS. When the Secretary of the USAF, in consultation with the Secretary of Defense, makes a decision — Saipan-only, Tinian-only, or the Hybrid — the USAF will program CNMI requirements and request funding based on the approved alternative, per the decision made in the ROD or an amendment to the ROD. For each of the alternatives, including the hybrid alternative, the USAF would plan to build infrastructure consistent with the requirements identified and reflected in the ROD or an amendment to the ROD.	Email
L3	Marine Bio	NOAA- G. Davis	The Magnuson-Stevens Fishery Conservation and Management Act (16 USC § 1855(b)(2)) requires federal agencies to consult with NMFS on "any action authorized, funded, or undertaken, or proposed to be authorized, funded or undertaken, by such agency that may adversely affect any essential fish habitat identified under the Act." All three alternatives are located within the coastal zone, within close proximity to nearshore marine resources, including Essential Fish Habitat (EFH) and support various life stages for the management unit	The USAF completed EFH consultation with NMFS HCD and completed ESA consultations with NMFS PRD for the Preferred Alternative, as described in Final EIS Section 4.7.2. Although the USAF consulted only on Tinian, the USAF would remain committed to mitigating potential adverse effects should they select Alternative 1 or Alternative 3 and would be required to initiate Section 7 and EFH consultation.	Email

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			<p>species (MUS) identified under the Western Pacific Regional Fishery Management Council's Pelagic and Marianas Fishery Ecosystem Plans (FEPs). The MUS and life stages specifically include: eggs, larvae, juveniles and adults of Coral Reef Ecosystem MUS (CRE-MUS), Bottomfish MUS (BMUS), Crustacean MUS (CMUS) and juveniles and adults of Pelagic MUS (MPMUS).</p> <p>[...]</p> <p>NMFS PIRO recommends the USAF, complete EFH consultation prior to the completion of the NEPA process and coordinate ESA consultation with PIRO Protected Resources Division as early as possible prior to project implementations.</p>		
L4	Water	NOAA-G. Davis	<p>The high volume of fuel being transferred and stored on site, the potential inadequacy of harbor infrastructure on Tinian, and scale of the proposed construction activities all create clear threats to EFH. The USAF has determined that no impacts will occur to EFH provided all federal and CNMI regulations are followed when developing and implementing best management practices (BMPs) for stormwater and land-based runoff. However, NMFS highlights three issues that may adversely affect EFH unless additional measures are taken:</p> <p>Stormwater: The increase in impermeable surfaces associated with this proposed action could lead to EFH impacts due to stormwater discharges. Non-point source pollution is a significant contributor to coral reef degradation in the Mariana Islands and should be considered in the development of the proposed alternatives. The USAF should use stormwater BMPs during both construction and operation phases of the proposed action, and incorporate stormwater controls into infrastructure designs as outlined in the RDEIS. The BMPs are intended to ensure that no increase in volume of stormwater discharge or degradation of coastal water quality results from this project. It is often overlooked that increases in freshwater discharges are considered pollutants that are known to negatively impact coral reefs. We strongly recommend the USAF develop and implement a monitoring program that: 1) adequately assesses baseline conditions, post-construction flow, and sediment transport; and 2) confirms the effectiveness of catchment and retention measures for prevention of increased stormwater volume and any contaminants (particulates or chemical pollutants) onto the reef. Local and federal partners, including NOAA, should be included on correspondence related to pertinent findings and updates from this ongoing monitoring effort. NOAA is available to provide technical assistance as needed.</p>	<p>The USAF completed EFH consultation with NMFS HCD and completed ESA consultations with NMFS PRD for the Preferred Alternative, as described in Final EIS Section 4.7.2. Although the USAF consulted only on Tinian, the USAF would remain committed to mitigating potential adverse effects should they select Alternative 1 or Alternative 3 and would be required to initiate Section 7 and EFH consultation. The USAF would implement mitigation measures during the Construction Phase and the Implementation Phase of Alternative 1, Alternative 2, and Alternative 3, regardless of alternative, to minimize or avoid impacts on marine biological resources. The mitigation measures applicable to all alternatives that would control stormwater runoff and reduce the release of sediment from project sites into the marine environment are fully detailed in Final EIS Section 4.4, Section 4.5, and Section 4.16, and the EFH Assessment prepared for the Preferred Alternative provided in Final EIS Appendix B.</p>	Email
L5	Water	NOAA-G. Davis	<p>[The high volume of fuel being transferred and stored on site, the potential inadequacy of harbor infrastructure on Tinian, and scale of the proposed construction activities all create clear threats to EFH. The USAF has determined that no impacts will occur to EFH provided all federal and CNMI regulations are followed when developing and implementing best management practices (BMPs) for stormwater and land-based runoff. However, NMFS highlights three issues that may adversely affect EFH unless additional measures are taken:]</p>	<p>The USAF completed EFH consultation with NMFS HCD and completed ESA consultations with NMFS PRD for the Preferred Alternative, as described in Final EIS Section 4.7.2. Although the USAF consulted only on Tinian, the USAF would remain committed to mitigating potential adverse effects should they select Alternative 1 or Alternative 3 and would be required to initiate Section 7 and EFH consultation.</p>	Email

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			<p>Spill control: A failure of the Saipan Airport ramp hydrant system in 2000 resulted in the release of 7,000 gallons of aviation fuel that is reported to have moved extremely quickly through the karst topography near the airport and into nearshore waters at Ladder Beach. Given the volume of fuel proposed for storage both on Saipan and Tinian additional redundancies should be developed to both prevent and capture fuel in the event of a leak or spill resulting from a failure within the system. To address this concern, we recommend the USAF perform a fate and transport of pollutants study to better understand and manage for future spill impacts from the storage tanks and during surface pumping activities. Findings from this study should then be used to develop a monitoring program for groundwater and nearshore waters that are likely to be impacted by spill events. This study should be included in the FEIS and updates from ongoing monitoring efforts should be shared with all local and federal partners, including NOAA who can be also provide technical assistance as needed.</p>	<p>The USAF would implement mitigation measures during the Construction Phase and the Implementation Phase of Alternative 1, Alternative 2, and Alternative 3, regardless of alternative, to minimize or avoid impacts on marine biological resources. Mitigation measures for spill control and countermeasure are detailed in Final EIS Section 4.12 and Final EIS Section 4.16. These mitigation measures include implementation of a SPCC Plan and FRP.</p>	
L6	Proposed Action and Alternatives	NOAA-G. Davis	<p>[The high volume of fuel being transferred and stored on site, the potential inadequacy of harbor infrastructure on Tinian, and scale of the proposed construction activities all create clear threats to EFH. The USAF has determined that no impacts will occur to EFH provided all federal and CNMI regulations are followed when developing and implementing best management practices (BMPs) for stormwater and land-based runoff. However, NMFS highlights three issues that may adversely affect EFH unless additional measures are taken:]</p> <p>Tinian Harbor: During the scoping meetings for this project it was noted that significant harbor improvements may be required to support the development, enhancement, and operations of a divert airfield location. The RDEIS backs away from this need and states the following:</p> <p>Therefore, Tinian has a limited capability to accept fuel shipments at the port. Although not ideal, Tinian meets the requirements of this selection standard to a limited extent as multiple ship off-loads would be required unless improvements to the harbor were made permitting larger vessels to safely transit into the harbor. (2.3.2.3 - line 28)</p> <p>Ships currently supplying the Tinian harbor are not jittily loaded and have extra fuel capacity available. Therefore, no new trips would be needed to accommodate the additional fuel; as such, shipping would not increase in Tinian harbor beyond historic levels under this alternative and no impacts on sea turtles would be expected. (4. 7.1.2 - line 23 and others)</p> <p>These paragraphs seem to contradict the information shared at the scoping meetings, and they seem to contradict each other. In one you state that "Tinian has limited capability to accept fuel shipments at the port" creating operational challenges and in the next you say that "no new trips would be needed to accommodate the additional fuel". A feasibility study should be performed and presented here detailing the shipping requirements that will be created for both construction and fuel supplies for this project, the current capability at Tinian harbor and limitations that may emerge resulting from the cumulative usage of</p>	<p>The scoping process conducted in 2011, as is the intent of scoping, provided the USAF with additional research and information regarding the current fuel supply chain for fuel deliveries at the Tinian port. As stated in the selection standards, the fuel capabilities of the Tinian port are not ideal, as the port can currently only accept shallow draft tankers and multiple fuel deliveries would be required to fill the tanks proposed by the USAF. However, the USAF is not proposing to increase the number of fuel tanker trips to the Tinian harbor. Rather, the USAF is proposing to receive fuel through the existing commercial supply chain and regularly scheduled fuel deliveries, which would be managed by DLA under contract with a commercial fuel supplier. Also as noted in the EIS, the current ships typically have additional capacity which would be used to fill the proposed tanks, as needed. The USAF is not proposing to make any improvements to the Tinian harbor.</p> <p>The EIS has been revised to remove inconsistencies in language regarding the current condition of the Tinian harbor and the USAF's proposed use of the harbor. Additional detail has been provided in the Final EIS in Section 5 regarding potential cumulative impacts related to use of the Tinian harbor.</p>	Email

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			this harbor created by the CNMI Joint Military Training and other pending Department of Defense actions. The findings from this study should then be shared within the FEIS.		
M1	Administrative	DOI, NPS-P. Port	<p>The National Park Service (NPS) manages two park units in the Marianas: War in the Pacific National Historical Park on Guam, which honors the bravery and sacrifices of all those who participated in the Pacific Theater of World War II; and American Memorial Park on Saipan, which honors the American and Marianas people who gave their lives during the Marianas Campaign of World War II. In addition to their cultural and historic significance, these sites preserve the most diverse coral reef system within the National Park System, habitat for threatened sea turtles, and the only federally managed wetland on Saipan.</p> <p>The NPS also represents the Secretary of the Interior for the National Natural Landmarks (NHL) program, and is charged by the Secretary with the administration of the Historic Preservation Fund Grants program in Micronesia.</p> <p>For a more complete explanation of the NPS mission and responsibilities in the Marianas, please refer to our comments dated February 20, 2012, concerning ER09/ 1197: Guam and Commonwealth of the Northern Mariana Islands Military Relocation.</p>	The NPS mission and responsibilities are noted.	Email
M2	Cultural Resources	DOI, NPS-P. Port	The Divert alternatives located on Saipan would have direct impacts to the cultural resources that contribute to the Aslito/Isley Field NHL. The Divert alternatives located on Tinian also would have direct negative effects to the historic property at the former West Field, which is a site eligible for inclusion on the National Register of Historic Places (Dixon et al. 2014). As all alternatives are located within somewhat developed areas of current airports and at active ports, NPS is concerned primarily with the impact to cultural and historic resources.	Comment noted.	Email
M3	Cultural Resources and Recreation	DOI, NPS-P. Port	Section 110(f) of the National Historic Preservation Act (NHPA) requires that the agency official, to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm to any National Historic Landmark that may be directly and adversely affected by an undertaking. Alternatives that avoid or minimize the impact to the maximum extent possible would be in accordance with this statute. While these comments are part of the NEPA consultation, choosing an alternative that avoids impacts to the Isley/Aslito NHL would meet this requirement. The negative impact to cultural resources and diminishment of public access and enjoyment of these resources would be significantly greater for either alternative that includes Saipan.	Comment noted. Impacts on historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties and were discussed during Section 106 meetings in CNMI the week of 3-6 November. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. The PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16. The USAF has taken steps for all alternatives to minimize harm to NHLs, pursuant to Section 110(f) of the NHPA, including reduction of the proposed facilities and operations from what was initially proposed in the 2012 DEIS.	Email

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M4	Cultural Resources	DOI, NPS- P. Port	For alternatives proposed at Saipan airport, project plans indicate the airport apron to be constructed immediately adjacent to multiple standing structures and identified previously recorded historic sites associated with the former Aslito/Isley Field. While cutouts on the apron design are meant to mitigate impact to the present structures (historic buildings) to some degree, the new apron and associated activities still will negatively affect these historic resources. These impacts include physical damage to part of the NHL, alteration not consistent with the Secretary of the Interior Standards, change of physical features within the NHL's setting and introduction of visual, atmospheric, and audible elements that negatively impact the NHL.	Comment noted. Impacts on historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties and were discussed during Section 106 meetings in CNMI the week of 3-6 November. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. The PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16. The USAF has taken steps for all alternatives to minimize harm to NHLs, pursuant to Section 110(f) of the NHPA, including reduction of the proposed facilities and operations from what was initially proposed in the 2012 DEIS.	Email
M5	Cultural Resources	DOI, NPS- P. Port	Additionally, the startup, idling, take off, landing, and taxiing of large aircraft to and from the apron will directly impact the experience of all visitors present. Visitation to these sites outside the airport fence currently is not controlled and is open to visitation at any time. The proposed apron lies, in part, directly on what appear to be a set of historic hardstands that are still visible above the ground, that were evident during the site visit earlier this month. The proposed fuel line path traverses what appears to be both previously recorded historic sites, and additional remains of hardstands, and are planned to be immediately adjacent to at least two existing historic structures (buildings). The proposed maintenance building lies on what appears to be remains of an historic taxiway and hardstand. These described effects when taken as a whole will negatively affect the historic character, integrity and experience of the NHL.	Comment noted. The USAF recognizes either alternative on Saipan would adversely affect the NHL. Impacts related to historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties and were discussed during Section 106 meetings in CNMI the week of 3-6 November. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. The PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16.	Email
M6	Cultural Resources	DOI, NPS- P. Port	For proposals at Tinian airport, project alternatives indicate project construction on either the north, or south side of the runway. Historic maps and photos of the former West Field, which is now part of the Tinian airport show that there would be direct effects to the taxiways, hardstands, and historic service roads from both proposals on the north or south side of the runway. The information provided by the Air Force for the Tinian areas selected for the proposed undertaking show no remaining historic structures such as buildings, in contrast to the multiple buildings present directly adjacent to the proposed project location on Saipan.	Comment noted. Little information is available to date regarding the presence and condition of specific features related to West Field within proposed construction areas.	Email

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M7	Cultural Resources and Recreation	DOI, NPS-P. Port	It does not appear that these actions will significantly impact visitors to adjacent cultural sites. Additionally, tourism, which is the driver of the economy in the CNMI, would be negatively affected especially by the Saipan alternatives. As part of the mitigation, an interpretive plan and funding for signage displays, printed and digital media that share the history and importance of the site should be completed and maintained for whichever alternative is selected.	Comment noted. Impacts on historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties and were discussed during Section 106 meetings in CNMI the week of 3-6 November. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. The PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16.	Email
M8	For- Tinian	DOI, NPS-P. Port	There is an additional military project proposed for Tinian, the Navy's CJMT. This project proposes facilities similar in construction and operation to those in the PACAF Divert proposal. To minimize the impact to cultural (historic) resources, choosing the Tinian only alternative appears to minimize overall impact to cultural resources by avoiding negative impacts to the Isley/Aslito NHL.	Comment noted. Although the projects are similar in construction and operations, they offer separate and distinct utility to each service. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record. Impacts related to historic properties and the National Historic Landmark were addressed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties. Results of these discussions were developed into a PA, which ultimately included only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. The PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16.	Email
M9	Cumulative-CJMT	DOI, NPS-P. Port	NPS recommends close coordination between USAF and Navy to minimize impacts.	Comment noted. The USAF coordinates regularly with the US Navy and the USMC regarding proposals in CNMI and the region.	Email
M10	Cultural Resources	DOI, NPS-P. Port	During construction activities at either location, it is likely that significant archaeological items will be encountered. The NPS recommends development of a robust archaeological monitoring and recovery plan that meets all current federal standards.	Archaeological monitoring and unanticipated discoveries are addressed in the PA that was developed via the NHPA and Section 106 consultation process with the CNMI SHPO, the Advisory Council on Historic Preservation, the NPS, and other consulting parties. Additional information on stipulations related to archaeological monitoring and unanticipated discoveries are provided in the Final EIS Sections 4.8 and 4.16.	Email

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M11	Cultural Resources	DOI, NPS-P. Port	The NPS also recommends that PACAF return all archaeological items to the CNMI Historic Preservation Office when they have established a compliant curatorial facility and that PACAF consider funding the longterm care and storage of these items as a mitigation to the undertaking.	Curation of archaeological items is addressed in a PA among the USAF, CNMI SHPO, Advisory Council on Historic Preservation, NPS, and other consulting parties. The agreement includes provisions to return cultural materials to CNMI once they have established a compliant curatorial facility. The PA includes only the Tinian alternative, which was identified as the preferred alternative after the public review period was complete. However, the PA outlines actions the USAF will take to avoid, minimize, and mitigate impacts to historic properties for the Preferred Alternative. If Alternative 1 or Alternative 3 were selected for the Proposed Action, the Divert PA requires the USAF to re-initiate Section 106 consultation to develop measures to mitigate adverse effects that would be captured in a new agreement document. Results of the 106 consultations are provided in the Final EIS Sections 4.8 and 4.16.	Email
M12	Administrative	DOI, NPS-P. Port	We look forward to continued participation in the consultation for DIVERT. If you have any questions about our comments, please contact Jim Richardson, Superintendent, War in the Pacific National Historical Park, at 6714777278, extension 1003.	Comment noted.	Email
M13	Administrative	DOI, OIA-P. Port	The Office of Insular Affairs (OIA) is responsible for coordinating overall federal policy in the U.S. territories of Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands (CNMI), and for overseeing financial assistance for the freely associated states of the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau. OIA's mission is to promote government efficiency, foster economic opportunities, and improve the quality of life of the people in the U.S. territories and freely associated states. Critical to OIA's responsibility is ensuring that the underlying federal civilian relationship with these areas are strengthened and remain effective.	The OIA mission and responsibilities are noted.	Email
M14	Proposed Action and Alternatives	DOI, OIA-P. Port	We commend the United States Air Force (USAF) for the collaborative effort it has engaged in with the CNMI people and its leadership since issuing the initial Divert Draft Environmental Impact Statement (Divert DEIS) in June 2012, and appreciate that the scale of the USA footprint has been greatly reduced in response to the public comments process.	Comment noted.	Email
M15	Against Saipan; For Tinian	DOI, OIA-P. Port	Given the continuing opposition from the Commonwealth Port Authority and CNMI political leaders for the modified Divert on Saipan and the modified Divert Hybrid on Saipan/Tinian, OIA recommends that high consideration be given to the modified Divert on Tinian as it has broadbased support from the CNMI.	Comment noted. This comment will be part of the Final EIS administrative record.	Email
M16	Proposed Action and Alternatives	DOI, OIA-P. Port	Self-Determination - OIA believes that the USAF cannot look at the Divert RDEIS in isolation from the issue of self-determination for the people and leaders of the CNMI. This includes the right to determine what form of federal activities should occur in the CNMI on CNMI lands, the right to determine which economic activities it wants to drive its economy, and the right to determine the	The USAF collaborated with the CNMI government and its people throughout the NEPA process and showed deference to self determination by listening to government and citizen concerns and suggestions.	Email

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			disposition of their land and natural resources. The right to self-determination becomes even more important considering the limited land size of the islands that comprise the CNMI; Saipan is only 44 square miles and Tinian is only 39 square miles.		
M17	Against Saipan; For Tinian	DOI, OIA- P. Port	[Self-Determination] - Significant opposition to using the Francisco C. Ada Saipan International Airport has been previously expressed by CNMI leaders upon the initial Divert DEIS release in 2012 with many leaders and the public expressing concern about the effort being located on Saipan. The overwhelming preference is to have the Divert located on Tinian. CNMI Governor Eloy Inos officially followed up with a letter to USAF Secretary Eric Fanning, on August 9, 2013, affirming his preference, and the preference of all four CNMI mayors (Saipan, Tinian, Rota, and the Northern Islands), and the CNMI Legislature that the Divert be built only on Tinian.	The Saipan alternative was carried forward for analysis in the Final EIS as a reasonable alternative in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. In the RDEIS, the USAF reduced the scope of their proposal from the 2012 Draft EIS on Saipan to reduce overall environmental impacts related to construction and to reduce land requirements and retain a minimum land interest in accordance with the Covenant.	Email
M18	Against Saipan; For Tinian	DOI, OIA- P. Port	Self-Determination - Governor Inos also reiterated his support for the Divert on Tinian and opposition to the Divert on Saipan on September 14, 2014, to U.S. Senate Armed Services Committee leadership during consideration of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2015, given that the NDAA for FY 2014 only authorized funding for the USAF to conduct a DEIS process for the Divert on Saipan.	Comment noted. This comment will be part of the Final EIS administrative record.	Email
M19	Against Saipan; For Tinian	DOI, OIA- P. Port	Self-Determination - The Commonwealth Ports Authority (CPA), the governing body of both international airports and seaports on Tinian and Saipan, sent a letter to the USAF in December 2013, informing it of the CPA's unanimous vote in favor of locating the Divert on Tinian. Subsequently, on August 28, 2014, the CPA passed a resolution stating that it would only support and enter into an agreement with the USAF if the location of the Divert were located on Tinian and that the Authority would not support nor submit an Airport Layout Plan (ALP) for the Divert to be located at Saipan International Airport. On November 25, 2015, the CPA Board affirmed support for the modified Divert on Tinian, and its opposition to the modified Divert on Saipan and the modified Divert hybrid on Saipan/Tinian.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Email
M20	Against Saipan; For Tinian	DOI, OIA- P. Port	Self-Determination - OIA is expecting that all of the CNMI's political leaders will support the position of the CPA. The Nineteenth CNMI Legislature already passed H.J.R. 192 in the House of Representatives on May 22, 2015, and the Senate on July 23, 2015. The resolution supports the position of the CPA and the expansion of the USAF Divert on the island of Tinian alone and does not support the implementation of any portion of the Divert initiative on Saipan.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Email
M21	Against Saipan; For Tinian	DOI, OIA- P. Port	Self-Determination - OIA recommends that the USAF take into account the right to self-determination of the people and leaders of the CNMI and their strong preference for the location of Tinian only during the Divert RDEIS process. A lack of serious consideration for the people's views could jeopardize the federal civilian relationship with the CNMI.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Email

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M22	Administrative	DOI, OIA-P. Port	<p>Section 902 Consultations - For the USAF, other DOD officials, and other federal officials, it is important to note the serious concerns that CNMI leaders have with both the Divert RDEIS process and the Draft Environmental Impact Statement/Overseas Environmental Impact Statement, Department of the Defense, Department of the Navy, Commonwealth of the Northern Mariana Islands Joint Military Training (CJMT DEIS) process, and their desire to discuss both projects and any future military activities within the context of Section 902 Covenant Consultations.</p> <p>Section 902 of Article IX of the Covenant to Establish the Commonwealth of the Northern Mariana Islands (CNMI) in Political Union with the United States of America (the Covenant), the federal law that governs U.S.-CNMI relations, provides that the United States and the Government of the CNMI "will consult regularly on all matters affecting the relationship between them. At the request of either Government, and not less frequently than every ten years, the President of the United States and the Governor of the Northern Mariana Islands will designate special representatives to meet and consider in good faith such issues affecting the relationship between the Northern Mariana Islands and the United States as may be designated by either Government and to make a report and recommendations with respect thereto."</p> <p>On October 2, 2015, CNMI Governor Inos sent a letter to President Barack Obama requesting initiation of Section 902 Consultations pursuant to the Covenant. Governor Inos requested that the President appoint a special representative to discuss the expiration of the CNMI-Only Transitional Worker program in 2019 and the Department of the Defense's (DOD) proposed military activities (CJMT DEIS and Divert RDEIS) within the CNMI. Earlier this year, the Nineteenth CNMI Legislature passed another resolution, H.J.R. 195, in the House of Representatives on May 22, 2015, and the Senate on July 23, 2015. The resolution requests that the Covenant Section 902 process be utilized by the President of the United States as the sole forum for discussion, consultation, and negotiation to address the United States' desire to acquire any interest in real property not already given under the Covenant. OIA is currently working with the White House in response to Governor Inos' request for Section 902 Consultations.</p>	<p>CNMI concerns regarding DOD activity region and request for Section 902 consultations is noted. The USAF proceeded with the development of the Final EIS to maintain the project schedule.</p>	Email
M23	Cumulative-General	DOI, OIA-P. Port	<p>Potential Impacts to the CNMI's Economy As discussed in our comments on the CJMT DEIS, DOD's actions in that process as well as the Divert RDEIS should be considered in the context of the stability of the CNMI's overall economy, which stands to be adversely impacted by current federal law (P.L. 113235) at the end of 2019. The law will zero out the number of CW1 foreign workers allowed in the CNMI as part of its labor workforce. Based on current estimates, the CNMI Governor projects that over 10,000 foreign workers will be needed to meet the projected demands of the private sector to keep up with its tourism and construction industries.</p>	<p>Projected demands on the labor workforce related to foreign workers are beyond the requirements of the NEPA analysis for the Proposed Action and corresponding cumulative effects. However, the USAF will follow, and will ensure that its federal contractors follow, the existing labor, wage and hour and immigration laws that are in existence at the time the project proceeds and is implemented. The Final EIS was revised to acknowledge that there is a lack of skilled workers in CNMI, a condition that could worsen as immigration reform is implemented.</p>	Email

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M24	Cumulative-General	DOI, OIA-P. Port	In short, failure of DOD to take into account other federal activities related to the CNMI's economy may impact its long-term strategic objectives. OIA is currently working with the U.S. Department of Homeland Security on implementing rules for the phase-out of foreign workers, but remains concerned that the U.S. Department of Labor Secretary no longer has the discretion to extend the number of foreign workers in the CNMI beyond December 31, 2019.	Projected demands on the labor workforce related to foreign workers are beyond the requirements of the NEPA analysis for the Proposed Action and corresponding cumulative effects. However, the USAF will follow, and will ensure that its federal contractors follow, the existing labor, wage and hour and immigration laws that are in existence at the time the project proceeds and is implemented. The Final EIS was revised to acknowledge that there is a lack of skilled workers in CNMI, a condition that could worsen as immigration reform is implemented.	Email
M25	Socioeconomics	DOI, OIA-P. Port	While the primary concern for the CNMI government and the private sector for the economy is the looming 2019 deadline to phase out foreign workers as part of its labor workforce, OIA is also concerned that locating the Divert on Saipan or Saipan/Tinian may create future harm for the CNMI economy.	Projected demands on the labor workforce related to foreign workers are beyond the requirements of the NEPA analysis for the Proposed Action and corresponding cumulative effects. However, the USAF will follow, and will ensure that its federal contractors follow, the existing labor, wage and hour and immigration laws that are in existence at the time the project proceeds and is implemented. The Final EIS was revised to acknowledge that there is a lack of skilled workers in CNMI, a condition that could worsen as immigration reform is implemented. There are no data to indicate that implementing the Divert proposal would have an adverse effect on tourism. Given the potential for sharing the Divert facilities with civilian aviation for a majority of each year, it is most likely that implementation of the proposal would prove beneficial for the tourism industry and CNMI economy.	Email
M26	Socioeconomics	DOI, OIA-P. Port	From 2002 to 2012, the CNMI economy suffered a 52.7 percent drop in its gross domestic product (GDP). This unprecedented loss in economic activity was a result of the loss of its garment industry coupled with a downturn in tourism. The CNMI has undertaken great strides to rebuild its economy by focusing on expanding its tourism industry. As a result of this concerted effort, the GDP rose 2.1 percent in 2012 and 4.4 percent in 2013. OIA is concerned several actions contemplated within the Divert RDEIS, especially locating the Divert on Saipan, and actions proposed in the CJMT DEIS, may harm the tourism industry and in turn the CNMI economy.	According to the CNMI Tourism Master Plan 2012-2016 sponsored by the Marianas Visitors Authority in 2012, The Northern Mariana Islands are experiencing an unprecedented economic depression caused by multiple factors. These include the complete loss of Saipan's garment industry, a major decline in international air service, the absence of tourism destination marketing in the islands' key source markets, and rapidly rising costs of doing business. There are no data to indicate that implementing the Divert proposal would have an adverse effect on tourism. Given the potential for sharing some of the Divert facilities with civilian aviation for a majority of each year, it is most likely that implementation of the proposal would prove beneficial for the tourism industry and CNMI economy.	Email
M27	Cumulative-General	DOI, OIA-P. Port	Hotel Development and Tourism – Tourism continues to be the top economic driver in the CNMI and continues to thrive with sustained growth in tourism arrivals, construction of new hotels and casino operations in Saipan. Hotel occupancy rates have increased from an average of 60 percent in 2011 to between 84 percent and 94 percent during the same time period in 2015. The CNMI, in light of this demand, is actively working to increase the number of rooms available for tourists. Between now and 2020, seven hotels on Saipan and two hotels on Tinian are or will be under development. Current room availability is 3520 rooms. By 2020, 6096 rooms are expected to be added, bringing the total room availability to 9616 rooms, nearly tripling current hotel occupancy capacity.	Comment noted. Final EIS Section 5 provides analysis of the cumulative effects anticipated from implementing the Proposed Action and other projects such as the proposed casino and resort developments on both Saipan and Tinian, including the ACT, Plumeria Resort, and Titanic Resort proposals.	Email

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M28	Cumulative-General	DOI, OIA-P. Port	Potential Expansion of the Francisco C. Ada Saipan International Airport – The CNMI, through CPA, issued an Airport Master Plan in 2002. This plan is anticipated to be updated in 2016. The 2002 plan calls for expanding the passenger loading bridges by procuring and insulating three new bridges. CPA will also be making improvements to the commuter terminal and is considering expanding the terminal to accommodate additional airlines. Therefore, while the proposed footprint of the Divert on Saipan is significantly less than what was proposed in 2012, it could still hinder commercial development opportunities in the future.	Comment noted. The USAF developed revisions to the proposed infrastructure at Saipan International Airport in coordination with the CPA and FAA, specifically considering proposed future development at the Saipan Airport. All impacts related to tourism, recreation, socioeconomics, and airport operations are presented in the Final EIS, and proposed Divert facilities would not affect CPA plans to improve the existing airport infrastructure. This comment will be part of the Final EIS administrative record.	Email
M29	Administrative	DOI, OIA-P. Port	Coordination with OIA Funded Projects - To implement the mission of OIA, one of OIA's primary functions is to provide financial assistance to the U.S. territories, including the CNMI. In the last ten years, OIA has contributed over \$150 million in grants to the CNMI. OIA provides grants to the CNMI in the form of Capital Improvement Project grants, Technical Assistance grants, Maintenance Assistance grants, Coral Reef grants, Brown Tree Snake grants, Compact Impact Aid, and Empowering Insular Community grants.	Comment noted. The USAF incorporated all reasonably foreseeable projects funded by OIA as provided in their comments into Final EIS Section 5.	Email
M30	Cumulative-General	DOI, OIA-P. Port	Improvements to the Tinian Airport – Both the Divert RDEIS and the CJMTDEIS contemplate a significant improvements to the Tinian Airport facility. OIA, however, has already funded \$2.9 million for renovation of existing terminal and for construction of a new departure terminal at the Tinian International Airport. Neither the Divert RDEIS nor the CJMTDEIS addresses the potential impact to these improvements.	Terminal improvements at the Tinian airport are included as "present" projects in the list of development considered in the cumulative impacts analysis in Final EIS Section 5.2. Impacts from all proposed construction on Tinian, both DOD and non-DOD is addressed under each resource area, as appropriate. The cumulative effects analysis on airspace and airport operations was revised to further clarify potential impacts between divert and the proposed terminal improvements/construction.	Email
M31	Cumulative-General	DOI, OIA-P. Port	Rehabilitation Assessment of the Tinian Harbor – OIA awarded a \$1.1 million Capital Improvement Project grant to the CNMI in FY2013 for a rehabilitation assessment of the Tinian Harbor. The assessment is to consider the harbor's post-World War II conditions of existing finger piers, connecting dock, north quay and channel /turning basin depths. The project consists of topographic and hydrographic surveys, geotechnical explorations, an environmental assessment, rehabilitation plan and architectural and engineering design. The requirements of this project could drastically change as a result of both the Divert RDEIS and the CJMT DEIS. OIA is unaware of any collaboration taking place on how the DOD-proposed improvements fit with work the CNMI is currently conducting. We urge DOD to address this issue in both the Divert RDEIS and the CJMT DEIS and to work closely with the CNMI on this project.	The rehabilitation assessment was not included in the cumulative effects analysis of the Final EIS because the outcome of the assessment is unknown. Should the assessment indicate minor improvements to the harbor, this would have a much different cumulative effect than if major improvements were required. Additionally, the USAF is not planning to conduct any improvements to the Tinian harbor, nor is it proposing to increase any ship traffic in the Tinian harbor beyond what currently occurs as part of the existing supply chain. Therefore, no cumulative effects from the Divert actions would be expected as the Divert would be a continuation of the existing operational baseline.	Email
M32	Cumulative-General	DOI, OIA-P. Port	OIA and the CNMI are concerned about the existing condition of the breakwater at the harbor. Repairs to the breakwater will need to be made in the foreseeable future, especially if there is increased activity at the harbor. The estimated rough order of magnitude (ROM) costs for the rebuilding of the existing breakwater is \$82.5 million. With an extension of 300 feet, ROM costs would be \$135.9 million. These estimates only cover construction costs. There is no mention of any improvements being considered by DOD in either the Divert RDEIS or the	Comment noted. As stated in the selection standards, the fuel capabilities of the Tinian port are not ideal, as the port can currently only accept shallow draft tankers and multiple fuel deliveries would be required to fill the tanks proposed by the USAF. However, the USAF is not proposing to increase activity or the number of fuel tanker trips to the Tinian harbor. Rather, the USAF would fill the proposed fuel tanks at the seaport and airport through the existing supply chain and regularly scheduled fuel deliveries. Also as noted in the Final EIS, the current ships typically have additional capacity which would	Email

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			CJMT DEIS to the existing breakwater. OIA urges DOD to consider helping the CNMI in any improvements to the breakwater.	be use to fill the proposed tanks, as needed. The USAF would not and does not propose to make any improvements to the Tinian harbor.	
M33	Bio Resources (Terrestrial)	DOI, OIA-P. Port	<p>Brown Tree Snake Program (BTS) – OIA has provided \$3.5 million in FY2014 and plans to provide the same amount for FY 2015 for the interdiction and control, including suppression and eradication, of the highly invasive Brown Tree Snake. Of that amount, approximately \$470,000 are provided to the CNMI.</p> <p>The Brown Tree Snake is responsible for the extinction or local extirpation of native forest birds and lizards on Guam. Numerous opportunities exist, especially with the increase in military presence and traffic in the CNMI, for this invasive species to be inadvertently introduced in the CNMI. The emergency response teams funded through the BTS program have documented sightings of the Brown Tree Snake in the CNMI, Hawaii, and other areas. A live Brown Tree Snake was found in a trap on the fence line surrounding the Rota Seaport as recently as September 2014. There is grave concern about introduction of the Brown Tree Snake in the CNMI should the USAF not provide adequate safeguards or assistance to the CNMI Brown Tree Snake Program.</p> <p>We are pleased with the information set forth in the Biological Plan on how the USAF intends to address invasive species. We cannot reiterate enough the importance of its proper implementation to the overall ecology, economy, and livelihood of the people of the CNMI.</p>	Comment noted. In accordance with NEPA, the USAF would only be able to proceed per the decision reflected in the ROD and as presented and analyzed in the Final EIS. The USAF is committed to executing the measures related to Brown Treesnake interdiction and control as outlined in the Final EIS and the Biological Opinion, relative to the alternative selected in the ROD.	Email
M34	Proposed Action and Alternatives	DOI, OIA-P. Port	Summary - OIA commends the USAF on it collaborative efforts with the CNMI people and its leadership since issuing the initial Divert DEIS in 2012 and appreciates that the USAF's footprint has been greatly reduced in response to CNMI leaders and public concerns.	Comment noted.	Email
M35	Against Saipan; For Tinian	DOI, OIA-P. Port	[Summary] - OIA is expecting that all of the CNMI's political leaders will support the position of the Commonwealth Port Authority in its support for the modified Divert on Tinian, and its opposition to the modified Divert on Saipan and the modified Divert hybrid on Saipan/Tinian. OIA recommends that high consideration be given to the modified Divert on Tinian by the USAF in its decision-making process as it reflects the views of CNMI leaders.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Email
M36	Administrative	DOI, OIA-P. Port	[Summary] - Due to continuing concerns about DOD's proposed military activities with the Divert RDEIS and CJMT DEIS, CNMI Governor Inos has requested 902 Covenant Consultation with President Obama to discuss DOD's proposed military activities in the CNMI. OIA is working with the White House in response to the Governor's letter.	CNMI concerns regarding DOD activity region and request for Section 902 consultations are noted. The USAF proceeded with the development of the Final EIS to maintain the project schedule.	Email
M37	Socioeconomics	DOI, OIA-P. Port	[Summary] - OIA continues to have concerns about the impact of the Divert RDEIS on the CNMI economy, particularly on Saipan, which is the major hub for the CNMI's projected hotel development and tourism industry.	According to the CNMI Tourism Master Plan 2012-2016 sponsored by the Marianas Visitors Authority in 2012, The Northern Mariana Islands are experiencing an unprecedented economic depression caused by multiple factors. These include the complete loss of Saipan's garment industry, a major decline in international air service, the absence of tourism destination marketing in the islands' key source markets, and rapidly rising costs of doing business. There is no evidence to indicate that implementing the Divert	Email

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				proposal would have an adverse effect on the tourism industry or the CNMI economy. Given the potential for sharing some Divert facilities with civilian aviation for a majority of each year, it is most likely that implementation of the proposal would prove beneficial for the tourism industry and CNMI economy.	
M38	Cumulative-General	DOI, OIA-P. Port	[Summary] - OIA encourages the USAF to look at current and ongoing OIA- or CNMI-funded projects to ensure that future impacts of military activities to such projects, including the airports, harbor, and environmental resources are considered.	Final EIS Section 5 addresses cumulative effects and was revised to include the current and ongoing projects identified by OIA in their comments.	Email
M39	Proposed Action and Alternatives	DOI, OIA-P. Port	[Summary] - Similar to our comments on the CJMT DEIS, OIA reiterates its position that the USAF should take into account the right to self-determination of the people and leaders of the CNMI during the Divert RDEIS process. Failing to do so could jeopardize the federal civilian relationship with the CNMI and our standing in the Western Pacific region. Thank you for the opportunity to review this project.	The USAF collaborated with the CNMI government and its people throughout the NEPA process and showed deference to self determination by listening to government and citizen concerns and suggestions.	Email
N1	Administrative	Office of Governor-R. Torres	This letter provides the comments of the Office of the Governor and the Lieutenant Governor on the Revised Draft Environmental Impact Statement (DEIS) for Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (CNMI) (the "DIVERT" or "Project").	Comment noted.	Website
N2	Proposed Action and Alternatives	Office of Governor-R. Torres	<p>As is evident from recent geopolitical developments and because of the Commonwealth of the Northern Mariana Islands' strategic location in the Western Pacific, the United States military's desire or interest in this region of the world as a location for redundant Air Force basing opportunities and other military training activities is particularly strong at the present moment.</p> <p>However, this progression or development is something that was foreseen to the Trust Territory of the Pacific Islands representatives (the founding officials of the CNMI government) and the ir United States counterparts who negotiated the Covenant to Establish a Commonwealth of the Northern Mariana Islands in Political Union with the United States of America nearly forty years ago.</p> <p>In anticipation of this exact turn of events, the CNMI Government entered into the Covenant Agreement providing two-thirds of the island of Tinian and the entire island Farallon de Medinilla (FDM) to the United States for military defense related training and joint service air base activity purposes. Legal papers (the Covenant, the Technical Agreement Regarding Use of Land to be Leased by the United States in the Northern Mariana Islands and the land leases and additional amendments) were enacted to embody this agreement.</p> <p>Specifically, Section Eight of the Covenant is devoted almost entirely to the United States' right to use property in the Northern Mariana Islands for defense related purposes. To counter any intentions or need to acquire additional real property in the CNMI, the United States agreed to "respect the scarcity and special importance of land in the Northern Mariana Islands" in future developments and put in place a policy limiting eminent domain powers.</p> <p>The agreement to restrict military activities to FDM and Tinian is contained not</p>	Comments noted.	Website

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			only in the Covenant, but in additional legal documents such as the Technical Agreement and the subsequent real property leases. Under the Technical Agreement, Tinian was ultimately going to benefit (for leasing two-thirds of the island to the United States for 100 years) through the establishment of a joint service air base on that island and as a result of infrastructural improvements that were going to take place.		
N3	Proposed Action and Alternatives	Office of Governor-R. Torres	The CNMI has acted in accordance with its end of the agreement. The United States has not and the Divert Project now threatens to undue the touch-stone agreement upon which the people of the Northern Mariana Islands agreed to join the American family of states.	<p>While the comment is not germane to the agency decision being analyzed as it deals with a political issue and a potential legal interpretation of the US Constitution and a federal statute outside the parameters of the NEPA analysis, and, the resolution of said issue is not within the cognizance of the Department of Defense or USAF as lead agency, the USAF asserts it is in compliance with all Federal statutes including “the Covenant” codified in Title 48 USC including compliance with all real property provisions of the Covenant.</p> <p>The Saipan alternative was carried forward for analysis in the Final EIS as a reasonable alternative in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. In the RDEIS, the USAF reduced the scope of their proposal from the 2012 Draft EIS on Saipan to reduce overall environmental impacts related to construction and to reduce land requirements and retain a minimum land interest in accordance with the Covenant. This comment will be part of the Final EIS administrative record.</p>	Website
N4	Proposed Action and Alternatives	Office of Governor-R. Torres	In two of three alternatives presented in the revised DEIS, the military will be required to obtain additional public property on the island of Saipan -- that was never intended to be used for defense related purposes and which is located within our international airport. The island of Tinian will not receive the full benefits contemplated in the controlling legal documents if the Divert Project or some part of the Project is located on Saipan. The Revised DEIS' complete failure to account for improvements needed on Tinian to accomplish the Divert Project's stated mission, such as upgrades to the existing harbor and fire protection and crash rescue services, is extremely problematic.	The Tinian alternatives analyzed in the Final EIS were premised upon Tinian harbor's continued acceptance of fuel shipments as it currently does, and upon using the same ships that currently service Tinian. Therefore, no harbor improvements would be needed. Fire protection would be upgraded at the Tinian airport with new fire suppression water supply system. Crash and rescue support would be provided during planned exercises.	Website
N5	Against- Saipan	Office of Governor-R. Torres	Accordingly, the military's desire to acquire property rights on Saipan via the NEPA process is, in the CNMI's opinion, in conflict with the specific agreements contained in the Covenant, the Technical Agreement, the subsequent real property leases and the underlying spirit of the agreement by which the Northern Mariana Islands entered into a Covenant Agreement with the United States.	Property rights cannot be acquired via the NEPA process. Property issues would be determined by the appropriate responsible CNMI and federal agencies after the environmental impact assessment process (i.e. development of the Final EIS) is completed. The USAF recognizes the Covenant, and the leases and the technical agreements that implement the Covenant. The USAF substantially reduced the scope of their proposal on Saipan to reduce overall environmental impacts related to construction and to reduce land requirements and retain a minimum land interest in accordance with the Covenant. Per 32 CFR 989.89(b), the USAF is required to analyze all reasonable alternatives, including those that are not directly within the power of the USAF to implement.	Website

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N6	Against- Saipan	Office of Governor- R. Torres	Further, the same public property on Saipan wanted by the military is also the same public property identified by the CNMI's port authority for future growth and commercial development at the Saipan International Airport. Competing interests to use the same property by different parties is heightened and a constant fact of life in our islands given the incredibly small total landmass of the entire CNMI. The Air Forces' effort to deconflict the competing use problem and to design the facility it wants to build on Saipan in such a way as to allow future development misses the larger, more significant point.	Comment noted. The USAF developed revisions to the proposed infrastructure at Saipan International Airport in coordination with the CPA and FAA, specifically considering proposed future development at the Saipan Airport. The USAF recognizes the scarcity of land in the CNMI, as noted in the Final EIS. The USAF reduced the scope of their proposal on Saipan to reduce overall environmental impacts related to construction and to reduce land requirements and retain a minimum land interest in accordance with the Covenant.	Website
N7	Against Saipan; For Tinian	Office of Governor- R. Torres	The CNMI has a good faith basis to expect that the Divert Project should be located entirely on the island of Tinian and despite our repeated efforts to dissuade the military from including Saipan in its plan; the Revised DEIS continues to do so. The military's desire to locate the Divert Project on Saipan places the CNMI in an awkward and uncomfortable position of appearing to oppose or obstruct the United States' defense related responsibilities in the NML This is not true.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
N8	Against Saipan; For Tinian	Office of Governor- R. Torres	Under the Divert Project's Modified Tinian Alternative, the United States will be required - just like on the island of Saipan - to obtain property rights through a lease agreement to build its desired divert airport facility and training location. The CNMI has repeatedly expressed its willingness to immediately begin negotiations to lease to the military the additional CNMI property necessary for this Project to move forward on Tinian.	Property rights cannot be acquired via the NEPA process; however, property issues would be determined by the appropriate responsible CNMI and federal agencies after the environmental impact assessment process (i.e. development of the Final EIS) is completed. Per 32 CFR 989.89(b), the USAF is required all reasonable alternatives, including those that are not directly within the power of the USAF to implement. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
N9	Against Saipan; For Tinian	Office of Governor- R. Torres	This proposal [...construction on Tinian] however continues to be discounted by the military because of monetary costs and timing reasons and so today the CNMI must once again re-assert its limited sovereignty and determination that defense related activities should be located on Tinian as explicitly intended and set out in the Covenant, the Technical Agreement and the real property leases.	Property rights cannot be acquired via the NEPA process; however, property issues would be determined by the appropriate responsible CNMI and federal agencies after the environmental impact assessment process (i.e. development of the Final EIS) is completed. The USAF recognizes the Covenant, and the leases and the technical agreements that implement the Covenant. However, all reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
N10	Against Saipan; For Tinian	Office of Governor- R. Torres	Accordingly, I must respectfully insist that the military withdraw Alternative 1 (the Modified Saipan Alternative) and Alternative 3 (the Hybrid Modified Alternative) which would require the CNMI to lease property to the United States on the island of Saipan. The CNMI will do everything possible to ensure the timing to create the divert field capacity (and costs involved) with the Modified Tinian Alternative are resolved as expeditiously and efficiently as possible. In sum, the CNMI as a proud member of the American family fully intends to comply with the promises set out in the controlling legal documents.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website

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N11	Against Saipan; For Tinian	Office of Governor-R. Torres	We welcome the opportunity to contribute to the common good and to ensure the military is able to carry out all its important missions in the Western Pacific from the location identified almost forty years ago as the setting from which defense related activities should be based. As recognized and acknowledged in the Revised DEIS, West Field Airport can meet and satisfy all of the Divert Project's mission requirements.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
N12	Against Saipan; For Tinian	Office of Governor-R. Torres	The CNMI therefore respectfully maintains that the Divert Activities and Exercises Project should be situated on the island of Tinian if the Air Force decides to go forward with this proposal. The CNMI is ready to work with the military towards that end.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
O1	For- Tinian	Marianas Visitors Authority	The Marianas Visitors Authority (MVA) has strong reservations about using any part of Saipan for a USAF 'divert' airfield. There are a number of specific reasons for this position which all center upon a degraded experience for our visitors and tourists. The MVA therefore strongly advises that the Modified Tinian Alternative be selected as the alternative to move this project forward.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
O2	Noise	Marianas Visitors Authority	Noise pollution and the visual aspects of operating training activities on Saipan are one of MVA's chief concerns and while we have read the DEIS and its assurances that the noise issue has been lessened by dropping fighter jets from the list of allowable training mission planes, we note that military tankers, bombers, cargo planes and other "similar" aircraft will produce noise adding to the amounts created by their commercial counterparts. Reducing the number of proposed mission flights planned reduces the noise projects by two-thirds, but considered in another way will still result in increases of the total amount of noise presently expected.	As the comment notes, the USAF substantially reduced the original proposal in part due to previous concerns over increased jet noise. The current proposal would result in less than significant noise increases, as presented in the Final EIS.	Website
O3	Noise	Marianas Visitors Authority	It should also be noted that jet and turbo prop aircraft operating STOL missions produce far more noise than normal length take offs and landings produce.	Comment noted. The noise analysis presented in the Final EIS indicates less than significant noise increases.	Website
O4	Proposed Action and Alternatives	Marianas Visitors Authority	We note further that the validity of the 'divert' capability premise itself is severely compromised by the short distance between Tinian or Saipan and Guam (a bit over 100 miles).	Comment noted.	Website
O5	Proposed Action and Alternatives	Marianas Visitors Authority	It is noted that an event severe enough to render a hardened military or commercial airport runway unusable whether natural (earthquake) or manmade (bombing or missile attack) would in either case likely be strong enough to affect the 'divert' airfield as well if located in the southern CNMI. Even the strongest storms are extremely unlikely to do severe enough damage to close Andersen AFB to air traffic.	Comment noted.	Website
O6	For- Tinian North	Marianas Visitors Authority	More importantly however is the fact that Tinian actually needs development, improvement of facilities and the additional fuel storage, fueling logistics hardware and infrastructure, parking and cargo aprons, fire suppression hardware, maintenance facility, access road improvements and a taxiway all described in the DEIS.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website

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07	Against- Saipan	Marianas Visitors Authority	Saipan on the other hand, has all these amenities already and will not see any true benefit from granting the Air Force the ability to conduct training missions from the Aslito/Isley Field or from Saipan airport (SPN).	Comment noted. This comment will be part of the Final EIS administrative record.	Website
08	Against- Saipan	Marianas Visitors Authority	Adding the same capability for part time military use on Saipan is redundant, uses a vital and limited real estate footprint and has the potential to cause inconvenience and delay to commercial traffic upon which the CNMI economy relies as its sole source of income.	The Hybrid Alternative was developed through discussions with FAA, CNMI agencies (e.g., CPA) and the CNMI Office of the Governor to provide an additional reasonable alternative to those proposed in the DEIS. The Hybrid alternative was carried forward for analysis in the Final EIS in accordance with the rules that guide EIS preparation in 40 CFR 1500-1508. The USAF analyzed potential impacts to land use and airport operations for all alternatives, as presented in the Final EIS. This comment will be part of the Final EIS administrative record.	Website
09	Proposed Action and Alternatives	Marianas Visitors Authority	We also note that while the Tinian airport (TIQ) needs these amenities the budget act that supplies the money for this project only specifies funding for the SPN which does not need the listed amenities. We are therefore concerned that if one of the 'hybrid' alternatives is chosen, that it would in reality become a Saipan only alternative due to lack of appropriate funding to complete the Tinian component of the hybrid plan. This would in effect render the concept of a Tinian "potential shared use" as described in the DEIS, moot and non-functional. The ability of the Air Force to spend money identified to construct this Project must be revisited and changed to allow it to be spent in the CNMI.	Funding referred to was authorized by Congress prior to a shift in proposed alternatives during development of the Revised Draft EIS. New funding would have to be authorized, depending on the alternative selected in the Final EIS. The USAF will program CNMI requirements and request funding based on the approved alternative, per the decision made in the ROD or an amendment to the ROD. For each of the alternatives, including the hybrid alternative, the USAF would plan to build infrastructure consistent with the requirements identified and reflected in the ROD or an amendment to the ROD.	Website
010	Recreation	Marianas Visitors Authority	It is also noted that a shared-use fuel facility on Tinian would be of great help to Tinian tourism by adding infrastructure allowing for direct international flight operations to occur from the CNMI's primary tourism source countries.	Comment noted.	Website
011	Proposed Action and Alternatives	Marianas Visitors Authority	MVA would recommend that any future version of this EIS contain a direct reference to designed-in shared uses of fuel storage and fueling hardware rather than only offering an uncertain 'potential' for shared uses.	This analysis was based on the USAF's initial consideration to work with CPA to develop fuel share agreements. However, after development of the Final EIS, it was determined that this responsibility falls with the Defense Logistics Agency, which would be the fuel supply agent. The Defense Logistics Agency, not the USAF, would have to navigate the approval process to sell fuel to commercial entities and they must first make a formal determination that doing so is in the public interest in accordance with federal laws. Therefore, Final EIS Section 4.3 has been revised to remove reference to potential shared use.	Website
012	For- Tinian	Marianas Visitors Authority	Further, improvements are called for on Tinian under the Covenant and Technical Agreement.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance with the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
013	Proposed Action and Alternatives	Marianas Visitors Authority	Another concern is the EIS 2.2.2.1 description of the 'divert' mission includes up to 30 days of continuous, unscheduled operations "until a more permanent home base is established". This would be a severe blow to the tourism based economy of the CNMI as these flights would supersede our commercial traffic on Saipan.	Comment noted. Thirty days of continuous use would be under emergency conditions only. Typical exercises would be conducted for a duration of one to two weeks.	Website

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O14	Proposed Action and Alternatives	Marianas Visitors Authority	As described in the REIS, these "Unscheduled" flight operations could and would occur at "any time" causing disruption and delay in commercial air traffic and possibly stranding visitors here on Saipan.	Unscheduled operations only refer to emergency landings of aircraft that are in distress.	Website
O15	Socioeconomics	Marianas Visitors Authority	This loss of critically limited hotel room inventory would be compounded by divert mission personnel competing for those same rooms. These losses would be of a lesser magnitude if the unscheduled divert missions were held on Tinian instead of Saipan.	The typical scenario would be a "scheduled" Divert exercise. Exercises would be planned well in advance. Furthermore, several large scale hotel developments are currently planned for both Saipan and Tinian and an occasional influx of USAF personnel would help fill their rooms. It is noted that the Tinian Dynasty, when open, operates below capacity and at least two very large scale hotels are being planned and/or built.	Website
O16	Proposed Action and Alternatives	Marianas Visitors Authority	While humanitarian assistance operations are laudable and might be staged and flown out of the CNMI divert facility if one exists, we note that they will be flown as part of the USAF mandate and direct orders to do so dictate, whether a CNMI divert facility exists or not.	Humanitarian assistance is one component of the Proposed Action. Please refer to the Final EIS Section 1.3 and the analysis of reasonable alternatives in Final EIS Sections 2.4 and 2.5 for discussion on this matter.	Website
O17	Proposed Action and Alternatives	Marianas Visitors Authority	We also note that these operations can involve a huge volume of relief material and personnel (as described in 2.2.2.2) which would totally overwhelm our infrastructure and accommodation capabilities.	Construction of the proposed Divert facilities would ensure that the existing facilities would not be overwhelmed, as explained by the USAF in the Final EIS Section 2, Purpose and Need. Furthermore, several large scale hotel developments are currently planned for both Saipan and Tinian and in influx of USAF personnel would help fill their rooms. It is noted that the Tinian Dynasty, when open, operates far below capacity and at least two very large scale hotels are being planned and/or built.	Website
O18	Against Saipan; For Tinian	Marianas Visitors Authority	It is disturbing that Joint Military Training and Unit Level Training operations already underway in the CNMI's air and sea space via the MITT and the MIRC will likely be expanded and included in any divert facilities constructed in the CNMI. This diversion would be a more reasonable use if the Tinian only option is chosen but would negatively impinge on high volume tourism arrivals on Saipan if a hybrid or Saipan only option were chosen.	The USAF has analyzed potential impacts related to airport operations, recreation, and the economy for all alternatives presented in the Final EIS. This comment will be part of the Final EIS administrative record.	Website
O19	Proposed Action and Alternatives	Marianas Visitors Authority	Since three types of operations are involved (divert, military exercises and humanitarian) and any combination can occur at any time whether scheduled or unscheduled, MVA finds that lodging requirements for personnel supporting these activities would be problematic given the limited room inventory resources available on both Tinian and on Saipan. At current levels of commercial use, Tinian could better handle this unscheduled room-use overload.	According to Final EIS Section 5, large scale hotel development is also planned on Saipan.	Website
O20	Socioeconomics	Marianas Visitors Authority	The Commonwealth of the Northern Marianas Islands (CNMI) has one economic driver: Tourism. It is the life blood of the economy and contributes 92% of the country's \$1.3 Billion GDP; the remaining 8% comes from US Department of Interior and Federal Grants amounting to \$100 Million annually on average. The Marianas Visitors Authority estimates that the industry in FY 2014 generated \$1.18 billion in economic activity and projects \$1.13 billion in activity for FY 2015. At present, only the lack of new hotel development and air service capacity has limited the growth opportunity for the industry.	Comment noted.	Website

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O21	Socioeconomics	Marianas Visitors Authority	The CNMI's tourism assets are sub-tropical weather, friendly people and the natural beauty of 14 tiny islands. Tiny compared to the US Territory of Guam which has considerably more land area than all the islands of the CNMI combined. Tiny compared to Rhode Island; the smallest US State which is seven (7) times larger. Tiny compared to Edwards AFB which is more than twice as large as all the land in the CNMI.	Comment noted.	Website
O22	Socioeconomics	Marianas Visitors Authority	With visitor arrivals on an upswing and new developments in the works, the tourism industry will remain the Northern Marianas' primary industry and the driver of its economy. The CNMI Government and its people cannot afford to allow interference with the income tourism brings us. Without that income, the Government cannot provide essential services and the people cannot maintain a livable economic environment.	Comment noted.	Website
O23	Proposed Action and Alternatives	Marianas Visitors Authority	It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow: Criteria 1 – US Territory: A) The US has many training facilities and bases not located on US Territory, several of which are in the Asia/ Western Pacific region. One or more of these of these should be considered as an alternative divert airfield site.	CNMI locations are the best choices to support the purpose and need. The analysis to support this conclusion is presented in the Final EIS Section 2. In summary, CNMI is the best location in event access to Andersen AFB is limited or denied.	Website
O24	Proposed Action and Alternatives	Marianas Visitors Authority	[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:] Criteria 1 – US Territory: B) The US also has strong reciprocal military/ diplomatic allies in the Asia Pacific region any number of which could be considered as potential alternative sites for a divert field.	CNMI locations are the best choices to support the purpose and need. The analysis to support this conclusion is presented in the Final EIS Section 2. In summary, CNMI is the best location in event access to Andersen AFB is limited or denied.	Website
O25	Proposed Action and Alternatives	Marianas Visitors Authority	[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:] Criteria 1 – US Territory: C) A strong case can be made that the Covenant agreement does not make the CNMI a US Territory but conveys a unique and special political and geographic relationship.	CNMI locations are the best choices to support the purpose and need. The analysis to support this conclusion is presented in the Final EIS Section 2. In summary, CNMI is the best location in event access to Andersen AFB is limited or denied.	Website
O26	Proposed Action and Alternatives	Marianas Visitors Authority	The US Government owns no part of the CNMI but was allowed to lease parts of the port area of Saipan, about two thirds of the Island of Tinian and all of the island of Farallon de Medinilla for a limited period of time in consideration of rents paid. The claim that the CNMI (along with Puerto Rico) "can also be classified as an unincorporated, organized territory of the US" is incorrect. Puerto Rico has no Covenant Agreement with the US and lacks the unique land-use policies in place and other self-governing protections that were	CNMI locations are the best choices to support the purpose and need. The analysis to support this conclusion is presented in the Final EIS Section 2. In summary, CNMI is the best location in event access to Andersen AFB is limited or denied.	Website

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			negotiated and are a part of that Covenant Agreement between the CNMI and the US. This is an inappropriate criteria to base the decision of where to locate the Divert Project.		
O27	Proposed Action and Alternatives	Marianas Visitors Authority	<p>[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:]</p> <p>Criteria 2 – Storm Radius: A. Storm radius is an inappropriate criteria when choosing an alternative airfield to the hardened USAF base on Guam, USA. A typhoon, no matter how strong, will not damage the runways at Andersen AFB. The credible threats are 1. A massive earthquake, and 2. An external attack on Andersen by a foreign power. Respectively, either threat 1 or 2 pose an almost identical, simultaneous threat to either Saipan or Tinian as to Guam.</p>	Comment noted. Also important to note is the fact that the recent typhoon in Saipan in 2015 shut down many of the island's operations, including the airport. This same typhoon had little effect on other nearby islands. This recent event clearly demonstrates that a severe storm could hinder or halt operations at Andersen AFB and Guam International Airport, while Saipan or Tinian could remain operational.	Website
O28	Proposed Action and Alternatives	Marianas Visitors Authority	<p>[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:]</p> <p>This criteria, as defined, allows for Saipan and or Tinian uses but excludes Rota even though Rota actually has a less likely threat 2 scenario as it has no military presence. This is an inappropriate criteria to make the decision upon as well.</p>	Rota was initially considered in 2012. However, Rota was eliminated from consideration as a viable alternative because it did not meet selection standards.	Website
O29	Proposed Action and Alternatives	Marianas Visitors Authority	<p>[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:]</p> <p>Criteria 3 – Available Land at an existing airport: If the USAF's desire is to locate a divert training base in the CNMI it can be done on the property already leased to the US Government, TSA style security arrangements notwithstanding (i.e. Tinian or FDM). Tinian is ideally suited for construction of a new runway at Tinian North Field or old West Field, either of which is within or adjacent to property already leased to the US. Using Tinian's commercial airport and paying a stipend agreeable to CPA and making specific improvements to that civilian airport in return should be considered as the primary preference to constructing an all military field on property currently leased to the US DoD.</p>	Comment noted.	Website
O30	Proposed Action and Alternatives	Marianas Visitors Authority	<p>[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:]</p> <p>Criteria 4 – Pre-existing infrastructure: While certainly cheaper to use someone else's existing facilities it is a potential safety and security compromise to house, train, exercise and store military aircraft, personnel and fuel stores at a civilian airport. It is easily within the ability of the USAF to build a military airport</p>	As described and analyzed in the Final EIS Section 2.3 of the Revised Draft and Final EISs, the PACAF considered several additional planning options to meet the purpose of and need for the Proposed Action, in response to comments on the 2012 Draft EIS. Additional options include evaluation of former World War II airfields and closed military airfields on Guam and in CNMI. Specifically, the USAF considered North Field and the portions of West Field located within the Military Lease Area. Although North Field does meet several of the selection standards, it does not provide existing airport infrastructure that the USAF can expand upon. Other than the deteriorated	Website

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			<p>on old West Field Tinian. Fueling storage and infrastructure could be shared if these amenities were built between the two facilities. While TSA/CPB security is effective for civilian travel, it is not comparable to full military security. Moreover, monetary construction costs are only one measure of the total – costs – associated with this proposed Project. This criteria is therefore also an inappropriate or inaccurate fact upon which to make location decisions.</p>	<p>runways, there is no remaining infrastructure at these facilities. In summary, North Field lacks any infrastructure upon which to build the additional divert capabilities and would require the development of an entirely new functional USAF airfield and installation beyond the purpose and need for the Proposed Action analyzed in the Final EIS. The purpose and need of the Proposed Action is to only use existing facilities on as-needed basis and does not include a permanent full-time beddown or installation location. The purpose does not include the construction of an entirely new airfield, or the full-time use of the facilities by the USAF. By locating the facilities at an existing operating airfield or airport, the location itself provides a level of physical security and maintenance unavailable at closed or abandoned facilities. Additionally, the development of facilities on an existing commercial airport provides the potential for future shared use. There are several USAF installations across the U.S. that share airport infrastructure without issue.</p>	
O31	Proposed Action and Alternatives	Marianas Visitors Authority	<p>[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:]</p> <p>Criteria 5 – Location inside the MITT/MIRC: Planes training within the MITT/MIRC can and currently do land on Saipan, Tinian or Rota in the event of an in-flight safety issue. A designated “divert” field does not enhance this capability in the least (unless a separate runway is built at West Field, and even that would add very little additional alternative in the event of an emergency or precautionary landing). This is an inappropriate criterion upon which to make the location decision.</p>	<p>There are currently no facilities fully capable of support emergency divert landings within CNMI. As a result of implementing the Proposed Action, the USAF would be better prepared to respond to emergencies when they occur.</p>	Website
O32	Proposed Action and Alternatives	Marianas Visitors Authority	<p>[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:]</p> <p>Criteria 6 – Seaport Fuel-Receiving Capability. This is an appropriate criteria as the operations described use aircraft and they cannot operate without fuel. The seaport on Tinian, with some modifications, could easily handle the fuel receiving requirements to meet the divert/training/ humanitarian missions described in the DEIS. The CNMI believes these improvements are part of the Tinian Lease Agreements set out in the Covenant.</p>	<p>Comment noted.</p>	Website
O33	Proposed Action and Alternatives	Marianas Visitors Authority	<p>[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:]</p> <p>[Criteria 6 – Seaport Fuel-Receiving Capability.] Further the ground transportation phase of operational fuel use could be done via secondary back roads (North option) instead of on primary commercial roads as on Saipan or the Tinian South option.</p>	<p>Comment noted. Supply routes depicted in the Final EIS do not represent the final routes or designs. The USAF would work with the CNMI government during project design and construction to determine the best fuel supply route, depending on the alternative selected.</p>	Website

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O34	Proposed Action and Alternatives	Marianas Visitors Authority	[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:] [Criteria 6 – Seaport Fuel-Receiving Capability.] Further, the distance from the port to the proposed fuel storage location is much shorter on Tinian than on Saipan.	Comment noted.	Website
O35	Proposed Action and Alternatives	Marianas Visitors Authority	[It is noted that the selections standards brought to bear on potential site alternatives for this DEIS are both arbitrary and a bit capricious. These criteria seem to be directed at describing the USAF preferred locations by default definition. Examples and analysis follow:] [Criteria 6 – Seaport Fuel-Receiving Capability.] Lastly, fuel received at the enhanced Tinian port could be shared with the Tinian commercial airport thus enhancing tourism on Tinian. (On-airport storage and aircraft fueling infrastructure could likewise be shared if properly designed). MVA suggests that other selection criteria be considered in future versions of this EIS.	Selection standards were developed based on USAF operational and mission requirements. No additional selection standards will be developed.	Website
O36	Transportation	Marianas Visitors Authority	ANALYSIS OF SELECTION ALTERNATIVES - Alternative 1 – Modified Saipan Alternative – Both the construction phase and the implementation phase of the DEIS Modified Saipan Alternative (MSA) involve frequent trips over heavily used and very limited 1 and 2 lane commercial roads that carry the bulk of traffic on Saipan. Saipan’s commerce and its Tourism-based economy depend totally on these thoroughfares and the delays caused by the high volume of DoD related traffic would be problematic.	This comment is in conflict with the Final EIS analysis, which addresses the potential for minor impacts on traffic.	Website
O37	Transportation	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES]- Alternative 1 – Modified Saipan Alternative – Compounding this problem is the nature of the implementation phase cargo; highly volatile jet fuel. The proposed location of the seaport tanks is right next to Saipan’s busiest highway. This high volume use would continue with 6 trucks on the road non-stop 10 hours every day for 14 days just to fill the tanks. This high traffic volume would go on continuously during military operations and less often during off peak periods. Constructing 2 sets of 2 fuel tanks (4.2 million gallons at each end) and transporting this fuel along busy Saipan roads, two-thirds the length of the whole island each way, is not an acceptable alternative.	Comment noted. Results of the traffic impact analyses in the Final EIS indicate minor impacts might be expected. The proposed fuel tank location is at the seaport of Saipan, which is an existing tank farm. This location was determined to be the most practical because it uses existing facilities, and the land use is compatible. Additionally, the USAF proposes to use the same fuel transfer method that is currently used to fill the existing commercial jet fuel tanks at the Saipan Airport.	Website
O38	Transportation	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 1 – Modified Saipan Alternative – Likewise, hundreds of trips per year for 3 years with heavily laden, (likely overladen), concrete and cement carrying trucks over those same roads during the construction phase, is unacceptable.	Final EIS Section 4.11 analyzed potential impacts on the transportation system and concluded that minor adverse impacts on the road system/traffic could be expected during the construction period.	Website
O39	Proposed Action and Alternatives	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 1 – Modified Saipan Alternative –Lodging and bussing up to 265 people (minimum of 530 person-trips each day) eats heavily into a hotel room and bus inventory on Saipan that is already overtaxed.	Whether this issue is considered as taxing local resources, or as an opportunity for local businesses, military exercises would be planned well in advance to afford time to prepare for any surge in personnel to the island.	Website

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O40	Noise	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 1 – Modified Saipan Alternative –Added to the above is the noise and bustle of 720 (possibly many more) jet aircraft movements per year. Many of those movements will be military aircraft that are more noise intensive than their civilian counterparts. MVA does not support this Alternative.	Comment noted.	Website
O41	Proposed Action and Alternatives	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 2 – Modified Tinian Alternatives – The seaport on Tinian, with some modifications, could easily handle the fuel receiving requirements to meet the divert/training/humanitarian mission described in the DEIS.	Comment noted.	Website
O42	Against Saipan; For Tinian	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 2 – Modified Tinian Alternatives – Further, the ground transportation phase of operational fuel use could be done via secondary back roads instead of on primary commercial roads as on Saipan. The distance from the port to the proposed fuel storage location is much shorter on Tinian than on Saipan, especially if the North Option is chosen.	Comment noted. This comment will be part of the Final EIS administrative record.	Website
O43	Against Saipan; For Tinian	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 2 – Modified Tinian Alternatives – North Only Option – This option impacts the CNMI tourism industry least, of all options considered in the current DEIS. Land already under lease to the US is used and no additional use of limited CNMI land is needed.	As stated in Final EIS Section 4.10.2.1.1, construction under the North Option would include some construction on land currently under jurisdiction of the CPA. Under the North Option, the USAF would need to obtain the necessary authority or minimum property interest necessary to construct the facilities on public lands and would maintain some of the facilities as common-use facilities for use by the CPA and other airport users.	Website
O44	Against Saipan; For Tinian	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 2 – Modified Tinian Alternatives – North Only Option. While the burden of 2 months per year of full time military training activity is heavy, it can be borne by existing Tinian infrastructure. In fact, if this option is properly designed, it can actually benefit Tinian tourism by adding airport and seaport improvements allowing for direct international flights to Tinian while minimally impacting major traffic flow thoroughfares. MVA supports this alternative.	Comment noted. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will be part of the Final EIS administrative record.	Website
O45	Socioeconomics	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 2 – Modified Tinian Alternatives. South Only Option – This option brings into play the main road of Tinian (Broadway) as a construction and fuel supply road. This will negatively affect tourism in this tiny community.	Final EIS Section 4.11 analyzed potential impacts on transportation and concluded that minor adverse impacts on the road system/traffic could be expected during the construction period and implementation phase. Therefore, related impacts on tourism from traffic would not be expected.	Website
O46	Cumulative-General	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 2 – Modified Tinian Alternatives. South Only Option – This option also significantly reduces available expansion possibilities for the TIQ airport by using the adjacent land south of the airfield in support of the divert field operations. This is potentially very destructive of tourism on Tinian as all the land north of TIQ is currently under lease to the US DoD and cannot be used to expand the civilian airport. Major civilian development including expansion of the Tinian Dynasty Hotel and Casino is in the planning stages with permits already in place*, direct flights to Tinian from China, Taiwan, Japan, Korea and Russia are a must for future	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will be part of the Final EIS administrative record.	Website

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			<p>growth. Those direct flights will require civilian airport expansion. MVA does not support this Alternative.</p> <p>*First, there are planned developments by Mega Stars Overseas Limited to double the size of the existing Tinian Dynasty Hotel and Casino and to add an 18-hole golf course and a major water park. This civilian commercial development will require a TIQ airport expansion. Likewise, Alter City Group has planned a multi-phase hotel/casino/integrated resort and 18-hole golf course just southwest of TIQ. This development will also require TIQ expansion. Also Bridge Investment Group's proposed seaside Titanic Replica Hotel and Casino to be located near the seaport will also need civilian airport expansion to accommodate increased arrivals to Tinian. Combined, these projects represent development estimated at hundreds of millions of dollars on Tinian that will likely not proceed if any part of the DEIS Tinian South option is implemented thus restricting TIQ Civilian airport expansion.</p>		
O47	Against- Hybrid	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 3 – Hybrid Modified Saipan/Tinian Options – Generally, it appears the Alternative 3 options simply allow for a divert field (Saipan) to be made available in case the divert field (Tinian) is unavailable to act as a divert field for Guam. This entire series of options is doubly redundant, costly and un-necessary.	Comment noted. The Hybrid Alternative was developed through discussions with FAA, CNMI agencies (e.g., CPA) and the CNMI Office of the Governor to provide an additional reasonable alternative to those proposed in the DEIS. The Hybrid alternative was carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. All alternatives in the Final EIS and corresponding analyses will be provided to the USAF decisionmaker per 32 CFR 989 (d)(3). The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD).	Website
O48	Against- Hybrid	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 3 – Hybrid Modified Saipan/Tinian Options – Further, these options interfere unreasonably with the tourism based economy on Saipan.	Comment noted. The USAF has analyzed potential impacts to recreation and the economy for all alternatives presented in the Final EIS. The Hybrid alternative was carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will be part of the Final EIS administrative record.	Website
O49	Proposed Action and Alternatives	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 3 – Hybrid Modified Saipan/Tinian Options – MVA suggests the USAF consider the number of divert/emergency and/or humanitarian landings that have been made annually on Saipan or Tinian for the last 3 decades. That number is quite small. We note that those few landings were made largely without incident and without special construction.	Comment noted.	Website
O50	Against- Hybrid	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 3 – Hybrid Modified Saipan/Tinian Options – North Option – MVA finds this option redundant and un-necessary. It provides little in the way of positive, useful alternatives to the Modified Tinian Alternative #2 but does create noise and traffic on Saipan and reduces commercial availability of hotel rooms on Saipan. MVA does not support this Alternative.	Comment noted. The USAF has analyzed potential impacts to noise, transportation, and the economy for all alternatives presented in the Final EIS. The Hybrid alternative was carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will be part of the Final EIS administrative record.	Website

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O51	Against- Hybrid	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - [[Alternative 3 – Hybrid Modified Saipan/Tinian Options – South Option – MVA finds this option redundant and un-necessary....]] It also restricts TIQ airport expansion and it negatively affects Tinian’s main thoroughfare (Broadway) civilian and commercial traffic. MVA does not support this Alternative	Comment noted. The USAF analyzed potential impacts to airport operations and future development for all alternatives presented in the Final EIS. The Hybrid alternative was carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will be part of the Final EIS administrative record.	Website
O52	Proposed Action and Alternatives	Marianas Visitors Authority	[ANALYSIS OF SELECTION ALTERNATIVES] - Alternative 4- No Action Alternative – Should the Air Force not agree that the Tinian North Only Alternative is appropriate - MVA would support this No Action Alternative. The status quo has worked well up to this point and would, in the opinion of the MVA, continue to work into the future as well.	Comment noted.	Website
O53	Proposed Action and Alternatives	Marianas Visitors Authority	CONCLUSIONS The Covenant and the Technical Agreement and lease agreements modified over the past 38 years, taken together spell out clearly the deal struck for military land use rights in the CNMI; two-thirds of Tinian and all of FDM are to be utilized to US Defense related activities.	Comment noted.	Website
O54	Proposed Action and Alternatives	Marianas Visitors Authority	[CONCLUSIONS] The USAF’s Revised DEIS and the accompanying media PR releases indicate that USAF wants to vastly increase military use of Saipan and prefers Alternative 3, the Hybrid Saipan/Tinian option.	As completion of the public review period for Revised Draft EIS, the USAF announced the Preferred Alternative as Alternative 2, which is identified in Final EIS Section 2.6. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD).	Website
O55	For- Tinian North	Marianas Visitors Authority	[CONCLUSIONS] MVA concludes that both Hybrid options and the Tinian South option will result in negative impacts to CNMI tourism, our only true source of income and revenue. The CNMI must therefore take proactive efforts to ensure that any activity that could harm our most important industry are minimized. Of the alternatives laid out in this version of the DEIS, The Modified Tinian North alternative impinges least on the tourism industry and seems easiest to implement given the only non-green criteria in table 2.3-1 is a modest seaport upgrade.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD). This comment will be part of the Final EIS administrative record.	Website
O56	For- Tinian North	Marianas Visitors Authority	[CONCLUSIONS] Additionally, the Tinian North Option uses land on the north side of TIQ only and thus does not impinge on future expansion possibilities of the civilian TIQ airport.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
O57	For- Tinian North	Marianas Visitors Authority	[CONCLUSIONS] PREFERRED ALTERNATIVE Alternative 2, Modified Tinian North, is the MVA preferred alternative. The MVA second choice would be the No Action Alternative.	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website

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P1	Administrative	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	To whom it may concern: I would like to point out that the CNMI is not included as a location from which I can select as an address from which my comments can be uploaded. Your attention to this matter is greatly appreciated.	Comment noted. The form on the website is a standard web form developed by an outside developer. The USAF will work in the future to ensure that CNMI is available as a selection or will note otherwise. This form limitation has not prevented receipt of comments from CNMI stakeholders.	Website
P2	For- North Field	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>On behalf of the people of Tinian and the Tinian Legislative Delegation, I would like to thank the United States Air Force for listening to the concerns of the people of the Commonwealth of the Northern Mariana Islands in the Revised Draft Environmental Impact Statement For Divert Activities and Exercises (hereinafter "RDEIS"). The RDEIS takes into consideration the comments of the people and assures us that the United States Air Force is listening to our collective concerns. We hope that this additional commenting period is further opportunity to take into consideration the concerns of the people of Tinian to the revised plans.</p> <p>While we appreciate the changes reflected in the RDEIS, I would like to express our strong reservations about the U.S. Air Force's proposed plans to use Tinian for Divert activities and exercises. While Tinian remains unwavering in its continued support of our United States Armed Forces and its continued use of Military Leased Areas ("MLA") for training exercises and activities, such training exercises and activities must be balanced with the people of Tinian's desire to achieve economic self-sustainability, preserve its cultural identity and historical resources, and protect its limited natural resources and fragile eco system.</p>	Comment noted. All reasonable alternatives identified in the Revised Draft EIS, including the Saipan Alternative, Tinian Alternative, and hybrid alternative were carried forward for analysis in the Final EIS in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. This comment will be part of the Final EIS administrative record.	Website
P3	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>Our review of Pacific Air Forces' ("PACAF") RDEIS indicates that there are no assurances that such proposed endeavors to achieve economic self-sustainability through the development of its casino tourism industry. While many have touted that .. placing the divert airfield training activities and exercises are compatible with Tinian's on Tinian will have a substantial benefit on the island,"¹ there is no evidence in the RDEIS that this will actually be the case.</p> <p>¹ Saipan Chamber of Commerce President's Statement public statement regarding the placement of Divert Airfield on the island of Tinian. See generally http://www.saipantribune.com/mdex.php/military-will-gather-public-input-tinian-pc:igc:in-cis/ (November 24, 2014)</p>	Comment noted.	Website
P4	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>Moreover, consistent with our position in the CNMI Joint Military Training DEIS, we are concerned that PACAF's RDEIS is not in compliance with the National Environmental Policy Act ("NEPA").</p> <p>NEPA requires that the DEIS comply with the NEPA process, applicable federal laws and regulations; adequately review potential environmental impacts; adequately explore and address alternatives; accurately identify and address environmental justice concerns of affected indigenous populations. A "modified Tinian alternative" or a "hybrid modified alternative" which would combine development on both Saipan and Tinian will have a significant impact on Tinian's ability to achieve economic viability.</p>	The Divert EIS has followed the process outlined by CEQ's NEPA regulations in 40 CFR 1500-1508 and the USAF Environmental Impact Assessment Process rules, which supplement the CEQ's regulations, in 32 CFR 989.	Website

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P5	Noise and Land Use	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	More importantly, increased noise levels from these proposed activities would likely detrimentally impact both the community and Tinian's developing tourist industry.	Please see the noise contours provided in Final EIS Section 4.1 and 4.10. The expected noise levels would be less than significant. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels also only slightly louder on Tinian under Alternative 2 and Alternative 3. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels.	Website
P6	Environmental Justice	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	It is our position that despite PACAF's revisions, the RDEIS violates NEPA for the following reasons: I. The RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative;	Thank you for your comment. The USAF stands by its analysis that shows implementation of the modified alternatives presents a noise, infrastructure, and operational footprint that is substantially reduced from that which could have resulted under the originally proposed project. These changes were made after listening to local community concerns over noise and other potential impacts, and in particular the concerns about impacts on minority or low income populations. Special outreach was conducted to reach these communities consistent with Executive Order 12898. The USAF listened and responded to local concerns as evidenced by the substantially reduced Divert proposal. The goal of Executive Order 12898 is for federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. It does not require that the federal agency prevent any and all impacts on these populations.	Website
P7	Cumulative-General	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	[It is our position that despite PACAF's revisions, the RDEIS violates NEPA for the following reasons:] II. The DOD has failed to prepare a single EIS which discusses the impacts of all connected and cumulative actions in the Marianas;	Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. Per Title 10 of the USC, each branch of the Armed Forces is a separate organization that has an independent utility. Therefore, while all branches fall under the Armed Forces and Department of Defense, the purpose and need of each proposal in the Marianas is to meet the individual branches' requirements under Title 10 of the USC. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5.	Website
P8	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	[It is our position that despite PACAF's revisions, the RDEIS violates NEPA for the following reasons:] III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises.	The USAF followed the NEPA process for development of the Divert EIS as outlined by CEQ's NEPA regulations in 40 CFR 1500-1508 and the USAF Environmental Impact Assessment Process rules, which supplement CEQ's regulations, in 32 CFR 989.	Website
P9	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	For these reasons, the people of Tinian request that PACAF further revise their plans and address the legal deficiencies outlined above and described in detail below. While we remain steadfast in our continued support of military preparedness and training, the law requires that PACAF first address the deficiencies described herein through completion of another EIS.	The USAF followed the NEPA process for development of the Divert EIS as outlined by CEQ's NEPA regulations in 40 CFR 1500-1508 and the USAF Environmental Impact Assessment Process rules, which supplement CEQ's regulations, in 32 CFR 989.	Website

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P10	Environmental Justice	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>I. PACAF's RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.</p> <p>PACAF's attentiveness to the concerns of the people of the Commonwealth as illustrated in the RDEIS must be commended. However, our concerns remain that the RD EIS does not adequately analyze environmental justice concerns in either alternatives which include Tinian. While there is no "standard formula for how environmental justice issues should be identified or addressed," agencies should consider environmental justice issues at every step of the process as appropriate.² Environmental justice issues encompass broad range of impacts covered by NEPA, including impacts on the economy.³ CEQ regulations defines "impacts" to include "ecological ... aesthetic, historic, cultural, economic, social or health, whether direct, indirect or cumulative."⁴</p> <p>²http://www3.epa.gov/environmentaljustice/resources/policy/ej_guidance_nepa_ceq1297.pdf (page 15)</p> <p>³ http://www3.epa.gov/environmentaljustice/resources/policy/ej_guidance_nepa_ceq1297.pdf (page 14)</p> <p>⁴ 40 C.F.R. 1508.8</p>	<p>Regarding environmental justice concerns, the environmental justice area of impact is the area within which potential impacts from a proposed action could occur. As defined by the CEQ, the environmental justice area of impact is considered to have disproportionately high percentage of minority or low-income residents if the percentage of persons characterized as being a minority or low-income within the area of impact is either greater than 50 percent, or is disproportionately higher than the community of comparison. CEQ also states that a minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds. The EIS environmental justice areas of impact are the election districts that encompass the Proposed Action activities at Saipan International Airport, Tinian International Airport, Ports of Saipan and Tinian, and the proposed fuel truck routes (Saipan Districts 1, 2, and 3 and Tinian District 6), and the communities of comparison are the islands of Saipan and Tinian. As described in the Final EIS Section 4.14.1, significant impacts and elevated noise levels were identified in the 2012 Draft EIS on the communities in Districts 1 and 2 on Saipan due to the consideration of fighter aircraft in the proposal. Community outreach to potentially impacted communities with high minority and low-income populations on Saipan occurred prior to the 2012 Draft EIS public hearing on Saipan. After release of the 2012 Draft EIS, the USAF reevaluated their proposal and removed all fighter aircraft operations from the Proposed Action and each of the three Modified Alternatives. The removal of fighter aircraft operations, resulted in a major reduction in expected noise levels on the communities in Districts 1 and 2. Significant adverse impacts would not be expected on disproportionately high minority and low-income populations under Alternative 1, 2, or 3.</p> <p>On Tinian, as described in Section 4.14.2, environmental justice impacts from noise are not expected. Short-term, minor to moderate, adverse environmental justice impacts could occur during implementation on Tinian due to moderately increased population and related traffic.</p>	Website
P11	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[I. PACAF's RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.]</p> <p>We note that in 2012, the Tinian Legislative Delegation publicly expressed its support of welcoming divert training and exercises and activities to the island of Tinian.⁵ The primary underlying reason for welcoming such training was the belief that the Tinian International Airport would benefit from the infrastructure that would be built at the airport that would thus support Tinian's desire to welcome international flights⁶ needed to grow its tourism/casino economy. Specifically, it was Tinian's hope that the infrastructure that would be built for divert training exercises and activities would be shared by international commercial flights and be compatible with Tinian's plans for economic development. However, as revealed by the RDEIS and PACAF's statements in the local media, it is unclear whether the purported infrastructural benefits</p>	<p>The potential for shared use of infrastructure at Tinian is dependent upon the alternative selected. Any USAF development on the north side of the runway would be less easily shared with civil aviation due to the separation between the civilian terminal and the north side of the runway area. As described in Final EIS Section 4.10, the USAF could maintain the parking apron and cargo pad as common-use facilities for use by the CPA and other airport users.</p>	Website

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			<p>previously discussed in 2012, which prompted Tinian's support. can be realized.⁷</p> <p>⁵ http://www.saipantribune.com/index.php/delegation-adds-support-divert-airfield-tinian/ (September 22, 2014)</p> <p>⁶ CNMI Senate Resolution 17-90</p> <p>⁷ http://www.saipantribune.com/index.php/divert-eis-released-public-comments-sought/ (October 16, 2015)</p>		
P12	Cumulative-General	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[I. PACAF's RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.]</p> <p>Furthermore, the RDEIS does not address indirect and cumulative impacts that the proposed plans would have on Tinian's economy. The RDEIS indicates that the primary benefit to the economy would be an increase in revenue due to the additional spending of personnel that may or may not be spent on Tinian.⁸ Beyond that, it is unclear how these activities will truly be beneficial economically to the island of Tinian.</p> <p>http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec3-4_100715.pdf, 4-182</p>	<p>All cumulative impacts related to the Divert proposal and other past, present, and reasonably foreseeable projects on Tinian and Saipan, and in the region, are addressed in Final EIS Section 5. The cumulative effects analysis specifically addressed recreation/tourism, the economy, and transportation.</p> <p>Economic benefits to the island of Tinian would result from the additional source of revenue from land acquisition either through lease or purchase payments.</p>	Website
P13	Socioeconomics	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[I. PACAF's RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.]</p> <p>Tinian's economy is largely dependent on its casino/tourism industry. Revenues generated from the casino support local employment and supplement public programs and services. Our tourism industry markets Tinian as a peaceful, tranquil and pristine island destination rich in culture and history. We believe that increased training related activities in the village may not be compatible with this image and has the likely potential or adversely impacting our tourism industry.</p>	<p>As of the release of the Revised Draft EIS and development of the Final EIS, the only casino on Tinian was closed and hotel operation significantly reduced to bare minimum operating levels due to lack of demand. The USAF disagrees that implementing the Divert proposal would further harm the local economy or tourism industry.</p>	Website
P14	Cumulative-General	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[I. PACAF's RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.]</p> <p>We also note that at the time that Tinian expressed its support of welcoming divert training exercises in 2012, we did not anticipate that the Alter City Group would be leasing public lands adjacent to the airport for the development of an integrated casino resort. The RD EIS does not adequately address how divert training activities will impact such development. Given the proximity of the project to the airport, there are obvious concerns about noise and land use compatibility with Alter City Group's plans to build its hotel and casino.</p>	<p>All cumulative impacts related to the Divert proposal and other past, present, and reasonably foreseeable projects on Tinian and in the region, including the Alter City development are addressed in Final EIS Chapter 5. The cumulative effects analysis specifically addressed noise and land use from the Alter City development and Divert, as well as other projects proposed on Tinian such as the Titanic hotel/resort development.</p>	Website
P15	Airspace/Airport Ops	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[I. PACAF's RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.]</p> <p>The RDEIS also states that during the 8 weeks of divert exercises. the community should expect flight delays. We are concerned that such delays may endanger the lives of our citizens who require air medivac assistance to Saipan in the event of a medical emergency. While we do believe that PACAF is</p>	<p>While the USAF recognizes that short-term, direct, adverse impacts could occur as there is no air traffic control tower, USAF aircraft would not have priority over current aircraft operating from Tinian International Airport, as DOD aircraft would also operate using VFR into and out of Tinian International Airport. Per FAA Joint Order 7100.65T, small aircraft departing or arriving behind large aircraft such as the KC-135, could be delayed for</p>	Website

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			committed to working cooperatively with the Commonwealth Ports Authority in limiting such delays, this type of situation cannot be planned for.	safety precautions due to wake turbulence. Additional analysis is provided in Final EIS Section 4.3. Additionally, the Final EIS analyzed a maximum of 8 weeks of exercises per year for a maximum of 720 operations (e.g., 360 take-offs and 360 landings). The USAF would typically not conduct exercises on weekends. This equates to approximately 18 operations (9 take-offs and 9 landings) each weekday during the 8 weeks of exercises. Furthermore, medical emergencies would take precedence over other aviation activities. Therefore, noticeable delays due to proposed USAF exercises would not be expected.	
P16	Cumulative-General	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[I. PACAF's RDEIS fails to adequately analyze environmental justice issues in the modified Tinian Alternative or the Saipan/Tinian Hybrid alternative.]</p> <p>Lastly, given that PACAF has stated that the "Divert EIS addresses only the ground movements and immediate approaches and departures at the airport or airports selected for improvement ... [and] actual air warfare and air logistic training are addressed by the MIRC EIS and the MITT EIS,"⁹ we also do not believe that this RDEIS has adequately analyzed other concerns of noise, health and safety, socioeconomics and cultural impacts to the community at large given its interconnectedness with other proposed military training activities. Clearly, other DOD training activities are interconnected with divert activities and as such, this community must be informed of the direct, indirect and cumulative impacts of these combined plans with regards to environmental justice issues. As such, at this point, it is our belief that the RDEIS fails to adequately analyze environmental justice concerns not specifically discussed herein.</p> <p>⁹ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf, ES-7</p>	<p>Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. While there is continuous coordination regarding the proposals between all agencies, each action is separate and would move forward without the other. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5. Environmental Justice is addressed in Final EIS Sections 3.14 and 4.14. The analysis did not identify any significant disproportionate impacts to Environmental Justice communities. There are no additional specific Environmental Justice issues identified in the comment to be addressed.</p>	Website
P17	Cumulative-General	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>II. DOD has violated NEPA by failing to prepare a single EIS which addresses all connected and cumulative actions in the Marianas.</p> <p>PACAF has clearly established that their training and exercises are interdependent with the proposed training and exercise activities in the Mariana Islands Training and Testing (MITT) proposal which seeks to expand what is currently authorized under the Mariana Islands Range Complex (MIRC). Specifically, PACAF states that the proposed divert training exercises and activities would include ... a limited number of training activities and exercises ... as described and analyzed in pending authorizations associated with the MIRC and in the MIRC EIS and the Mariana Islands Training and Testing (MITT) EIS.¹⁰ The revised DEIS further states that the "Divert EIS addresses only the ground movements and immediate approaches and departures at the airport or airports selected for improvement. ... [and] actual air warfare and air logistic training are addressed by the MIRC EIS and the MITT EIS."¹¹</p> <p>¹⁰ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf (ES-7)</p> <p>¹¹ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf (ES-7)</p>	<p>Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. Each branch of the Armed Forces is a separate organization that has an independent utility. Therefore, while all branches fall under the Armed Forces and Department of Defense, the purpose and need of each proposal in the Marianas is to meet the individual branches' requirements. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5. The Divert EIS does not propose any changes to operational authorizations established by the recent MITT ROD. Instead, any Divert training operations would be conducted within the authorization established by the MITT ROD.</p>	Website

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P18	Cumulative-General	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[II. DOD has violated NEPA by failing to prepare a single EIS which addresses all connected and cumulative actions in the Marianas.]</p> <p>"A central purpose of an EIS is to force the consideration of environmental impacts in the decision making process."¹² "That purpose requires that the NEPA process be integrated with agency planning 'at the earliest possible time' .. and the purpose cannot be fully served if consideration of the cumulative effects of successive, interdependent steps is delayed until the step has already been taken."¹³ It must be pointed out that the proposed divert-airfield operation is one of four ongoing EIS/OEIS which include the Marine relocation to Guam, MITT/MIRC and the CNMI Joint Military Training ("CJMT"). As stated, these proposed divert airfield operations as admitted by the PACAF overlap with ongoing activities authorized by the MITT which are intended to be expanded by the MIRC. Moreover, all these training activities have purported impacts on Tinian and the Mariana Islands as a whole. However, much like the Marine Corps' CJMT DEIS, PACAF has and continues to limit the scope of its DEIS to address "only to the ground movements and immediate approaches and departures at the airport or airports selected for improvements." By PACAF's own statement, divert training activities and exercises are connected to the larger overall plan of increasing military presence, training activities and exercises in the Marianas Archipelago.</p> <p>¹² Thomas v. Peterson, 753 F.2d 754, 757 (9th Cir. 1985)</p> <p>¹³ Id. at 757 (citations omitted).</p>	Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. Per Title 10 of the USC, each branch of the Armed Forces is a separate organization that has an independent utility. Therefore, while all branches fall under the Armed Forces and Department of Defense, the purpose and need of each proposal in the Marianas is to meet the individual branches' requirements under Title 10 of the USC. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5.	Website
P19	Cumulative-General	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[II. DOD has violated NEPA by failing to prepare a single EIS which addresses all connected and cumulative actions in the Marianas.]</p> <p>The Council on Environmental Quality ("CEQ") requires that cumulative actions be considered in an EIS¹⁴ and that similar actions be analyzed in a single EIS. Actions that are considered similar are those" which, when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography."¹⁵ As such, it our position that by limiting the scope of the DEIS to address only the above activities, PACAF has and continues to violate NEPA by failing to analyze other connected and interdependent actions in a single EIS.</p> <p>¹⁴ 40 C.F.R. § 1508.25(a){2}.</p> <p>¹⁵ 40 C.F.R. § 1508.25(3).</p>	Each DOD proposal (MITT, CJMT, Divert, Guam Relocation SEIS) is an independent action being conducted by different DOD agencies. Per Title 10 of the USC, each branch of the Armed Forces is a separate organization that has an independent utility. Therefore, while all branches fall under the Armed Forces and Department of Defense, the purpose and need of each proposal in the Marianas is to meet the individual branches' requirements under Title 10 of the USC. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of these other DOD environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5.	Website
P20	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises.</p> <p>PACAF has provided the following standards for selecting sites for its proposed Divert exercise and training activities:¹⁶</p> <ul style="list-style-type: none"> • Be located in a U.S territory • Be located outside the average diameter of a typhoon from Anderson AFB (i.e., storm radius). 	The selection standards and consideration of alternatives in the Divert Final EIS meets the requirement of the CEQ regulations in 40 CFR 1500-1508. Please see Final EIS Sections 2.4.2 and 2.4.3 for discussion of other alternative locations considered, but dismissed from detailed analysis and reasons for dismissal.	Website

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			<ul style="list-style-type: none"> • Provide an airfield that has land available for development. • Provide an airfield that has existing functional infrastructure available for improvement and expansion. • Be located within the MIRC training area (i.e., 30 minute reserve fuel flight time). • Provide a seaport that has existing fuel-receiving capabilities at the port of debarkation. <p>PACAF has stated that "there are many potential divert airfield locations across the Pacific Rim, but they are all too far outside USAF-established selection standards." PACAF therefore has only considered airports in the Mariana Islands region to meet its purpose and needs. As such, the discussions in the proposed alternatives are defective as it has failed to fully explore all reasonable alternatives in the DEIS.</p> <p>¹⁶ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf (ES-7 & 8)</p>		
P21	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises.]</p> <p>The "heart" of an environmental impact statement is the alternatives analysis.¹⁷ "The existence of reasonable but unexamined alternatives renders an EIS inadequate."¹⁸ It is clear that PACAF's divert training activities and exercises are intended to support MIRC related activities as established by its selection criteria that proposed sites must "be located within the MIRC training area."¹⁹</p> <p>¹⁷ 40 C.F.R. § 1502.14(a).</p> <p>¹⁸ "Ilio'ulaokalani Coalition v. Rumsfeld, 464 F.3d 1083, 1095 (9th Cir. 2006) (citation omitted).</p> <p>¹⁹ http://www.pacafdivertmarianaseis.com/docs/Divert_PublicRDEIS_Sec1-2_100715.pdf (ES-9)</p>	Comment noted. The analysis and selection of alternatives considered but dismissed and alternatives carried forward for analysis in the Final EIS is provided in Final EIS Section 2. Selection standards used in the Divert Final EIS were developed based upon USAF mission requirements. Each standard was evaluated to determine the degree to which an alternative may or may not support the purpose and need for the proposed action.	Website
P22	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises.]</p> <p>Furthermore, given that the selected site must "be located outside the average diameter of a typhoon from Anderson AFB," there can be no viable discussion of utilizing the Rota International Airport or the A.B. Won Pat International Airport. As such, it is clear that the only two locations that PACAF could consider in its proposed Divert DEIS is Saipan International Airport or the Tinian Airport. In its revised plans, it proposes a new alternative which includes the utilization of both islands.</p>	Comment noted.	Website
P23	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises.]</p> <p>NEPA requires that DOD prepare an EIS which examines all reasonable alternatives and to give the people of the CNMI an opportunity to meaningfully participate in these types of decisions. This participation can only truly be meaningful if all reasonable alternatives are discussed. PACAF has "considerable discretion" when defining its purpose and need for divert training</p>	Selection standards used in the Divert Final EIS were developed based upon USAF mission requirements. Each standard was evaluated to determine the degree to which an alternative may or may not support the purpose and need for the proposed action.	Website

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			<p>exercises and activities.²⁰ However, when doing so, it “cannot define its objectives in unreasonably narrow terms.”²¹ As outlined and discussed above, any potential divert site must be located within the MIRC training area and must be outside the storm radius from Anderson AFB. PACAF in defining its purpose and needs, created a selection criteria that could only preselect airports in either Tinian or Saipan. These selection standards are “unreasonably narrow” as it has essentially reduced the DEIS to the “foreordained formality” of conducting divert training exercises and activities at the Saipan International Airport or Tinian Airport.²²</p> <p>²⁰ Friends of Southeast's Future v. Morrison, 153 F.3d 1059, 1066 (9th Cir.1998).</p> <p>²¹ City of Carmel-By-The-Sea v. United States Dep't. of Transp., 123 F.3d 1142, 1155 (9th Cir.1997)</p> <p>²² Friends of Southeast's Future v. Morrison, 153 F.3d at 1066 (9th Cir.1998).</p>		
P24	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[III. PACAF has failed to explore all reasonable alternatives for Divert training activities and exercises.]</p> <p>Lastly, there is nothing which currently precludes the Air Force from conducting humanitarian relief exercises or utilizing Commonwealth ports in the event of a natural disaster or national emergency as authorized by current CNMI/US agreements. Inferences could be drawn to conclude that the driving need for additional authorization for the utilization of air or sea ports within the Commonwealth is to support MITT/MIRC/CJMT related activities. Presenting the proposed divert plans therefore as one that is necessary for promoting humanitarian efforts could be construed as a mere pretext to eliminate the full consideration of other alternative sites such as Korea, Japan or the Philippines which all have military installations that could currently accommodate such training exercises that are within the Pacific region.</p>	Locations presented in the comment do not meet the selection standards, which were developed based on existing USAF mission requirements.	Website
P25	Administrative	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>CONCLUSION</p> <p>The people of Tinian remain steadfast in our commitment and support of the United States Air Force and all members of our United States Armed Services. Over the course of many years, and several generations, we have welcomed numerous military training exercises</p>	Comment noted.	Website
P26	Proposed Action and Alternatives	Office of the Mayor-Tinian & Aguiguan-J. San Nicholas	<p>[CONCLUSION]</p> <p>Tinian with clear answers or any assurances that these training activities will be a benefit beyond bringing additional foot traffic to the island. As such, we, the people of Tinian, request that PACAF and DOD be required to: 1. Provide an adequate analysis environmental justice issues in the modified Tinian Alternative and Hybrid alternative; 2. Prepare a single EIS which discusses the impacts of all connected and cumulative actions in the Marianas of all 4 EIS; 3. Explore all reasonable alternatives for Divert training activities and exercises in the Pacific region.</p>	Regarding environmental justice concerns, the environmental justice area of impact is the area within which potential impacts from a proposed action could occur. As defined by the CEQ, the environmental justice area of impact is considered to have disproportionately high percentage of minority or low-income residents if the percentage of persons characterized as being a minority or low-income within the area of impact is either greater than 50 percent, or is disproportionately higher than the community of comparison. CEQ also states that a minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated	Website

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				<p>thresholds. The Final EIS environmental justice areas of impact are the election districts that encompass the Proposed Action activities at Saipan International Airport, Tinian International Airport, Ports of Saipan and Tinian, and the proposed fuel truck routes (Saipan Districts 1, 2, and 3 and Tinian District 6), and the communities of comparison are the islands of Saipan and Tinian. As described in the Final EIS Section 4.14.1, significant impacts and elevated noise levels were identified in the 2012 Draft EIS on the communities in Districts 1 and 2 on Saipan due to the consideration of fighter aircraft in the proposal. Community outreach to potentially impacted communities with high minority and low-income populations on Saipan occurred prior to the 2012 Draft EIS public hearing on Saipan. After release of the 2012 Draft EIS, the USAF reevaluated their proposal and removed all fighter aircraft operations from the Proposed Action and each of the three Modified Alternatives. The removal of fighter aircraft operations, resulted in a major reduction in expected noise levels on the communities in Districts 1 and 2. Significant adverse impacts would not be expected on disproportionately high minority and low-income populations under Alternative 1, 2, or 3. On Tinian, as described in Section 4.14.2, environmental justice impacts from noise are not expected. Short-term, minor to moderate, adverse environmental justice impacts could occur during implementation on Tinian due to moderately increased population and related traffic.</p> <p>The USAF has analyzed cumulative effects in the Divert Final EIS Section 5 per 40 CFR 1500-1508. The cumulative effects anticipated from implementing other separate DOD actions will be analyzed in each of these other DOD environmental reviews. One comprehensive EIS that covers all DOD proposals will not be prepared because each agency has a different mission; each proposal is independent of the other; and each agency proposed action has independent utility. The Pacific region is not the area of concern. In the Divert Final EIS, the area of concern is the Mariana Islands region as stated in the Final EIS due to originating aircraft from Andersen AFB requiring a potential divert location or to support aircraft already operating within the Mariana Islands Range Complex.</p>	
Q1	Cumulative-General	Alter City Group - E. Sze	Alter City Group herein enters its public comment to the Revised Draft Environmental Impact Statement for the U.S. Air Force's Divert Activities and Exercises Proposal (hereinafter "Revised Draft"). Alter City Group objects to Alternatives Two (Modified Tinian Alternative) and Three (Hybrid Modified Alternative} of the Revised Draft and supports the No Action Alternative for two primary reasons, as follows: (1) Alter City Group's investment on Tinian would be directly discouraged by Alternatives Two and Three; and (2) on a grander scale, implementation of Alternatives Two and Three would harm economic development on Tinian.	Comment noted.	Website

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Q2	Cumulative-General	Alter City Group - E. Sze	<p>I. Alternatives Two and Three Directly Threaten Alter City Group's Investments on Tinian</p> <p>Alter City Group is investing on Tinian with the development of the Plumeria Resort in the beautiful and idyllic Puntan Diablo Cove. Alter City Group's project is expected to be completed over 12 years in 3 phases, to result in 6,000 rooms on Tinian in its hotel, as well as villas, corporate villas, service apartments, an 18-hole golf course, a casino, waterpark, museum, clinic, cafe, restaurant, and shops, among other projects. Alter City Group's development will invite tourists from all over the world, as well as enhance local infrastructure facilities and provide additional community services to the local population on Tinian. Alter City Group's development is located right next to the Tinian International Airport. In addition, Alter City Group has expressed an intent to the Commonwealth Ports Authority to lease the southwestern portion of Airport Expansion, West Field, Lot No. 272 T 1 O and the southwestern portion of West Tinian Airport, Lot No. 272 T 09. The lease of these lands is sought to allow for extra accommodations for the villas along the coast that Alter City Group has already proposed. Alter City Group intends to lease this land from the Commonwealth Ports Authority for a term of 25 years, with an optional 15-year extension.</p>	<p>Comment noted. The USAF plans to improve airport facilities for the purpose stated in the Final EIS, which is compatible with the airport land use.</p>	Website
Q3	Cumulative-General	Alter City Group - E. Sze	<p>[I. Alternatives Two and Three Directly Threaten Alter City Group's Investments on Tinian]</p> <p>Right next door to Alter City Group's tranquil development, Alternatives Two and Three propose the construction of a parking apron, a cargo pad, a maintenance facility, fuel tanks and supporting infrastructure, a fuel hydrant system, a fire suppression system, and an access road. Alternatives Two and Three would also include construction of taxiways to connect the cargo and parking aprons to the runway and reroute Blh Avenue on the western side of the runway to avoid the proposed taxiway area. Alternatives Two and Three additionally include construction of fuel tanks at the Port of Tinian, which would entail the transport of construction materials to Tinian International Airport. Alternatives Two and Three would seek to improve the airfield design to accommodate 3 or 12 KC-135 or similar aircraft.</p> <p>These Alternatives approximate 720 operations by KC-135 or similar aircraft over 8 weeks annually and would necessitate fuel transfer from the seaport to the airport as well as temporary lodging and associated support for up to 265 personnel. These activities would result in noise pollution not only during construction but thereafter. Instead of relaxing on their balconies enjoying the serene qualities of the island and wildlife, guests will be treated to noise from construction of all of the aforementioned projects, including noise from an additional 265 personnel and from 3 or 12 KC-135 or similar aircraft making about 720 operations a year. Instead of enjoying the serene views from their villas, guests will be subjected to trucks rattling over the streets transporting construction materials and transferring fuel from the seaport to airport and large KC-135s or similar aircraft roaring overhead. The Revised Draft utterly fails to address its effect on the resort experience.</p>	<p>Although the Final EIS assessed the cumulative impacts of the Divert proposal together with the environmental impacts that would be caused by the Alter City resort, impacts on the resort were not assessed because the proposed Alter City resort has not yet been constructed and is not in operation. In fact, whether the resort will be constructed remains a matter of speculation. The National Environmental Policy Act requires an assessment of impacts on existing conditions. Impacts of a proposal, together with the impacts of other past, present, or reasonably foreseeable future projects are discussed as Cumulative Impacts in Final EIS Section 5.</p>	Website

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Q4	Cumulative-General	Alter City Group - E. Sze	<p>[I. Alternatives Two and Three Directly Threaten Alter City Group's Investments on Tinian]</p> <p>The implementation of Alternatives Two or Three would directly harm Alter City Group's development plans and its investment. The Revised Draft EIS fails to address both noise level pollution, the effect of the diversion plan on developments and investments on Tinian and its effects on tourism.</p>	Noise impacts are assessed and presented in Final EIS Sections 4.1 and 4.10.	Website
Q5	Against- Tinian	Alter City Group - E. Sze	<p>[I. Alternatives Two and Three Directly Threaten Alter City Group's Investments on Tinian]</p> <p>The Revised Draft EIS further fails to address the associated visual impact (including the proposed infrastructure and light pollution). It also fails to address the impact of the increase in traffic and the impact of the divert activities on commuter flights and air traffic, as well as construction emissions on the Alter City Group development.</p> <p>While it might be argued that the Alter City Group development will also bring increased air traffic and noise pollution, this is the price of economic development. Alter City Group has already committed \$5 million to the Commonwealth Ports Authority for the upgrade of the airport facilities to accommodate direct international and private flights and ferry dock upgrades. Any increased air traffic or noise from the Alter City Group development will end up being a benefit to Tinian's economy - instead of harming it in the way the Revised Draft proposes. The increased air traffic proposed by the Revised Draft will not only fail to enhance Tinian's tourist economy, it will directly impair it.</p>	There is no evidence to indicate that implementing the proposed USAF Divert facilities would have an adverse effect on the local economy as stated in the comment. In fact, the construction associated with Divert can be expected to add jobs to the local economy. Additionally, the increased number of personnel present during exercises would benefit the local tourism economy. Nor would proposed flight activities "impair" the local economy due to air traffic impacts. The flight levels being proposed are quite low, and would be scheduled around existing civilian flight schedules. A visual impact assessment is not necessary because the proposed airport and flight related activities are compatible with the surrounding use, which is an airport. Impacts on air traffic and air quality would be negligible or minor. Final EIS Section 4.3 provides an analysis of potential impacts on airport operations and Final EIS Section 4.14 provides an analysis of potential impacts on socioeconomics.	
Q6	Socioeconomics	Alter City Group - E. Sze	<p>II. Alternatives Two and Three would Harm Economic Development on Tinian</p> <p>On a grander scale, implementation of either Alternative Two or Three would harm the already struggling economic development on Tinian. Investments like those promised by Alter City Group secure economic growth while capitalizing on the natural beauty of Tinian. Alter City Group's investment will boost the CNMI economy as a whole and benefit Tinian locals by increasing domestic employment opportunities and generating extra revenue to the government treasury.</p>	The Divert proposal would offer diversification of economic opportunities. When the tourism economy slumps due to poor global economic conditions, as was the case at the time release of the Revised Draft EIS, the local job opportunities also slump. Currently, the only casino on Tinian has closed and the hotel is operating at bare minimum levels due to lack of tourism demand. Final EIS Section 4.14 provides a complete analysis of all three alternatives on the economy.	
Q7	Socioeconomics	Alter City Group - E. Sze	<p>[[III. Alternatives Two and Three would Harm Economic Development on Tinian]]</p> <p>Alter City Group has pledged \$1.2 billion for its project in Puntan Diablo Cove. Alter City Group has already paid a non-refundable fee of over \$1.2 million for the first phase of its project and has already applied for and paid for its application for a casino license. Alter City Group recently signed a memorandum of understanding with the Chu Kong Passenger Transport Company Ltd. to develop a ferry system between Saipan and Tinian. The wheels of economic development have been set in motion for Tinian as an international tourist destination and the proposed divert activities and exercises run counter to that. While expanding U.S. strategic interests and Department of Defense mission requirements in the western Pacific is indeed important, the Tinian International Airport is simply not the appropriate venue. Tinian is already struggling</p>	The USAF disagrees that proposed Divert development would have an adverse effect on economic opportunities. The local government would realize income from the federal government and locals would be afforded construction and operations jobs. Some proposed infrastructure could also be shared with civil aviation as the USAF would not utilize the infrastructure for a majority of each year. Final EIS Section 4.14 provides a complete analysis of all three alternatives on the economy.	

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			economically and the investments Alter City Group is making on the island promise to meet the objective of using Tinian's natural beauty and resources to build a thriving economy as a tourist destination - a militarized island does not meet that objective. The Revised Draft does not account for the potential loss of tourism and potential deterrence from investment in future resorts and similar facilities, which would have a long term effect on Tinian's prospects of building a tourism economy.		
Q8	Proposed Action and Alternatives	Alter City Group - E. Sze	[[II. Alternatives Two and Three would Harm Economic Development on Tinian]] Offering one modified alternative after hybrid modified alternative after another is not an accommodation to the people of Tinian, it is simply an obtrusive and unilateral way to meet a military interest that is not in the best interests of Tinian. The interests of a tiny island should not be set aside as less important when the military has apparently deemed Tinian to be significant enough to shoulder the burden of promoting U.S. interests in the Asia-Pacific region. The Revised Draft fails to take into account other locations beyond the CNMI for divert activities. The Revised Draft concedes that there are currently divert landings in Guam, Saipan, and Rota, and fails to qualify or support the need for even more facilities in the CNMI, and specifically on Tinian. The Revised Draft fails to address why the divert activities should occur on Tinian and not elsewhere.	Comment noted. The USAF has worked with the people of CNMI and its government and conducted extensive public involvement efforts since the inception of the divert proposal. Each alternative studied in the Final EIS was found reasonable when the mission-related selection standards are applied. Each alternative was considered equally. Locations outside the CNMI were eliminated from study because they did not meet the purpose and need for the divert proposed action.	
Q9	Against-General	Alter City Group - E. Sze	Alter City Group stands behind its investment and behind its promises to Tinian and will take whatever appropriate legal action necessary to protect its development and its promise of economic development to Tinian. Alter City Group supports the No Action Alternative.	Comment noted. The USAF carried forward all 3 alternatives presented in the Revised Draft EIS for analysis in the Final EIS as reasonable alternatives, in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. ACG's comments will be part of the Final EIS administrative record.	
R1	Administrative	EPA - K. Johnson	The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed. The Revised Draft Environmental Statement (RDEIS) updates the 2012 DEIS with modified alternatives 'for facility construction at Saipan International Airport and/or Tinian International Airport to support a combination of aircraft and support personnel for divert operations, periodic exercises, and humanitarian assistance/disaster relief. The Air Force has not identified a preferred alternative in the RDEIS. Therefore, in accordance with EPA's Policy and Procedures for the Review of Federal Actions Impacting the Environment, we are rating individual alternatives evaluated in the RDEIS.	Comment noted.	Email
R2	Noise	EPA - K. Johnson	Through a comment letter to the Air Force on July 26, 2012, EPA rated the 2012 DEIS Preferred Alternative 1 as Environmental Objections — Insufficient Information (EO-2)* due to severe noise impacts predicted for residents on Saipan for 8 weeks per year. The alternatives in the RDEIS no longer include fighter jet aircraft as part of the training exercises and, as a result, noise levels would be much reduced. While this alleviates our noise objections, EPA is concerned that the revised analysis uses a new metric that averages the noise that would be generated during 8 weeks of training over the course of a year,	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF instructions, and FAA orders. The metrics presented in the Final EIS Section 4.1 and 4.10 include both the AAD (yearly) and the ABD (exercise) analysis. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and	Email

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			<p>artificially reducing predicted noise levels and presenting noise impacts in a manner that is not consistent with how the noise would be experienced by the public. Because of this, we are rating Alternative 1 in the RDEIS as Environmental Concerns — Insufficient Information (EC-2)*.</p> <p><u>*EPA Rating Definitions</u></p> <p>“EO” (Environmental Objections) The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.</p> <p>“EC” (Environmental Concerns) The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.</p> <p>Category “2” (Insufficient Information) The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.</p>	<p>better describe the potential changes between the existing environment and the potential yearly and exercise noise levels. However, the USAF presents the average annual day analysis in the Final EIS to determine significance, as community noise annoyance studies are based on average annual day and it is the FAA and USAF standard for significance analysis.</p>	
R3	Noise	EPA - K. Johnson	<p>We strongly recommend that the Air Force reassess noise impacts using the noise metric and methodology that was previously used in the 2012 DEIS in order to clearly disclose project noise levels in the Revised Final EIS as they would be experienced by residents for 8 weeks/year.</p>	<p>USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF instructions, and FAA orders. The metrics presented in the Final EIS Section 4.1 and 4.10 include both the AAD (yearly) and the ABD (exercise) analysis. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels. However, the USAF presents the average annual day analysis in the Final EIS to determine significance, as community noise annoyance studies are based on average annual day and it is the FAA and USAF standard for significance analysis.</p>	Email
R4	Infrastructure/ Utilities	EPA - K. Johnson	<p>We have rated the Tinian alternatives (Alternatives 2 and 3) in the RDEIS as Environmental Objections — Insufficient Information (EO-2)*, based on potentially significant impacts to the drinking water system that should be avoided to adequately protect the environment. The RDEIS does not sufficiently evaluate the impacts of the project on the drinking water utility and the amount of water available from the CUC system on Tinian may not be sufficient to meet the construction-phase demand for the project. The CUC is under a Stipulated</p>	<p>USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Text was revised in Final EIS Section 4.13 to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are</p>	Email

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			<p>Order to bring its drinking water system into compliance with the Safe Drinking Water Act and is in “severe distress” financially, according to a recent CUC quarterly report. If the military action would place an additional financial burden on CUC, this would be a significant impact to the utility and could compromise the public’s access to drinking water.</p> <p>*EPA Rating Definitions</p> <p>“EO” (Environmental Objections) The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.</p> <p>Category “2” (Insufficient Information) The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.</p>	properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	
R5	Infrastructure/ Utilities	EPA - K. Johnson	The Marine Corps recently published the CNMI Joint Military Training (CJMT) DEIS (April 2015) and is now conducting supplemental analyses of impacts of that project on the Tinian drinking water system. We recommend that the Air Force consult the technical appendices of the CJMT DEIS, and work closely with the Marine Corps, to better assess the construction-phase impacts of Divert Activities and Exercises on the drinking water system.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Text was revised in Final EIS Section 4.13 to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email
R6	Cumulative- General	EPA - K. Johnson	We also recommend close coordination of construction scheduling with the Marine Corps, if a Tinian alternative is selected, to ensure that the capacity of the drinking water system is not exceeded and access to drinking water by the local population is not affected.	Comment noted. The USAF would coordinate construction and operations plans with the Marines, but also with the Commonwealth Utilities Corporation regarding water issues.	Email
R7	Administrative	EPA - K. Johnson	We appreciate the opportunity to review this Revised DEIS and look forward to working with the Air Force to address the issues outlined above and in the enclosed Detailed Comments. If you have any questions, please refer staff to Karen Vitulano, lead reviewer of the RDEIS, at (415) 947-4178, or to Kathleen Goforth, Manager of the Environmental Review Section, at 415-972-3521. Please send a copy of the Final Revised EIS to this office (mail code ENF-4-2) when it is electronically filed with our Washington, D.C. office.	Comment and provided contacts noted.	Email

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R8	Infrastructure/ Utilities	EPA - K. Johnson	<p>Impacts to drinking water-</p> <p>While not formally designated as a Sole Source Aquifer under the Safe Drinking Water Act, groundwater is the sole source of drinking water on Tinian and meets the definition of a sole or principal source aquifer¹. The Commonwealth Utilities Corporation (CUC) supplies drinking water to the island via a single public water well. Given the limited source of drinking water available on Tinian, it is critical that estimates of impacts to available drinking water be fully analyzed, disclosed and mitigated. The RDEIS for the Divert Activities and Exercises, Commonwealth of the Northern Mariana Islands (Divert Project) does not sufficiently assess the Proposed Action's impacts on the CUC for the Tinian Alternatives, nor does it include a complete estimate of construction-phase water demand.</p> <p>¹ EPA defines a sole or principal source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas may have no alternative drinking water source(s) that could physically, legally and economically supply all those who depend on the aquifer for drinking water</p>	<p>USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Text was revised in Final EIS Section 4.13 to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.</p>	Email
R9	Infrastructure/ Utilities	EPA - K. Johnson	<p>[Impacts to drinking water] The water demand identified in the RDEIS for the construction phase includes only the amount of water that would be used for dust suppression. Other construction water use, such as concrete mixing, rinsing new water pipes, hydrotesting new water storage tanks, etc. is not included. In addition, the water demand from the 500-750 construction workers is not analyzed, and it is unclear if this estimated number of workers includes dependents. If it does not, the estimated water demand would be even higher, since, as the RDEIS acknowledges, Tinian does not have the construction workforce needed and it is assumed that 85% of these workers would be from off-island (p. 4-176, 4-117). The estimated water demand for dust suppression alone is 51,500 gallons per day (gpd) for 3 years for the North option (32,500 gpd for the South option). Consumption by the construction workforce would be a substantial addition to this construction-phase estimate. The RDEIS estimates the water consumption demand during the implementation phase at 98 gpd per person, which, if applied to the construction workforce would calculate at an additional 49,000 - 73,500 gpd water demand. The RDEIS identifies the amount of water Tinian is able to generate at 1.26 million gallons per day, which appears to be a high estimate averaging the generation for wet and dry seasons. Since, as the RDEIS acknowledges, water supply issues are intensified during the dry season (p. 3-110), it would be more conservative to utilize the dry season estimate for the analysis.</p>	<p>The USAF revised and substantially reduced the number of proposed construction workers under all Alternatives, as described in Final EIS Section 2.4. Text was also revised in Final EIS Section 4.13 to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate.</p>	Email
R10	Infrastructure/ Utilities	EPA - K. Johnson	<p>[Impacts to drinking water] The RDEIS does not calculate the amount of water that would be available to be pumped from the CUC system therefore it is unclear whether the CUC could accommodate the water demand. We note that the CJMT DEIS calculated, using the wet/dry season average pump rate, that there would be 50,862 gpd available to the Tinian population after losses in the distribution system (CJMT DEIS p. 4-414). The CJMT DEIS utilized a water loss</p>	<p>USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Text was revised in Final EIS Section 3.13 to note that there is unaccounted water loss in the CUC system. The USAF proposes to construct two wells for fire suppression purposes capable of producing 240,000 gpd. These wells would be used during construction and implementation in the event that the CUC could not adequately meet the</p>	Email

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			or “unaccounted for water” (UFW) rate of 75% for this calculation. The Divert RDEIS estimates the unaccounted for water (UFW) in the CUC distribution system at 50%, referencing a 2011 National Renewable Energy Laboratory (NREL) Report, which may not be the most updated estimate. The CUC Drinking Water and Wastewater Master Plan estimates the UFW for Tinian to be 74%.	water supply demand. Text was also revised in Final EIS Section 4.13 to clarify the use of these wells. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	
R11	Infrastructure/ Utilities	EPA - K. Johnson	[Impacts to drinking water] If the 50,862 gpd value of available water is accurate, it appears that the construction-phase water demand for Divert would substantially exceed the amount potentially available from the CUC system. This would counter the conclusion in the RDEIS that adverse impacts from the Divert Project would be negligible on the water supply (p. 4-149).	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The Final EIS has been revised in Section 4.13 to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email
R12	Infrastructure/ Utilities	EPA - K. Johnson	[Impacts to drinking water] Additionally, the CJMT DEIS, Appendix P (p. 2-1) notes that three of the four pumps serving the Tinian drinking water well are operating almost constantly, and because one pump is kept on standby for maintenance purposes, the well is operating near full capacity. If this is correct, the CUC public water well may not realistically be able to support the projected increase in water use when it is already operating at near capacity.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Text was revised in Final EIS Section 4.13 to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email
R13	Infrastructure/ Utilities	EPA - K. Johnson	[Impacts to drinking water] The CUC is under a Stipulated Order to bring its drinking water system, primarily on Saipan, into compliance with the Safe Drinking Water Act and to provide comprehensive planning for current and future infrastructure needs with regard to groundwater protection and drinking water supplies on Tinian. According to a recent CUC quarterly progress report ² , the utility continues to struggle financially and is in “severe distress”. CUC also recently reported that it currently lacks approximately 20 percent of the manpower needed to successfully operate and maintain its facilities ³ . ² STIPULATED ORDER NO. 1; Item 69, Quarterly Progress Report No. 25, January 29, 2015 - April 28, 2015. Submitted to EPA by Alan W. Fletcher, Executive Director, Commonwealth Utilities Corporation, on April 27, 2015. ³ Draft Groundwater Management and Protection Plan, Commonwealth of the Northern Mariana Islands, Prepared for Commonwealth Utilities Corporation, Dueñas, Camacho & Associates and CH2M, May 2015	Comment noted. USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Text was revised in Final EIS Section 4.13 to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email

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R14	Infrastructure/ Utilities	EPA - K. Johnson	[Impacts to drinking water] The cumulative impacts to the drinking water utility would be even greater. The cumulative impact assessment does acknowledge that the combination of the Divert Project with other construction projects, particularly the CJMT proposal, the large hotel resorts, and the new homestead development, would place much greater demands on utilities because of the increased worker population and level of construction (p. 5-37). The RDEIS notes the pre-existing potable water utility deficiencies that can contribute to potential impacts but states only that the Air Force would coordinate with the CUC to ensure water supply is sufficient (p. 5-37).	The USAF acknowledges the current demands on and limits of the existing water utility. The USAF plans to install wells that would be used for construction, fire suppression water tanks and, if needed to augment local utility water, for consumption during exercise periods (up to 8 weeks/year). Text in Final EIS Section 4.13 was clarified to state that the USAF will also construct potable wells in the event that the CUC system is not sufficient. Further, the USAF will continue to coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email
R15	Infrastructure/ Utilities	EPA - K. Johnson	[Impacts to drinking water] The Air Force proposes no mitigation for its impact on the CUC system. If the proposed military action could place an additional financial burden on CUC, potentially compromising the public's access to drinking water, EPA believes this would be a significant impact.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The USAF revised and substantially reduced the number of proposed construction workers under all Alternatives, as described in Final EIS Section 2.4. Text in Final EIS Section 4.13 was also revised to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand. The USAF proposes to construct two wells for fire suppression purposes capable of producing 240,000 gpd. These wells would be used during construction and implementation in the event that the CUC could not adequately meet the water supply demand. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email
R16	Infrastructure/ Utilities	EPA - K. Johnson	Recommendation: Quantify the full construction-phase [water] demand for all alternatives. Revise the analysis to use the dry season estimate for the amount of water the CUC system on Tinian can generate, and explain or revise the UFW value used.	Text in the Final EIS Section 3.13 was revised to note that there unaccounted water loss in the CUC system. The USAF revised and substantially reduced the number of proposed construction workers under all Alternatives, as described in the Final EIS Section 2.4. Text in the Final EIS Section 4.13 was also revised in to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand should the CUC existing supply be inadequate.	Email
R17	Infrastructure/ Utilities	EPA - K. Johnson	[Recommendation:] Discuss the capacity of the water system and limitations of the CUC system regarding ability to pump and amount of manpower available.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Text in Final EIS Section 3.13 was revised to note that there is a 75-80 percent unaccounted water loss in the CUC system. Final EIS Section 4.13 was also revised to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand. The USAF proposes to construct two wells for fire suppression purposes capable of producing 240,000 gpd. These wells would be used during construction and implementation in the event that the CUC could not adequately meet the water supply demand. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water	Email

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R18	Infrastructure/ Utilities	EPA - K. Johnson	[Recommendation] If the construction phase would place an additional financial burden on CUC, potentially compromising the public's access to drinking water, identify those significant impacts on the CUC utility for the Tinian alternatives.	supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian. USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The USAF revised and substantially reduced the number of proposed construction workers under all Alternatives, as described in Final EIS Section 2.4. Final EIS Section 4.13 was also revised to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand. The USAF proposes to construct two wells for fire suppression purposes capable of producing 240,000 gpd. These wells would be used during construction and implementation in the event that the CUC could not adequately meet the water supply demand. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email
R19	Infrastructure/ Utilities	EPA - K. Johnson	[Recommendation] Identify specific mitigation that the Air Force would implement to reduce impacts to the drinking water system. Potential mitigation could include assistance in reducing the high UFW in the CUC system.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The USAF revised and substantially reduced the number of proposed construction workers under all Alternatives, as described in Final EIS Section 2.4. Final EIS Section 4.13 was also revised to clarify water uses on Saipan and Tinian during construction and implementation, including construction worker usage and proposed wells to meet water demand. The USAF proposes to construct two wells for fire suppression purposes capable of producing 240,000 gpd. These wells would be used during construction and implementation in the event that the CUC could not adequately meet the water supply demand. The USAF will continue to coordinate with the CNMI CPA, CUC, and BECQ during construction and implementation of the project to ensure that the wells are properly sited, permitted, and installed; and withdrawal rates during these periods of activity do not exceed the water supply. The USAF will also coordinate with the Marine Corps, should CJMT and Divert construction or implementation schedules overlap on Tinian.	Email
R20	Cumulative- CJMT	EPA - K. Johnson	[Recommendation] In the Revised Final EIS (RFEIS), identify specific measures to coordinate with the Marine Corps on their CJMT supplemental analysis of impacts to the CUC system to ensure any cumulative water demand is considered and construction timelines are scheduled to minimize simultaneous water demand on the CUC system, if applicable.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The USAF is in coordination with the USMC regarding the CJMT and Divert proposals, with oversight by the US Pacific Command. Supplemental analysis for the CJMT will take into consideration any proposed infrastructure and operations by the USAF. The cumulative effects anticipated from implementing these separate actions will be analyzed in each of the environmental reviews. The USAF has analyzed cumulative effects in the Divert Final EIS Section 5. Construction schedules and operations between CJMT and Divert would be deconflicted, should overlap occur. Additionally, CJMT is analyzing the potential of a new water	Email

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				system on Tinian which would take into account, in its cumulative impacts analysis, the Divert proposal. Lastly, Final EIS Section 4.13 was revised to provide additional information regarding the proposed Divert water usage and facilities on Tinian.	
R21	Noise	EPA - K. Johnson	Noise Impacts - Impact assessment methodology - EPA had raised environmental objections regarding the very high noise levels predicted under the original 2012 DEIS's Preferred Alternative on Saipan, especially under the medium and high scenarios which would have subjected over 11,000 residents to noise levels considered incompatible with residential land use. The high scenario would have exposed some residents to noise levels above 80 A-weighted decibels (dBA) which can cause hearing loss. In our comments, EPA requested an evaluation as to whether an alternative that would operate under only the low scenario (no fighter jets) would meet the project purpose and need. We are pleased that for the revised Proposed Action, the Air Force is no longer including fighter jet aircraft as part of the training exercises. This change is substantial enough to result in much reduced noise levels. However, the decision to alter the noise methodology used to assess and disclose noise impacts in the RDEIS is the basis for continuing environmental concerns because the updated methodology generates artificially low noise estimates which are incongruent with the manner in which humans experience noise. The conclusion that impacts are less than significant was based on this methodology and EPA is concerned that impacts may result that are not disclosed in the RDEIS.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF instructions, and FAA orders. The metrics presented in the Final EIS Section 4.1 and 4.10 include both the AAD (yearly) and the ABD (exercise) analysis. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels. However, the USAF presents the average annual day analysis in the Final EIS to determine significance, as community noise annoyance studies are based on average annual day and it is the FAA and USAF standard for significance analysis. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either the same or only slightly louder at noise sensitive locations under all alternatives.	Email
R22	Noise	EPA - K. Johnson	[Noise Impacts - Impact assessment methodology] - In the RDEIS, the Air Force has changed the primary metric used to express noise that would occur during the Proposed Action's 8-weeks of training from the Average Busy Day (ABD), to the Average Annual Day (AAD). AAD was calculated by dividing the total number of aircraft operations that are conducted during the 8-week training period by 365 days to obtain an average number of operations per day. The AAD results were used to evaluate significance for noise (p. 4-4). EPA cautioned strongly against such a methodology, when it was suggested by the Air Force during a noise-related conference call with EPA on August 2, 2012, because it would not represent how noise is actually experienced by human receptors. The RDEIS states that the AAD noise contours were added to maintain noise analysis consistency across USAF EIS documents and since the baseline noise analysis was estimated using 365 days per year, noise from proposed military aircraft operations was also estimated using 365 days per year to be able to compare noise impacts directly to the baseline (p. 3-1). When EPA identified the Day- Night Average Sound Level, DNL, as the most appropriate measure to describe cumulative noise exposure during an average annual day in its "Levels" document ⁴ , it was based on several considerations, including the applicability of the measure "to the evaluation of pervasive long-term noise in various defined areas and under various conditions over long periods of time", as well as the close correlation of the measure "with known effects of the noise environment on the individual and the public". The altered	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF instructions, and FAA orders. The metrics presented in the Final EIS Section 4.1 and 4.10 include both the AAD (yearly) and the ABD (exercise) analysis. The USAF presents the average annual day analysis in the Final EIS to determine significance, as community noise annoyance studies are based on average annual day and it is the FAA and USAF standard for significance analysis. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either the same or only slightly louder at noise sensitive locations under all alternatives. Additionally, for 10 months/year, noise levels on both islands would be consistent with existing conditions.	Email

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			use of the cumulative noise metric, developed by the Air Force in this analysis, is inconsistent with these considerations and does not sufficiently assess and disclose shorter term noise exposures to the public. ⁴ "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety," U. S. EPA Report No. 550/9-74-004, September 1974		
R23	Noise	EPA - K. Johnson	[Noise Impacts - Impact assessment methodology] While the RDEIS includes the ABD noise contour map and one paragraph discussing it, the RDEIS includes no information regarding land use or population receptors within noise contours. The 2012 Divert Project DEIS "low scenario" analysis indicated that over 1,200 acres of off-airport property for the Saipan Alternative would be incompatible with residential land use, with almost 200 of these acres in the higher 70-74 dBA contour, during the 8-week training exercises. For Tinian, 400 acres would be incompatible, with 73 acres in the 70-74 dB contour (DEIS p. 4-20). We understand this may not represent the revised Proposed Action, but the Air Force had suggested consulting this analysis in response to our requests for additional information regarding the noise analysis. ⁵ ⁵ Telephone conversation between Karen Vitulano, USEPA, and Mark Petersen, USAF, November 10, 2015	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Additional information on the ABD analysis, including land use information and noise sensitive locations within the contours, was added to Section 4.1 and 4.10. Incompatible land uses are not expected under the ABD for any of the alternatives.	Email
R24	Noise	EPA - K. Johnson	[Noise Impacts - Impact assessment methodology] The AAD metric was also used in the assessment of both land use and environmental justice impacts, which influences the impact assessment conclusions presented in the RDEIS for these analyses.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The USAF presents the average annual day analysis in the Final EIS to determine significance, as community noise annoyance studies are based on average annual day and it is the FAA and USAF standard for significance analysis. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to potential impacts on land use under the Average Busy Day (exercise) noise levels. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either the same or only slightly louder at noise sensitive locations under all alternatives. Additionally, for 10 months/year, noise levels on both islands would be consistent with existing conditions and incompatible land uses are not expected under the ABD for any of the alternatives.	Email
R25	Noise	EPA - K. Johnson	[Noise Impacts - Impact assessment methodology] Recommendation: We strongly recommend that the AAD metric be removed from the RFEIS and that the Air Force use the ABD metric for the noise impact assessment, as it did in the 2012 Divert DEIS.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The noise analysis was conducted according to USAF and FAA requirements as published in the Code of Federal Regulations, USAF instructions, and FAA orders. The metrics presented in the Final EIS Section 4.1 and 4.10 include both the AAD (yearly) and the ABD (exercise) analysis. The USAF presents the average annual day analysis in the Final EIS to determine significance, as community noise annoyance studies are based on average annual day and it is the FAA and USAF standard for significance analysis. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive	Email

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				locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels.	
R26	Noise	EPA - K. Johnson	[Noise Impacts - Impact assessment methodology Recommendation:] Identify representative points of interest, population receptors, and acres exposed to ABD project noise levels and compare with baseline conditions.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The requested information (noise sensitive locations, populations, and acreages exposed to the ABD) was added to Final EIS Section 4.1 and 4.10.	Email
R27	Noise	EPA - K. Johnson	[Noise Impacts - Impact assessment methodology] Recommendation:] Update the land use and environmental justice analyses to include an estimate of noise levels using the ABD metric.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. The USAF presents the average annual day analysis in the Final EIS to determine significance, as community noise annoyance studies are based on average annual day and it is the FAA and USAF standard for significance analysis. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to potential impacts on land use under the Average Busy Day (exercise) noise levels. The Average Annual Day (yearly) DNL noise levels are only slightly louder than the existing noise levels and the Average Busy Day (exercise) DNL noise levels are either the same or only slightly louder at noise sensitive locations under all alternatives. Additionally, for 10 months/year, noise levels on both islands would be consistent with existing conditions and incompatible land uses are not expected under the ABD for any of the alternatives.	Email
R28	Noise	EPA - K. Johnson	Noise Impacts - Disclosing noise impacts to quiet rural environments - EPA generally accepts the use of 65 dBA DNL as appropriate for a significance threshold for noise impacts since this corresponds with residential land use compatibility. However, in very quiet existing environments, especially the rural atmosphere on Tinian, the amount of noise increase should also be considered when assessing noise impacts. The RDEIS identifies baseline noise levels at noise-sensitive receptors around Tinian airport as less than 45 dBA (p. 3-92). (We note that the CJMT DEIS identifies some residential locations as higher than 45: Marpo Heights at 45.4 dBA, and Northeast of Marpo Heights at 48.5 dBA). For this quiet setting, a change of exposure analysis is helpful, along with a discussion that provides meaningful information to the public as to how the project will affect their lived noise environment. Because no change of noise exposure data is provided, there is no indication of the extent that Tinian's will experience a degradation of their noise environment. The Federal Interagency Committee on Noise (FICON) Technical Subgroup characterized a 3 dB increase in noise as "a large change" in the level of noise exposure when the existing condition is below 65 dB, and noted that this increase can be perceived by people as a degradation of their noise environment ⁶ . Because decibels are on a logarithmic scale, an increase of 10 dBs represents a subjective doubling of loudness ⁷ . The RDEIS should attempt to disclose the change in noise environment that residents would experience during training exercises in a meaningful way.	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Information was added to the Final EIS Section 4.1 and 4.10 about population, acreages, and noise sensitive locations under both the ABD and AAD scenarios for all alternatives.	Email

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			⁶ Federal Interagency Committee on Noise (FICON), August 1992. Federal Agency Review of Selected Airport Noise Analysis Issues. p. 3-5. Available: http://www.fican.org/pdf/nai-8-92.pdf ⁷ <i>ibid</i>		
R29	Noise	EPA - K. Johnson	[Noise Impacts - Disclosing noise impacts to quiet rural environments] Recommendations: Provide a change of exposure analysis for residents for the Saipan and Tinian Alternatives. Discuss how the increases in noise that would occur during the 8-week training period would be perceived by residents (i.e. whether it would represent a doubling or greater increase in loudness, etc.).	USAF representatives discussed issues with EPA and resolved concerns by revising sections in the Final EIS. Information was added to Final EIS Section 4.1 and 4.10 to provide additional analysis related to the Average Busy Day (exercise) noise levels, including noise levels at noise sensitive locations, and better describe the potential changes between the existing environment and the potential yearly and exercise noise levels.	Email
R30	Cumulative-CJMT	EPA - K. Johnson	Project interface with CNMI Joint Military Training (CJMT) not explained. The Tinian Alternatives in the RDEIS have elements that are identical with components of the CNMI Joint Military Training (CJMT) action, which is also undergoing NEPA review. Both projects propose improvements at the Tinian airport, including fuel tanks, cargo pad, access roads, aircraft parking apron/ramp, and military taxiways. For the Tinian Alternative North option, these facilities are located in the same locations. Both projects also propose fuel tanks at the Port of Tinian. The RDEIS does not discuss how these two projects will interface, whether they would be shared spaces or if it's possible that these projects would both occur in different locations (e.g. both north and south areas of Tinian airport being developed).	The various actions proposed by the Air Force and the Marine Corps each have independent utility; the Air Force's proposal does not rely on the Marine Corps proposal to come to fruition.	Email
R31	Cumulative-CJMT	EPA - K. Johnson	[Project interface with CNMI Joint Military Training (CJMT) not explained.] Additionally, both the Divert Project and the CJMT EISs state that their construction workforces would likely be housed at the Tinian Dynasty Hotel and Casino, which would not appear to support both workforces simultaneously. Based on discussions with the Air Force and Marines, we understand if the Air Force selects the Tinian Alternative North option, it is likely that only one project's elements would be constructed at the airport, however this is not explained to the public in the RDEIS.	The various actions proposed by the Air Force and the Marine Corps each have independent utility; the Air Force's proposal does not rely on the Marine Corps proposal to come to fruition.	Email
R32	Cumulative-CJMT	EPA - K. Johnson	Recommendation: Explain how the Marines and Air Force Proposed Actions at Tinian's airport and seaport would interface.	The various actions proposed by the Air Force and the Marine Corps each have independent utility; the Air Force's proposal does not rely on the Marine Corps proposal to come to fruition.	Email
R33	Cumulative-CJMT	EPA - K. Johnson	[Recommendation:] If there is the possibility that both projects would proceed with construction at Tinian airport, identify the Divert project schedule, if/how it would overlap with the CJMT construction schedule, and how housing needs and utility demands would be accommodated.	The various actions proposed by the Air Force and the Marine Corps each have independent utility; the Air Force's proposal does not rely on the Marine Corps proposal to come to fruition.	Email
R34	Cumulative-General	EPA - K. Johnson	Port Improvements as a Connected Action. The Proposed Action involves the transfer of large amount of fuel and bulk fuel storage at the Ports of Tinian or Saipan. For the Tinian and Hybrid Alternatives, the Port of Tinian would be used, however the RDEIS states that the Port of Tinian is currently in disrepair and has a limited capability to accept fuel	Pier improvements were not included in the Proposed Action. As stated in the Final EIS, the USAF would procure fuel from the existing supply chain that currently serves Tinian. Shallow draft tankers currently provide fuel to Tinian, and the Final EIS states clearly that the extra capacity on the tanker could be	Email

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			shipments at the port (p. 3-113). We are aware that the harbor has no fixed shore-side cranes or lighting, and two finger piers west of the main wharf are in complete disrepair and unusable. The rehabilitation of the Tinian pier appears to be vital to the implementation of this project for the Tinian alternatives. Unless the action can proceed using Tinian Pier in its current deteriorated state, rehabilitation of the pier appears to be a connected action (40 CFR 1508.25(a)1(ii)).	used to fill proposed fuel tanks. Therefore, no pier or harbor improvements are being proposed.	
R35	Proposed Action and Alternatives	EPA - K. Johnson	[Port Improvements as a Connected Action.] Recommendation: Discuss whether the project could proceed without the rehabilitation of the Tinian Pier and, if it could not, evaluate the environmental impacts from rehabilitation of the pier as a connected action in the RFEIS.	The Tinian-related alternatives (Alternatives 2 and 3) have all been developed in such a way as to not require rehabilitation of the Tinian pier. No pier, wharf, or harbor improvement were studied in the Final EIS as they would not be required under the proposed action.	Email
R36	Infrastructure/ Utilities	EPA - K. Johnson	Solid Waste The document presents no definitive proposal for the final disposition of solid waste for the Tinian and Hybrid Alternatives. The RDEIS states only that contractors hired for the various construction projects would be responsible for the removal and disposal of their construction wastes generated on site (p. 4-150) and because there is a lack of municipal solid waste facilities on Tinian, construction debris would have to be collected and transported off the island using commercial solid waste haulers and commercial barges or ships until a permitted municipal solid waste facility is constructed (p. 4-151).	Any contractor with the responsibility of solid waste management or involved in the use, storage, transport, or treatment of hazardous materials would be required to follow all applicable CNMI and Federal regulations, as described in Final EIS Section 4.12.	Email
R37	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] There is no commitment to recycling or composting the waste, as required by Executive Order 13693 and DoD Policy,	This requirement was specifically added to Final EIS Section 4.13 for each alternative.	Email
R38	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] ...and it is not clear if the amount of green waste from the clearing of over 82 acres of Tangatangan Ironwood scrub and forest vegetation on Tinian is included in the construction waste totals (p. 4-71).	As described in Final EIS Section 4.13, construction debris is generally composed of clean materials, and most of this waste would be recycled per EO 13693 Planning for Federal Sustainability in the Next Decade and DOD requirements. Additionally, waste from vegetation clearing for construction would be composted as needed.	Email
R39	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] Composting facilities may be an option for the green waste, but that does not appear to have been explored. The Marine Corps is proposing to process all green waste for reuse on island, e.g., as mulch and compost for their future actions on Tinian.	As described in Final EIS Section 4.13, construction debris is generally composed of clean materials, and most of this waste would be recycled per EO 13693 Planning for Federal Sustainability in the Next Decade and DOD requirements. Additionally, waste from vegetation clearing for construction would be composted as needed.	Email
R40	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] There are limitations to the proper disposal of solid waste at nearby landfills. There are no RCRA compliant solid waste landfills on Tinian. The Marpi landfill on Saipan has only one landfill cell in operation and it is full. The Department of the Navy has had discussions with EPA and the CNMI government about utilizing the Marpi landfill for CJMT waste; however, the Marpi landfill would require the opening and construction of new cells for which the CNMI government does not have complete funding.	Comment noted.	Email

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R41	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] The landfills on Guam also have limitations. Layon is the only permitted landfill on Guam and does not accept either green waste or construction and demolition (C&D) debris, including asbestos containing material that could be part of the C&D debris. The compliance status of the Navy Base landfill on Guam, which is not currently permitted, is uncertain, and the Anderson Air Force Base landfill is undergoing closure.	Comment noted.	Email
R42	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] Recommendation: Identify how the management of solid waste will occur under the Proposed Action and disclose the impacts in the RFEIS.	As described in Final EIS Section 4.13, construction debris is generally composed of clean materials, and most of this waste would be recycled per EO 13693 Planning for Federal Sustainability in the Next Decade and DOD requirements. Additionally, waste from vegetation clearing for construction would be composted, as practicable. Waste produced during planned exercises is expected to be minimal. If there is no capacity in local repositories, the USAF would remove solid waste from the island (Saipan or Tinian) and dispose of it properly.	Email
R43	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] Recommendation: If negotiations are underway to secure a disposal site, provide an update in the RFEIS.	It is anticipated that such negotiations would commence after the USAF makes a decision as to the alternative to be implemented. The USAF decision will be based on the Final EIS and identified in the Record of Decision (ROD).	Email
R44	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] Recommendation: Construction of the project should not commence unless there is a compliant landfill capable of accepting project waste.	Comment noted.	Email
R45	Infrastructure/ Utilities	EPA - K. Johnson	[Solid Waste] Recommendation: The RFEIS should include a commitment to follow DoD's Integrated (Non-Hazardous) Solid Waste Management Policy. We recommend a solid waste diversion plan and a green waste management plan be developed, and that the Air Force process all green waste for reuse/composting on the island where it is generated.	Comment noted. As described in Final EIS Section 4.13, construction debris is generally composed of clean materials, and most of this waste would be recycled per EO 13693 Planning for Federal Sustainability in the Next Decade and DOD requirements. Additionally, waste from vegetation clearing for construction would be composted, as practicable. Waste produced during planned exercises is expected to be minimal.	Email
R46	Hazardous Materials	EPA - K. Johnson	Hazardous Waste The RDEIS provides no information regarding the final disposition of hazardous waste generated from the project, stating only that storage, handling, and disposal would be the responsibility of the contractors (p. 4-124, 4-129). We are not aware of hazardous waste haulers on Tinian. Guam does not have any permitted commercial or military hazardous waste disposal facilities.	The USAF cannot predict the final disposition of all wastes generated, particularly when a contractor supports this function. However, the USAF can and will ensure all applicable requirements for storage, transfer, or treatment of hazardous waste are followed, as described in Final EIS Section 4.12.	Email
R47	Hazardous Materials	EPA - K. Johnson	[Hazardous Waste] For temporary storage on Guam, it is our understanding that the Air Force would need to obtain written approval from the Guam EPA Administrator prior to transport to Guam.	Comment noted. All applicable transfer, storage, or treatment requirements would be followed.	Email
R48	Hazardous Materials	EPA - K. Johnson	[Hazardous Waste] The RDEIS states that the Proposed Action would develop and implement a Spill Prevention, Control and Countermeasures (SPCC) Plan (p. 4-58). Based on the proposed volumes and activities, Facility Response Planning ⁸ is also applicable. Both the SPCC Plan and Facility Response Plan (FRP) would need to be in place and fully certified by a professional engineer	The USAF would implement a SPCC Plan Section 311(j)(1)(C) of the CWA as amended by the Oil Pollution Act of 1990) for the operation of all fuels storage facilities and fuels infrastructure to eliminate the potential for spills. The SPCC Plan will be prepared, maintained, and implemented and provides for the prevention, control, counteract, and reporting of all spills. The plan will	Email

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			and ready for full implementation at the time fuel is first placed into any tankage. [Hazardous Waste] Recommendations: Clarify how hazardous wastes would be managed, stored and disposed in accordance with the Resource Conservation and Recovery Act (RCRA). ⁸ See http://www2.epa.gov/oil-spills-prevention-and-preparedness-regulations/facility-response-plan-frp-overview	provide measures to prevent, and to the maximum extent practicable, to remove a worst case discharge from the facility. The plan will be certified by an appropriately licensed or certified technical authority ensuring that the plan considers applicable industry standards for spill prevention and environmental protection that the plan is prepared in accordance with good engineering practice, and is adequate for the facility. Furthermore, per Oil Pollution Act of 1990 which amended the Clean Water Act, the USAF is required to have a Facility Response Plan (FRP) for accidental "catastrophic" spill. The FRP pulls the resources of all industrial activities (the Tinian International Airport, for example) and the US Coast Guard together to handle an incident of the scale beyond any single individual facility's capability to respond. Information is provided in Final EIS Section 4.13 regarding the SPCC and FRPs.	
R49	Hazardous Materials	EPA - K. Johnson	[Hazardous Waste] Recommendations: ...and how transportation of hazardous materials would meet the requirements of RCRA and the U.S. DOT, as appropriate.	Any contractor doing work involving the use, storage, transport, or treatment of hazardous materials would be required to follow all applicable CNMI and Federal regulation, as described in Final EIS Section 4.12.	Email
R50	Hazardous Materials	EPA - K. Johnson	[Hazardous Waste] Recommendations: Identify the requirement for FRP in the RFEIS.	This requirement was specifically added to Final EIS Section 4.12.	Email
R51	Administrative	EPA - K. Johnson	[Hazardous Waste] Recommendations: EPA is available to provide technical support if needed to ensure SPCC and FRP requirements are met. Please contact Pete Reich of EPA Region 9's Oil Program at 415-972-3052 with any questions. EPA would inspect the operations for full compliance shortly after startup.	Comment noted. As described in Final EIS Section 4.12., the USAF will develop all SPCC and FRP in compliance with 40CFR part 112.7 and 40 CFR parts 112.20 and 112.21, respectively. The USAF will reach out to EPA for additional assistance, as needed.	Email
R52	Proposed Action and Alternatives	EPA - K. Johnson	Use of Fighter Aircraft evaluated in other NEPA documents. The project description in the RDEIS has been changed to eliminate fighter aircraft from proposed exercises (p. 2-2). However, the RDEIS states that a limited number of scheduled joint military training activities and exercises would occur, as described and analyzed in the Mariana Islands Range Complex (MIRC) and the Mariana Islands Testing and Training EISs (p. 2-9), and that the analysis in this EIS is limited to the shift of some of the aircraft already operating during these exercises to the airport or airports proposed for improvements (p. 2-8). While the Air Force has confirmed that no fighter jets are included in this action ⁹ , the above statement seems to suggest that fighter aircraft take-offs and landings evaluated in other EISs could utilize the improved airports on more than an emergency basis. The RDEIS states that while the analysis is based on the KC-135, the precise mixture of aircraft during exercises could vary depending upon mission requirements (p. 2-7). ⁹ Teleconference between Karen Vitulano, USEPA, and Mark Petersen and other personnel, USAF, November 18, 2015	The following text: "precise mixture of aircraft during exercises could vary", refers to aircraft similar to the KC-135 (i.e. logistics type aircraft with noise profiles similar to the KC-135), not fighter jets.	Email
R53	Noise	EPA - K. Johnson	[Use of Fighter Aircraft evaluated in other NEPA documents] Table 4.1-4 indicates that F-16's are part of Alternative 1 at Saipan International Airport (p. 4-5), however the Air Force informed us that this was a data artifact from an emergency landing of one F-16 in 2012.	Comment noted. The F-16 fighter was part of the background data due to the recorded emergency landing in 2012. This does not mean the Divert EIS proposes to operate fighter jets under the proposed action. Fighter jets are not included under the proposed action description.	Email

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R54	Proposed Action and Alternatives	EPA - K. Johnson	[Use of Fighter Aircraft evaluated in other NEPA documents] Recommendation: Clarify in the Revised FEIS whether the airport improvements proposed under the proposed action could enable their use by fighter jets, the impacts of which were evaluated in other NEPA documents. If the proposed action would enable new landings by fighter jets at the improved airports for Divert, their impacts should be evaluated and disclosed in this Revised EIS.	Fighter jets are not part of the Divert proposed action. However, under the No Action alternative fighters jets already have the ability to make emergency landings, which is a rare event. The existing fighter jets would maintain the ability to make emergency landings whether or not the Divert proposed action is implemented.	Email
S1	Administrative	CPA- M. Lizama	The Commonwealth Ports Authority hereby submits its comments on the Revised Draft Environmental Impact Statement for Divert Activities and Exercises ("RDEIS").	Comment noted.	Website
S10	Administrative	CPA- M. Lizama	[[CPA submitted the CPA Board Resolution No. 14-02 Regarding the U.S. Air Force Divert Activities and Exercises Initiative and Proposed Construction Project in the Northern Mariana Islands, signed 29 August 2014.]]	Submittal of the CPA Board Resolution is noted. The USAF carried forward all 3 alternatives presented in the Revised Draft EIS for analysis in the Final EIS as reasonable alternatives, in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The CPA's submittal will be part of the Final EIS administrative record.	
S2	Against-General	CPA- M. Lizama	The Authority remains opposed to siting Divert activities on Saipan. The Saipan International Airport is the front door to the CNMI's tourism economy - the lifeblood of the overall CNMI economy - and the Authority cannot responsibly risk even minor or temporary negative impacts to its operation. Further, the Authority is generally opposed to the siting of Divert activities at the Tinian International Airport rather than at North Field in the MLA.	<p>Comment noted. The USAF has carried forward all 3 alternatives presented in the Revised Draft EIS for analysis in the Final EIS as reasonable alternatives, in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The CPA's submittal will be part of the Final EIS administrative record.</p> <p>The USAF developed revisions to the proposed infrastructure at Saipan International Airport in coordination with the CPA and FAA, specifically to consider impacts to future development, including tourism and future operations. The USAF is required to allow priority to civilian flights in accordance with FAA regulations and DOD and CNMI agreements as to airport usage. Flights would be deconflicted by the FAA regulated air traffic control tower at Saipan. All impacts related on tourism, recreation, socioeconomics, and airport operations are presented in the Final EIS.</p> <p>Additionally, as described and analyzed in the Revised Draft EIS and the Final EIS Section 2.3, PACAF considered several additional planning options to meet the purpose of and need for the Proposed Action, in response to comments on the 2012 Draft EIS. Additional options include evaluation of former World War II airfields and closed military airfields on Guam and in CNMI. Specifically, the USAF considered North Field and the portions of West Field located within the Military Lease Area. While North Field does meet several of the selection standards, it does not provide existing airport infrastructure that the USAF can expand upon. Other than the deteriorated runways, no infrastructure (e.g., such as usable taxiways, Navigational Aids (NAVAIDS), lighting, or existing fuel infrastructure) remains at these facilities. In summary, North Field lacks any infrastructure upon which to build the additional divert capabilities and would require the development of an entirely new functional USAF airfield and installation beyond the scope of the Proposed Action analyzed in the Final EIS. The purpose and need of the Proposed Action was to only use facilities on as-needed basis and does not include a permanent full-time beddown or installation location. The purpose</p>	Website

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				also does not include the construction of an entirely new airfield, or the full-time use of the facilities by the USAF. By locating the facilities at an existing operating airfield or airport, the location itself provides a level of physical security and maintenance unavailable at closed or abandoned facilities. In addition, the development of facilities on an existing commercial airport provides the potential for future shared use.	
S3	Proposed Action and Alternatives	CPA-M. Lizama	That being said, I recognize the many compromises that the USAF has included in the RDEIS, many of which resulted from comments generated by the 2012 Draft EIS. The Authority recognizes these efforts as well, and sees them as a substantial step towards a program that would be temporary, reasonable, low impact, and conducted in cooperation with the Authority	Comment noted.	Website
S4	Cumulative-CJMT	CPA-M. Lizama	However, the Authority has concerns about the possibility of Divert opening the door to greater military operations on Tinian via MARFORPAC and the Department of the Navy's CNMI Joint Military Trainings proposal for Tinian. The CJMT is not in the best interests of the Authority. These concerns must be addressed more adequately than they are in the RDEIS.	As described in the Purpose and Need of the Final EIS Section 1.3, the purpose of the Divert proposal was to establish Divert capabilities for the USAF. The CJMT and Divert proposals are independent actions being conducted by two separate DOD agencies. While there is continuous coordination regarding the proposals between CJMT and Divert, each action is independent and would move forward without the other. Other military branches could participate in the Divert exercises ONLY if those branches have conducted NEPA for their own exercises, or if their total number of operations combined with the USAF's operations does not exceed 720- as described in the Final EIS. The Divert airfield could provide a location for future exercises, as described in the Final EIS. Any exercises beyond those presented in the document would require additional NEPA analysis.	Website
S5	Proposed Action and Alternatives	CPA-M. Lizama	The RDEIS also does not adequately address the North Field alternative, makes incorrect assumptions about the availability of Port of Tinian property, and proposes no compensation to the Authority for the cost shift it would bear if Divert were implemented at an Authority airport.	North Field was dismissed from detailed analysis in the Final EIS because it did not adequately meet the purpose and need. An action at North Field would require substantially more infrastructure and development. It would essentially lead to the construction of a new USAF installation or "base," which is far beyond the scope of what the Divert proposal requires. Any cost for utilizing CPA facilities would be negotiated after a decision has been made.	
S6	Administrative	CPA-M. Lizama	The Authority has worked in the past with military activities on Tinian and will do so in the future. The Authority will continue to do its part to work with the USAF to see if an accord can be reached that fulfills both the Authority's concerns and the USAF's Divert need. The Authority's specific comments on the RDEIS are enclosed.	Comment noted.	Website
S7	Administrative	CPA-M. Lizama	[[CPA submitted copies of two letters between CPA and ACG regarding the ACG request to lease CPA land on Tinian. Lease requests include the following properties: the southwestern portion of Airport Expansion, West Field, Lot No. 272 T 10 ;the southwestern portion of West Tinian Airport, Lot No. 272 T 09; and title and interest in LOT 272 T 03 and LOT 272 T 04.]]	Submittal of letters/lease requests is noted. The USAF has carried forward all 3 alternatives presented in the Revised Draft EIS for analysis in the Final EIS as reasonable alternatives, in accordance the rules that guide EIS preparation in 40 CFR 1500-1508. The CPA's comment will be part of the Final EIS administrative record.	Website

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S8	Administrative	CPA- M. Lizama	[[CPA submitted a copy of the March 2013 CPA's Military Exercise Ground Operations Plan and Implementation Plan for Saipan, Tinian, and Rota Airports.]]	Submittal of the CPA's Military Exercise Ground Operations Plan and Implementation Plan was noted. The USAF will review the plan.	
S9	Administrative	CPA- M. Lizama	[[CPA submitted their comments on the CJMT Draft EIS]]	The CJMT comments are noted and will be part of the Final EIS administrative record.	
T1	Translation	Josh Castro	Please provide ALL written material in Chamorro and Carolinian so our elders and others who might not fully speak and understand English can understand.	Comment noted. A Chamorro and Carolinian translator was available at all Divert public meetings (2011 scoping meetings, 2012 public hearings, July 2015 cultural resources meetings, November 2015 Revised Draft EIS public meetings.) Questions could be asked and answered in either Chamorro or Carolinian at all meetings. Additionally, it should be noted that all CNMI newspapers and government official materials are produced in English.	Saipan Public Meeting
T2	Public Meetings	Josh Castro	And please MORE HEARINGS!!! It'll help everyone understand.	Comment noted. No additional public meetings are anticipated for the Divert EIS. The USAF held public meetings, although not required, for the Revised DEIS to provide additional info to the public about the Divert EIS process. The meetings were held in addition to cultural resources-related public meetings that were held in July, Public Hearings that were held in 2012, and public scoping meetings held in 2011.	Saipan Public Meeting
U1	Cultural Resources	Sam McPhetres	[[Sam McPhetres provided observations, which included photo documentation, regarding the history of the Marianas with respect to the Divert proposal.]]	Submittal of historical documentation and observations is noted and have been reviewed in context of the Divert proposal.	

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