DRAFT

KC-46A THIRD MAIN OPERATING BASE (MOB 3) BEDDOWN ENVIRONMENTAL IMPACT STATEMENT (EIS)

EXECUTIVE SUMMARY

Prepared for:
Air Force Reserve Command
Air Force Civil Engineer Center
Air Mobility Command
United States Air Force

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This document is the Executive Summary (ES) of the Draft Environmental Impact Statement (EIS) for the KC-46A Third Main Operating Base (MOB 3) Beddown. The entire Draft EIS is contained on the Compact Disk (CD) in the pocket below. For your convenience, a list of the Draft EIS acronyms is on the last page.

To view the Draft EIS on CD, you will need Adobe Acrobat ® Reader. If you do not already have Adobe Acrobat ® Reader, you can download it at www.adobe.com.

- Insert the CD into your computer's CD drive and double-click on the file in the CD directory.
- Either scroll through the document or click on a heading in the Table of Contents and it will take you to that section of the Draft EIS.

The CD files are read-only, which means that you can view and/or print them. A printed copy of the Draft EIS for the KC-46A MOB 3 Beddown, is available at public libraries in Peru, Indiana; Goldsboro, North Carolina; Oklahoma City, Oklahoma; and Chicopee, Massachusetts. The Draft EIS is also available online at http://www.kc-46a-beddown.com.

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EXECUTIVE SUMMARY

This Executive Summary (ES) is designed to direct the reader to the KC-46A Third Main Operating Base (MOB 3) Environmental Impact Statement (EIS). A CD containing the complete Draft EIS is provided on the inside front cover of this ES.

ES 1.0 PROPOSED ACTION OVERVIEW

The potential environmental consequences of the U.S. Air Force (USAF) intent to beddown the KC-46A MOB 3 mission at USAF installations in the continental United States (CONUS) where the Air Force Reserve Command (AFRC) leads a Mobility Air Force mission are evaluated in the Draft EIS. The USAF has selected the KC-46A as the newest aerial refueling aircraft to replace a portion of the aging tanker fleet.

The Draft EIS has been prepared to provide the decision maker (Secretary of the Air Force) and the public the information required to understand the potential environmental impacts of the decisions that may be made regarding beddown of the proposed MOB 3 mission. This ES is designed to provide an overview of the requirements for and potential environmental impacts of the basing of the MOB 3 mission at each of the alternative bases. This ES is organized in a manner similar to the EIS to assist the reader in locating the supporting details and comprehensive evaluation provided in the EIS.

Four alternative bases were evaluated for the proposed MOB 3 mission (see Figure ES-1).

- MOB 3 Alternative Bases
  - Grissom Air Reserve Base (ARB), Indiana
  - Seymour Johnson Air Force Base (AFB), North Carolina
  - Tinker AFB, Oklahoma
  - Westover ARB, Massachusetts

The Strategic Basing Process resulted in the identification of Seymour Johnson AFB in North Carolina as the preferred alternative and Grissom ARB in Indiana, Tinker AFB in Oklahoma, and Westover ARB in Massachusetts as reasonable alternatives for the proposed MOB 3 mission.

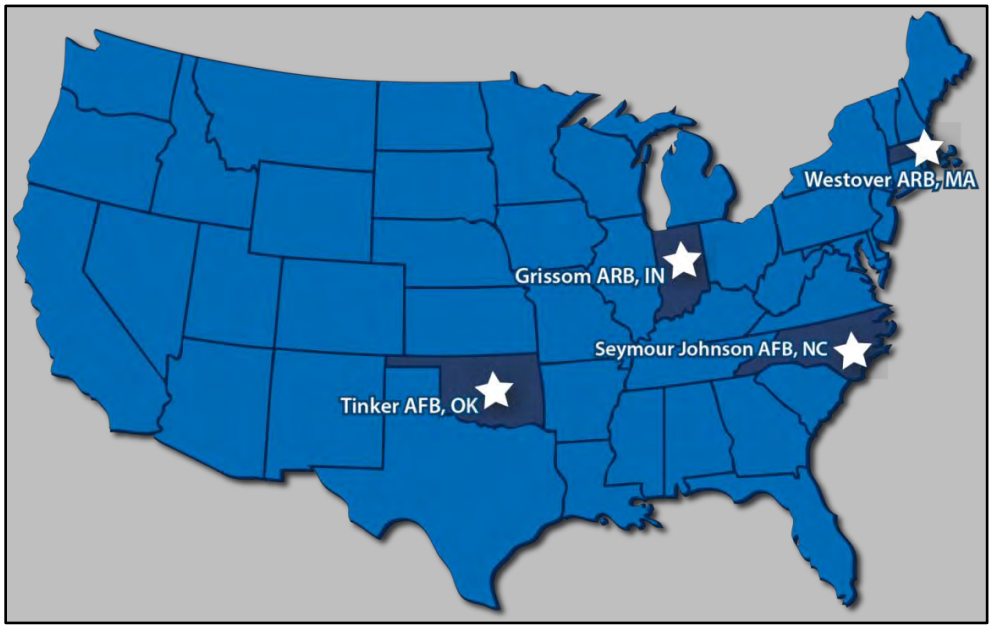

Figure ES-1. MOB 3 Alternative Basing Locations

The proposed MOB 3 mission would include the basing of 12 Primary Aerospace Vehicles Authorized (PAA), facilities and infrastructure, and manpower.

ES 1.1 PURPOSE AND NEED FOR THE ACTION

The purpose of the MOB 3 beddown is to provide a fully capable, combat operational AFRC and Air Mobility Command (AMC) KC-46A air refueling squadron to accomplish aerial refueling and related missions.

The mission-ready KC-46A squadron will allow immediate and effective employment in exercises, peace-keeping operations, contingencies, and combat. Basing and operating the KC-46A will allow the USAF to maintain combat capability and mission readiness as U.S. military resources become increasingly committed to missions throughout the world.

The KC-46A MOB 3 beddown is needed to support the recapitalization of the USAF's aging refueling aircraft fleet. The USAF needs bases to accomplish the required training and to field a fully operational force. A USAF base for the MOB 3 mission is needed to achieve a high state of operational mission readiness.

ES 1.2 PUBLIC AND AGENCY INVOLVEMENT

The public scoping period for the EIS began on 23 March 2016 with publication of the Notice of Intent in the *Federal Register*. During the weeks that followed, notification letters were mailed to Federal, state, and local agencies; elected officials; federally recognized tribes (tribes)[1]; nongovernmental organizations; and interested individuals, and four public scoping meetings were held in the communities near the four bases.

[1] Per Department of Defense Instruction (DoDI) 4710.02, *DoD Interactions with Federally-Recognized Tribes*, "tribe" refers to a federally recognized Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges (DoDI 4710.02, Section 3.5).

ES 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The MOB 3 mission involves the basing of 12 KC-46A aircraft in one squadron at a USAF installation within the CONUS where the AFRC leads a Mobility Air Force mission.

The squadron of KC-46A aircraft will require infrastructure, facilities, airfield operations, training activities, personnel, and airspace to support missions. Table ES-1 provides an overview of key elements associated with the KC-46A MOB 3 beddown that have the potential to affect environmental resources at the base or under the regional training airspace.

Table ES-1. Overview of Requirements for the KC-46A MOB 3 Beddown

The proposed MOB 3 beddown involves implementing several related elements at a selected base.

Elements Affecting the Base

- ✓ The beddown of 12 KC-46A aircraft in one squadron in accordance with the aircraft delivery schedule
- ✓ Depending on mission profiles, conduct sorties at each base for pilot, copilot, and inflight refueling operator training/certification, aerial refueling operations, and global reach missions
- ✓ Renovate, construct, and manage facilities and infrastructure necessary to support the mission
- ✓ Implement personnel changes (increases or decreases) at the base to conform to mission requirements

ES 2.1 KC-46A MOB 3 MISSION-SPECIFIC REQUIREMENTS

The basic requirements for the proposed KC-46A MOB 3 beddown include the physical infrastructure, land, airspace, personnel, and water and energy assets needed to support the MOB 3 mission. This section presents the criteria that apply to the MOB 3 siting, facilities for mission and mission support functions, and personnel authorized to execute work related to the mission and flying operations required as part of the MOB 3 mission.

ES 2.1.1 MOB 3 Facility Infrastructure Requirements

The basic allocation and physical requirements necessary to support one squadron of 12 KC-46A include but are not limited to hangars, squadron operations facilities, aircraft maintenance facilities, flight training center (simulators), various storage facilities and parking, and various shops.

A variety of other service-type facilities and infrastructure could be required to support the mission depending on the facilities and infrastructure available at each base. These could include child development centers (CDCs), utilities, roads, taxiways, overruns, dining facilities, a fitness center, Visiting Quarters, and dormitories.

ES 2.1.2 KC-46A MOB 3 Personnel Requirements

Basing of the proposed KC-46A MOB 3 mission would require sufficient personnel to operate and maintain the aircraft and to provide necessary support services. Depending on the location and the current mission, the anticipated increase in full-time personnel would range from 53 to 411 persons.

ES 2.1.3 KC-46A MOB 3 Flight Operations

KC-46A aircrews associated with the MOB 3 mission would complete mission sorties in support of real-world objectives and training sorties to maintain proficiency in the aircraft. The majority of training would occur in flight simulators.

The KC-46A would be operated in existing airspace, and the types of flight operations would mirror existing KC-135 operations. At Westover ARB, local KC-46A operations would be similar to the existing C-5 operations. KC-46A aircrews would use existing air refueling (AR) tracks and fuel jettison areas, when applicable. Flight activities involving refueling training and practice would primarily occur in designated AR tracks.

ES 2.2 PREFERRED AND REASONABLE ALTERNATIVES

The USAF identified Seymour Johnson AFB as the Preferred Alternative. Grissom ARB, Tinker AFB, and Westover ARB were identified as reasonable alternatives. For each of the preferred and reasonable alternatives, a site-specific description of the basing requirements for the beddown and operation of the proposed KC-46A MOB 3 mission is presented. For Seymour Johnson AFB, Tinker AFB, and Grissom ARB, the proposed action would replace the current KC-135 mission. For Westover ARB, the KC-46A mission would add to the existing C-5 mission.

In addition to the preferred and reasonable alternatives, a No Action Alternative is also considered in this EIS in conformance with the Council on Environmental Quality (CEQ) regulations (40 *Code of Federal Regulations [CFR]* 1502.14[d]). The No Action Alternative constitutes the baseline conditions, in which there would be no change in based aircraft at Grissom ARB, Seymour Johnson AFB, or Tinker AFB. At Westover ARB, the C-5 mission would continue; however, the model of C-5 aircraft would change. As part of a previously scheduled program that is not connected to the proposed KC-46A MOB 3 beddown process, all Westover ARB-based C-5B aircraft are being replaced with C-5M aircraft.

ES 2.3 GRISSOM ARB

This section details the specific actions that would occur if Grissom ARB is selected to host the KC-46A MOB 3 mission. The MOB 3 mission would replace the existing KC-135 mission at Grissom ARB.

ES 2.3.1 Facilities and Infrastructure Projects

The projects anticipated to be required to support the proposed MOB 3 mission at Grissom ARB are presented on Figure ES-2. Table ES-2 summarizes the proposed MOB 3-related facility and infrastructure projects by construction category. The proposed redevelopment would take place within the previously disturbed cantonment area of Grissom ARB. Existing flight operations and refueling activities associated with the KC-135 mission would continue during demolition, renovation, and construction activities.

Table ES-2. Facilities and Infrastructure Projects for the MOB 3 Mission at Grissom ARB

Project Type	Area (Square Feet)
Demolition	60,613
Renovation	180,146
New Construction	183,600

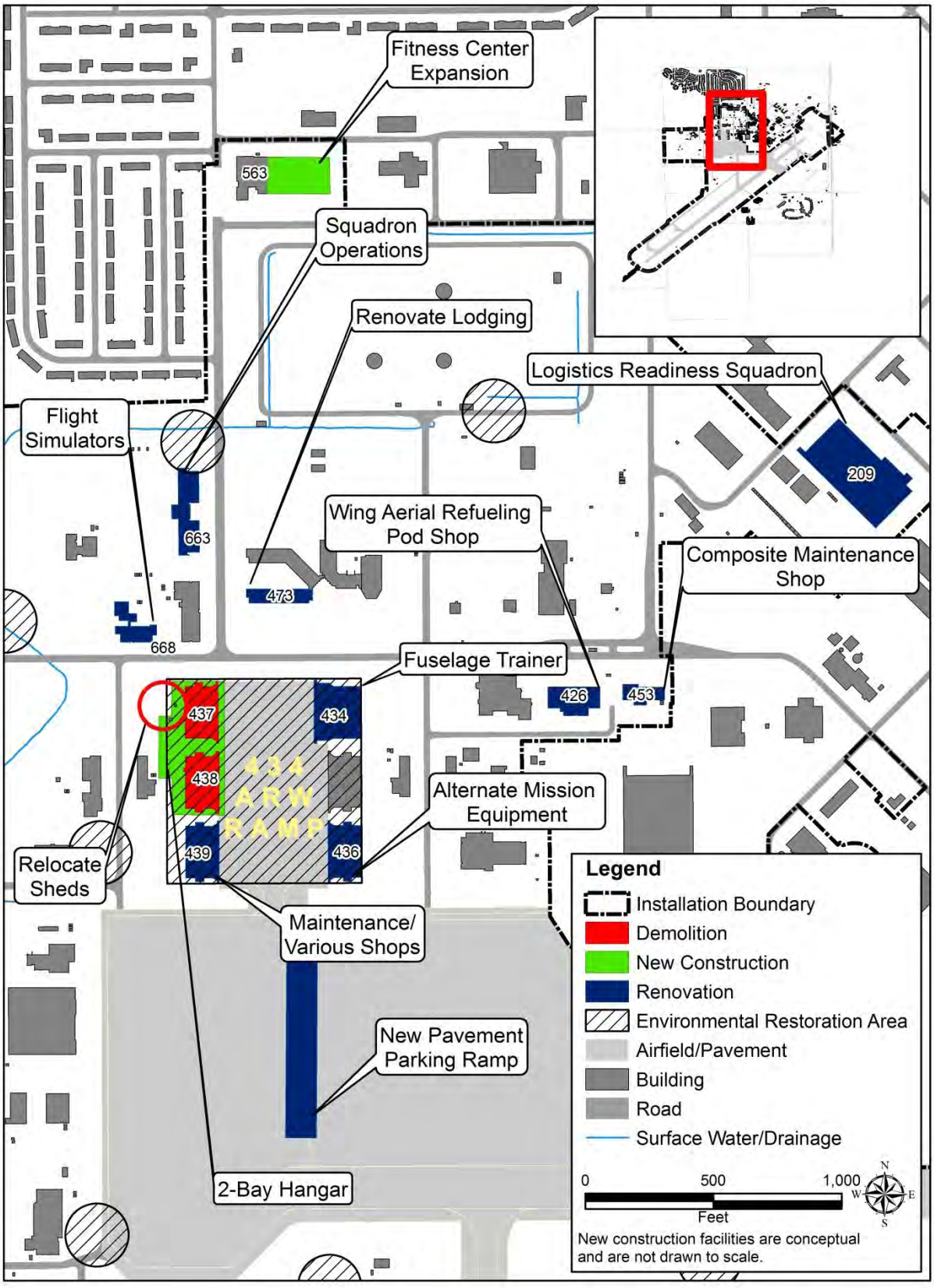

Figure ES-2. Facilities and Infrastructure Projects for the KC-46A MOB 3 Mission at Grissom ARB

ES 2.3.2 Personnel Requirements

Replacement of the KC-135 mission with the proposed MOB 3 mission at Grissom ARB would result in a net increase of 217 full-time, on-base personnel. Additional dependents would be anticipated to accompany full-time personnel associated with the proposed MOB 3 mission.

ES 2.3.3 Flight Operations

Table ES-3 provides a comparison of the existing airfield operations relative to the proposed KC-46A aircraft operations anticipated with implementation of the MOB 3 mission at Grissom ARB. The table shows that the total annual tanker operations at Grissom ARB would decrease from 8,800 per year to 7,310, resulting in an approximate 17 percent decrease in annual tanker aircraft operations.

Table ES-3. Grissom ARB Baseline and Projected MOB 3 Mission End-State Airfield Operations

Aircraft[a]	Baseline Totals	Projected Totals
	Annual Operations	Annual Operation
KC-135[b]	8,800	0
Transient	2,450	2,450
Civilian	4,618	4,618
KC-46A[b]	0	7,310
Total	**15,868**	**14,378**

[a] An operation is the accomplishment of a single maneuver, such as a takeoff/departure, an arrival/landing, or half of an additional approach/closed pattern. Data are based on information provided by the 434th Air Refueling Wing (ARW).
[b] The annual total represents a combination of operations resulting from local training sorties and mission sorties.

ES 2.4 SEYMOUR JOHNSON AFB

The USAF is evaluating Seymour Johnson AFB as the preferred alternative for the MOB 3 mission. The MOB 3 mission would replace the existing KC-135 aerial refueling mission at Seymour Johnson AFB and result in a net decrease of four PAA. The 4th Fighter Wing (FW) operations at Seymour Johnson AFB would continue unchanged and existing KC-135 training and refueling operations would continue through the construction phase.

ES 2.4.1 Facilities and Infrastructure Projects

The projects anticipated to be required to support the proposed MOB 3 mission at Seymour Johnson AFB are presented on Figure ES-3. Table ES-4 summarizes the proposed MOB 3-related projects by construction category. The proposed redevelopment would take place within the previously disturbed cantonment area of Seymour Johnson AFB. Existing flight operations and refueling activities associated with the KC-135 mission would continue during demolition, renovation, and construction activities.

Table ES-4. Facilities and Infrastructure Projects for the MOB 3 Mission at Seymour Johnson AFB

Project Type	Area (Square Feet)
Demolition	77,706
Renovation	142,052
New Construction	182,646

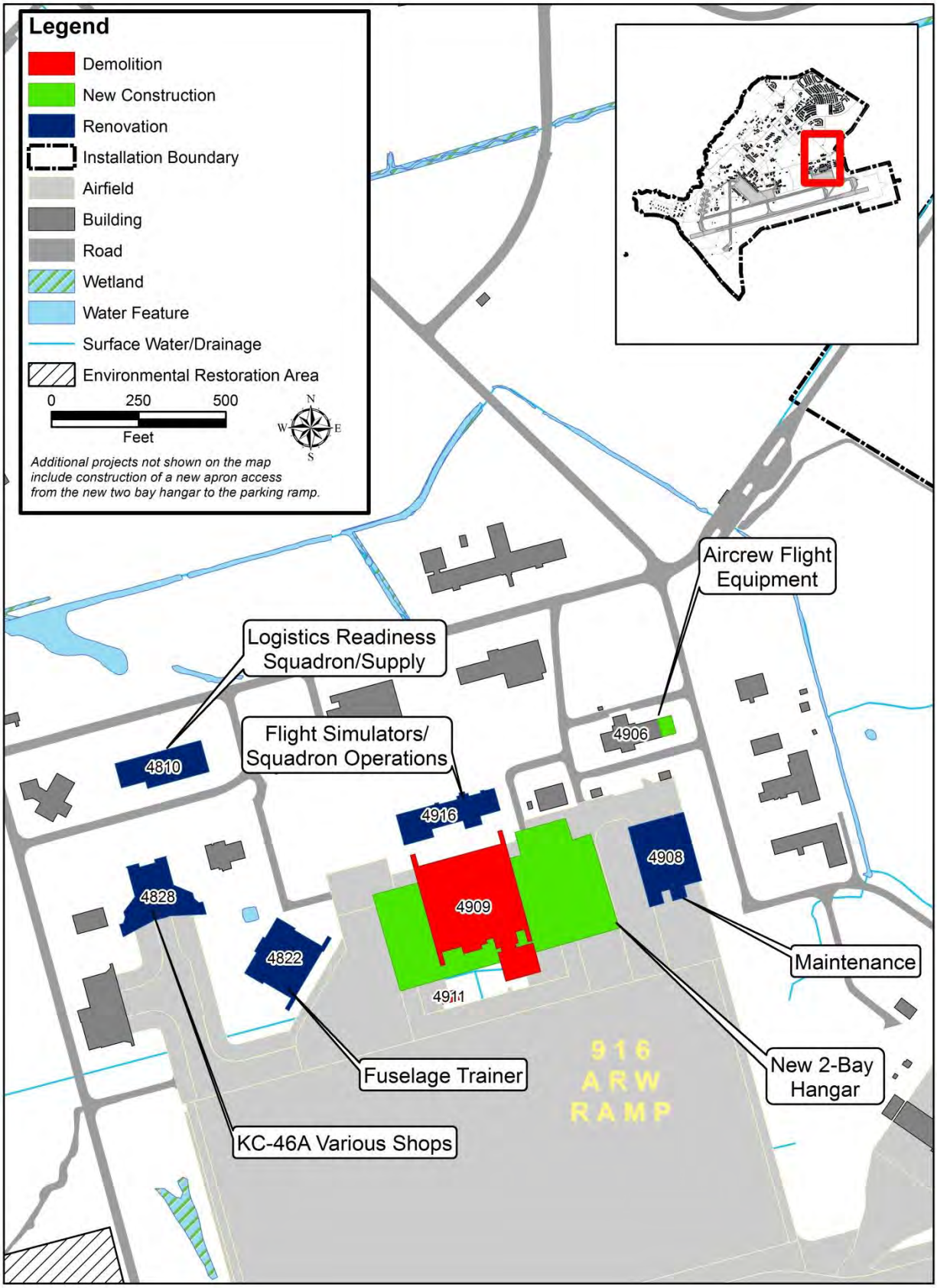

Figure ES-3. Facilities and Infrastructure Projects for the KC-46A MOB 3 Mission at Seymour Johnson AFB

ES 2.4.2 Personnel Requirements

Replacement of the KC-135 mission with the proposed MOB 3 mission at Seymour Johnson AFB would result in a net increase of 53 full-time, on-base personnel. Additional dependents would be anticipated to accompany full-time personnel associated with the proposed MOB 3 mission.

ES 2.4.3 Flight Operations

Table ES-5 provides a comparison of the existing airfield operations relative to the proposed KC-46A operations anticipated with implementation of the MOB 3 mission at Seymour Johnson AFB. The table shows that the total annual tanker operations at Seymour Johnson AFB would increase from 2,568 per year to 4,314, resulting in an approximate 68 percent increase in annual tanker operations.

Table ES-5. Seymour Johnson AFB Baseline and Projected MOB 3 Mission End-State Airfield Operations

Aircraft[a]	Baseline Totals	Projected Totals
	Annual Operations	Annual Operations
KC-135 [b]	2,568	0
F-15E[b]	55,800	55,800
Transient	942	942
KC-46A[b]	0	4,314[b]
Total	**59,310**	**61,056**

[a] An operation is the accomplishment of a single maneuver, such as a takeoff/departure, an arrival/landing, or half of an additional approach/closed pattern. Data are based on information provided by the 4 FW and 916 ARW.

[b] The annual total represents a combination of operations resulting from local training sorties and mission sorties.

The Kinston Regional Jetport is currently used by KC-135 aircrews to conduct off-station training. KC-46A aircrews would continue to use the Kinston Regional Jetport as an auxiliary airfield to practice off-station approaches and would conduct up to 1,623 airfield operations per year at that location.

ES 2.5 TINKER AFB

The USAF is evaluating Tinker AFB as a reasonable alternative for the MOB 3 mission. The proposed MOB 3 mission would replace the existing KC-135 mission at Tinker AFB. Aircraft operations and missions associated with the Oklahoma City Air Logistics Complex, Navy, and Air Force Sustainment Center, as well as other existing missions, would remain unchanged.

ES 2.5.1 Facilities and Infrastructure Projects

The projects anticipated to be required to support the proposed MOB 3 mission at Tinker AFB are presented on Figure ES-4. Table ES-6 summarizes the proposed MOB 3-related projects by construction category. The proposed redevelopment would take place within the previously disturbed cantonment area of Tinker AFB. Existing flight operations and refueling activities associated with the KC-135 mission would continue during demolition, renovation, and construction activities.

Table ES-6. Facilities and Infrastructure Projects for the MOB 3 Mission at Tinker AFB

Project Type	Area (Square Feet)
Demolition	137,999
Renovation	35,000
New Construction	324,500

ES 2.5.2 Personnel Requirements

Replacement of the KC-135 mission with the proposed MOB 3 mission at Tinker AFB would result in a net increase of 308 full-time, on-base personnel. Additional dependents would be anticipated to accompany full-time personnel associated with the proposed MOB 3 mission.

ES 2.5.3 Flight Operations

Table ES-7 provides a comparison of the existing airfield operations relative to the proposed KC-46A aircraft operations anticipated with implementation of the MOB 3 mission at Tinker AFB. The table shows that the total annual tanker operations at Tinker AFB would increase from 2,399 per year to 6,440, resulting in an approximate 168 percent increase in annual tanker operations and a 13 percent increase in overall aircraft operations at Tinker AFB.

Table ES-7. Tinker AFB Baseline and Projected MOB 3 End-State Airfield Operations

Aircraft[a]	Baseline Totals	Projected Totals
	Annual Operations	Annual Operations
KC-135[b]	2,399	0
Based Aircraft	18,708	18,708
Depot	6,104	6,104
Transient	4,988	4,988
KC-46A[b]	0	6,440
Total	**32,199**	**36,240**

[a] An operation is the accomplishment of a single maneuver, such as a takeoff/departure, an arrival/landing, or half of an additional approach/closed pattern. Data are based on information provided by the 72nd Air Base Wing (ABW) and the 507 ARW.

[b] The annual total represents a combination of operations resulting from local training sorties and mission sorties.

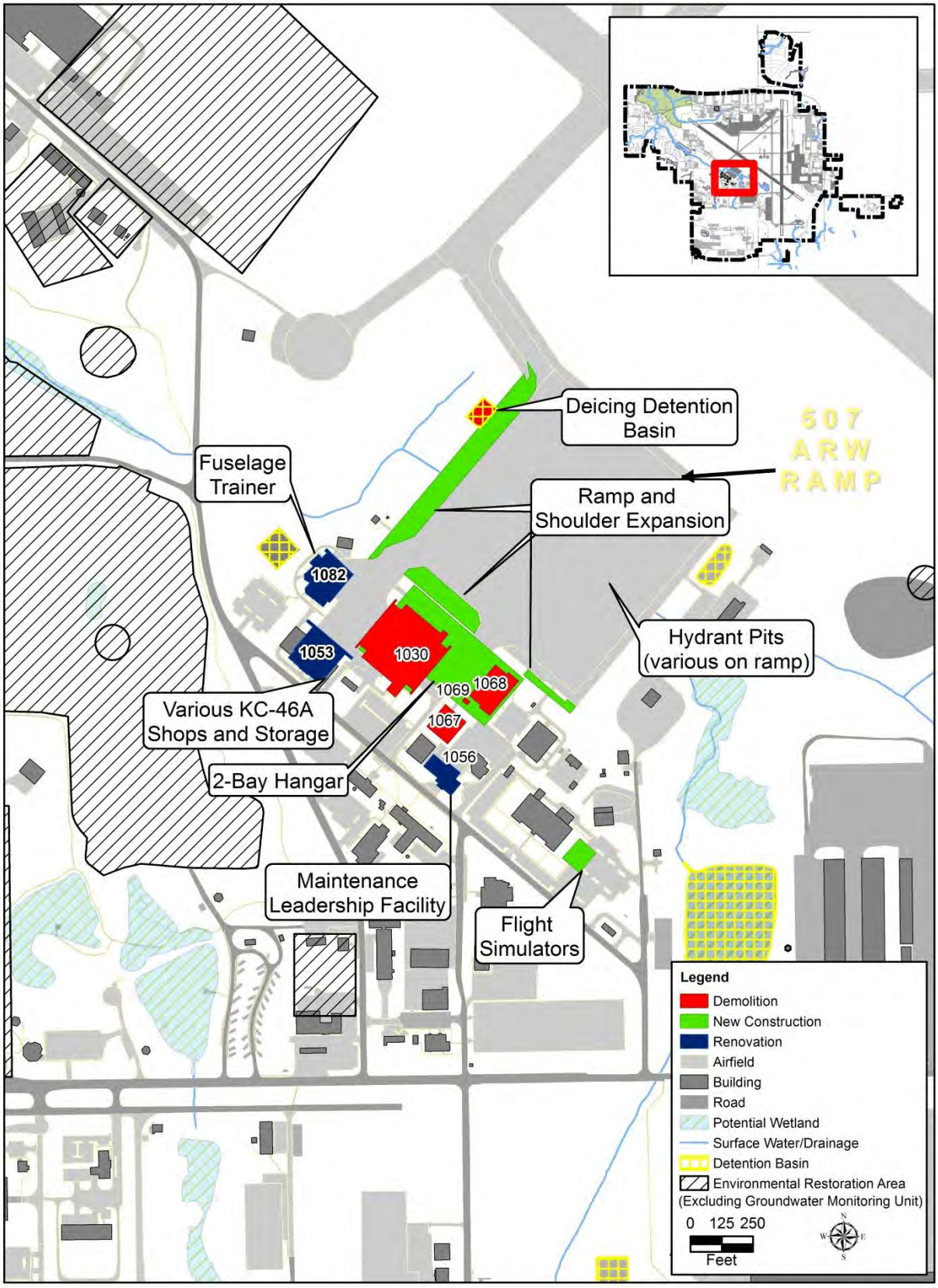

Figure ES-4. Facilities and Infrastructure Projects for the KC-46A MOB 3 Mission at Tinker AFB

ES 2.6 WESTOVER ARB

The USAF is evaluating Westover ARB as a reasonable alternative for the MOB 3 mission. The proposed MOB 3 mission would be additive to the existing C-5 mission at Westover ARB.

ES 2.6.1 Facilities and Infrastructure Projects

Table ES-8 summarizes the proposed MOB 3-related projects by construction category. Figure ES-5 presents the proposed locations for the MOB 3-related projects on Westover ARB. Existing flight operations and refueling activities associated with the C-5 mission would need to continue during demolition and reconstruction activities. The proposed redevelopment would take place within the previously disturbed cantonment area of Westover ARB. Existing flight operations and refueling activities associated with the KC-135 mission would continue during demolition, renovation, and construction activities.

Table ES-8. Facilities and Infrastructure Projects for the MOB 3 Mission at Westover ARB

Project Type	Area (Square Feet)
Demolition	100,341
Renovation	986,164
New Construction	496,459

ES 2.6.2 Personnel Requirements

The addition of the proposed KC-46A mission at Westover ARB AFB would result in a net increase of 411 full-time, on-base personnel. Additional dependents would be anticipated to accompany full-time personnel associated with the proposed MOB 3 mission.

ES 2.6.3 Flight Operations

Table ES-9 provides a comparison of the existing airfield operations relative to the proposed KC-46A aircraft operations anticipated with implementation of the proposed MOB 3 mission at Westover ARB. The table shows that the total annual tanker operations at Westover ARB would increase from 0 per year to 7,032. Total aircraft operations at Westover ARB would increase from 17,011 to 24,043 resulting in a 41 percent increase in overall aircraft operations at Westover AFB.

Table ES-9. Westover ARB Baseline and Projected MOB 3 End-State Airfield Operations

Aircraft[a]	Baseline Totals	Projected Totals
	Annual Operations	Annual Operations
C-5 [b]	1,724	1,724
Transient	8,243	8,243
Civilian	7,044	7,044
KC-46A[b]	0	7,032
Total	**17,011**	**24,043**

[a] An operation is the accomplishment of a single maneuver, such as a takeoff/departure, an arrival/landing, or half of an additional approach/closed pattern. Data are based on information provided by the 439th Airlift Wing (AW).

[b] The annual total represents a combination of operations resulting from local training sorties and mission sorties.

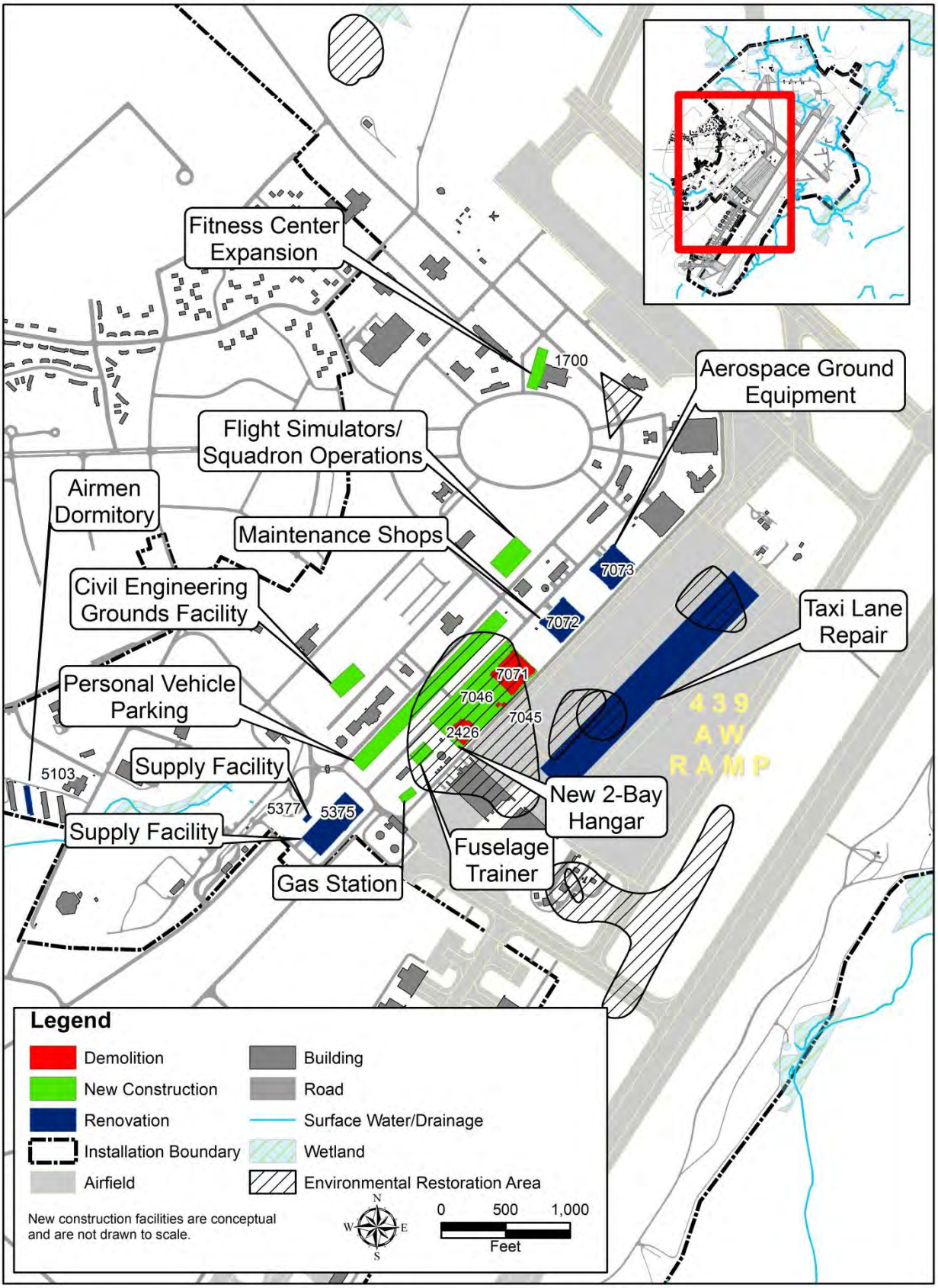

Figure ES-5. Facilities and Infrastructure Projects for the KC-46A MOB 3 Mission at Westover ARB

ES 2.7 NO ACTION ALTERNATIVE

Section 1502.14(d) of the National Environmental Policy Act (NEPA) requires the analysis of a No Action Alternative. Analysis of a No Action Alternative provides a benchmark, enabling decision makers to compare the magnitude of the environmental effects to the proposed action or alternatives. No action means that an action would not take place, and the resulting environmental effects from taking no action would be compared with the effects of allowing the proposed activity to go forward.

At Grissom ARB, Seymour Johnson AFB, and Tinker AFB, the No Action Alternative for this Draft EIS reflects the *status quo* (i.e., the KC-46A MOB 3 beddown would not occur). No KC-46A aircraft would arrive, and all existing aircraft would remain in place. No construction, renovation, or demolition of any structure or other infrastructure would occur. No KC-46A personnel changes would occur and existing flight operations would remain unchanged.

At Westover ARB, the No Action Alternative includes the complete conversion of the C-5B fleet to the C-5M aircraft, which is currently ongoing as a separate action. No KC-46A aircraft would arrive and no construction, renovation, or demolition of any structure or other infrastructure would occur. No KC-46A personnel changes would occur and existing flight operations would remain unchanged.

Evaluation of the No Action Alternative compares the effects of implementing the KC-46A MOB 3 beddown with the effects of the No Action Alternative at each base and for each resource area.

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ES 3.0 BASE-AFFECTED ENVIRONMENT

The base-affected environment for each resource area at each base is not included in this ES. Please refer to Chapter 3, Sections 3.1 through 3.4 of the EIS, for the base-affected environment at each of the four bases.

ES 4.0 ENVIRONMENTAL CONSEQUENCES

This section summarizes the potential environmental consequences at each base, as presented in Chapter 4 of the EIS. The nature of the impact is determined by the conditions of the environment existing before implementation of any of the alternatives (i.e., baseline conditions and the No Action Alternative). The geographic scope of potential consequences, known as a region of influence (ROI), is defined as the area of the base affected by aircraft operations and infrastructure upgrades. For some resources (such as noise, air quality, and socioeconomics), the ROI extends into surrounding communities unique to that specific resource area.

ES 4.1 GRISSOM ARB

ES 4.1.1 Acoustic Environment

The number of off-base acres affected by noise levels greater than 65 decibels (dB) A-weighted day-night average sound level (L_{Adn}) would decrease by 21 acres. It is estimated that no off-base residents would be affected by noise levels greater than 65 dB L_{Adn} (Figure ES-6). No significant impacts to the acoustic environment would result from implementation of the proposed MOB 3 mission.

ES 4.1.2 Air Quality

The National Ambient Air Quality Standards (NAAQS) used to regulate air quality for six pollutants and the impact threshold values for the air quality analysis are described in EIS Volume II, Appendix B, Section B.2.

Emissions from the proposed KC-46A MOB 3 operations would not exceed Prevention of Significant Deterioration (PSD) thresholds for any of the NAAQS pollutants. This criterion is being used only to determine if an impact occurs, as the area is in attainment and neither a PSD analysis or conformity determination is required.

Construction for the proposed MOB 3 mission at Grissom ARB would produce a total of 1,370 metric tons of carbon dioxide equivalent (CO_2e) emissions. Operation of the proposed MOB 3 mission at Grissom ARB would result in a net increase of 2,510 metric tons per year of CO_2e emissions.

No significant impacts to air quality are anticipated. Emissions from construction activities would be below any PSD pollutant threshold of 250 tons per year.

ES 4.1.3 Safety

Implementation of the proposed KC-46A MOB 3 mission is not anticipated to result in any net increase in the safety risks associated with aircraft mishaps or any increase in the risks of occurrence of those mishaps. No significant safety impacts would occur related to bird/wildlife-aircraft strike hazard issues. The USAF does not anticipate any significant safety impacts as a result of construction, demolition, or renovation if all applicable Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) and Occupational Safety and Health Administration (OSHA) requirements are implemented.

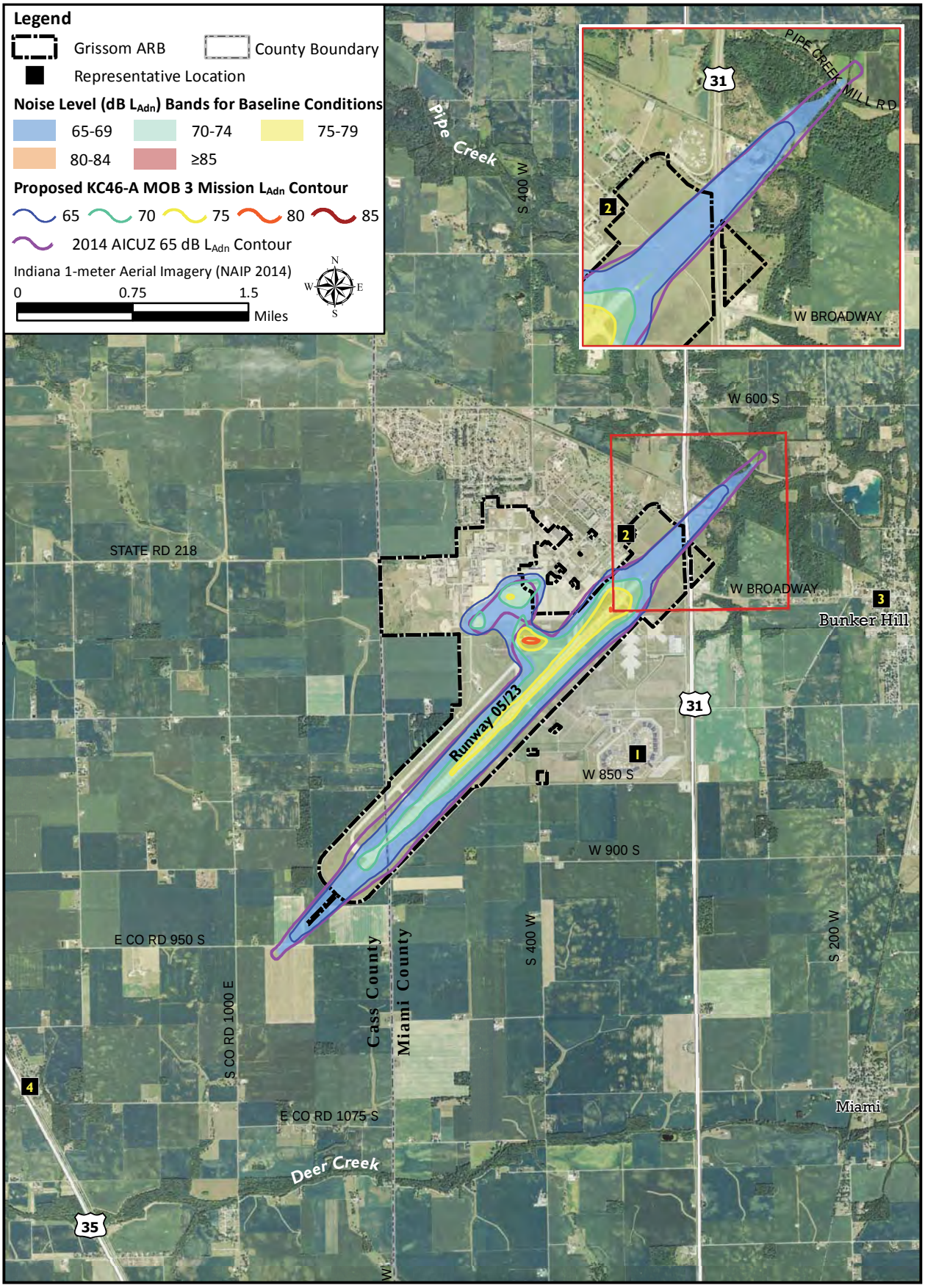

Figure ES-6. Baseline and Proposed MOB 3 Mission Noise Contours (dB L_{Adn}) at Grissom ARB

ES 4.1.4 Soils and Water

All of the construction and demolition (C&D) activities associated with the proposed KC-46A MOB3 mission would occur within the Grissom ARB boundary. The total disturbed area for the projects associated with the proposed mission would not exceed 5 acres (new construction). No sensitive water resources or floodplains occur in areas planned for the KC-46A development projects.

Relevant stormwater and land disturbance permits would be required and stormwater plans would be updated. During the design phase, a variety of stormwater controls would be incorporated into construction plans. These could include planting vegetation in disturbed areas as soon as possible after construction; constructing retention facilities; and implementing structural controls (e.g., interceptor dikes, swales [excavated depressions], silt fences, straw bales, and other storm drain inlet protection), as necessary, to prevent sediment from entering inlet structures. No significant impacts to soil and water resources are anticipated.

ES 4.1.5 Biological Resources

There are no Federal or state-listed species and/or designated critical habitat at Grissom ARB. No significant impacts to biological resources or wetlands are anticipated to result from implementation of the proposed KC-46A MOB 3 mission.

ES 4.1.6 Cultural Resources

No adverse impacts to Section 106 cultural resources are anticipated. The Indiana State Historic Preservation Office (SHPO) has concurred that no cultural resources occur at Grissom ARB. Therefore, the proposed MOB 3 mission would not have an adverse impact on cultural resources.

Grissom ARB has completed consultation with tribes potentially affiliated with the base. No concerns regarding traditional cultural properties, properties of traditional, religious, or cultural importance, or other cultural concerns have been received.

Inadvertent discovery of archaeological resources is considered unlikely. An inadvertent discovery of previously unrecorded cultural resources would be managed in compliance with Federal and state laws and USAF regulations.

ES 4.1.7 Land Use

Implementation of the proposed MOB 3 mission would decrease the off-base area affected by noise levels of 65 dB L_{Adn} or greater by 21 acres. No significant impacts to land use resources would result from the proposed MOB 3 mission.

ES 4.1.8 Infrastructure

Implementation of the proposed MOB 3 mission is not anticipated to result in significant impacts to infrastructure systems (e.g., potable water, wastewater, stormwater, electrical, natural gas, solid waste management, and transportation).

ES 4.1.9 Hazardous Materials and Waste

The types of hazardous materials and wastes that would be used and generated by the proposed MOB 3 mission are consistent with those currently utilized and generated by the KC-135 mission; however, the quantities of hazardous materials used and wastes generated would increase with implementation of the proposed MOB 3 mission. No significant impacts to hazardous materials and waste would result from implementation of the proposed MOB 3 mission.

ES 4.1.10 Socioeconomics

Implementation of the proposed MOB 3 mission at Grissom ARB would result in a 0.7 percent increase in the ROI populations and a total increase of 217 on-base full-time military personnel, U.S. Department of Defense (DoD) civilians, and contractors for an estimated 29 new jobs. Total construction costs of $117.8 million could generate 1,197 jobs and $11.4 million in indirect and induced income for the duration of the construction activity.

The housing market in the ROI and surrounding communities within adjacent counties would be anticipated to support the incoming personnel.

An estimated 197 military dependents of school-age would enter the school districts in surrounding communities. Based on the number of school corporations and schools in the ROI, as well as class size for the state, the schools in the county would be anticipated to have the capacity to support the incoming population.

Demand for public services in the ROI would increase with the projected change in the population; however, it would not be anticipated to result in a significant change due to the small increase in population partially offset with the recent annual decline in population in the ROI.

Several base services would require additional manpower and facilities to accommodate the incoming personnel. No significant impacts to socioeconomics would result from implementation of the proposed MOB 3 mission.

ES 4.1.11 Environmental Justice and Other Sensitive Receptors

Implementation of the proposed MOB 3 mission is not anticipated to disproportionately impact any off-base minority, low-income, elderly, or youth populations.

ES 4.2 SEYMOUR JOHNSON AFB

ES 4.2.1 Acoustic Environment

One (1) additional off-base acre and an estimated one additional off-base resident would be affected by noise levels greater than 65 dB L_{Adn} (Figure ES-7). No significant impacts to the acoustic environment would result from implementation of the proposed MOB 3 mission. Practice approaches by KC-46A aircrews at Kinston Regional Jetport would result in a noise level increase that would also not be perceived as significant.

ES 4.2.2 Air Quality

Emissions from the proposed KC-46A MOB 3 operations would not exceed PSD thresholds for any of the NAAQS pollutants. This criterion is being used only to determine if an impact occurs, as the area is in attainment and neither a PSD analysis or conformity determination is required.

Construction for the proposed MOB 3 mission at Seymour Johnson AFB would produce a total of 1,391 metric tons of CO_2e emissions. Operation of the proposed MOB 3 mission at Seymour Johnson AFB would result in a net increase of 28,881 metric tons per year of CO_2e emissions.

KC-46A aircrews would use the Kinston Regional Jetport only on an occasional basis, and these operations would result in only minor increases in emissions at that location. Therefore, KC-46A operations at the Kinston Regional Jetport would not result in significant impacts.

No significant impacts to air quality are anticipated. Emissions from construction activities would be below any PSD pollutant threshold of 250 tons per year.

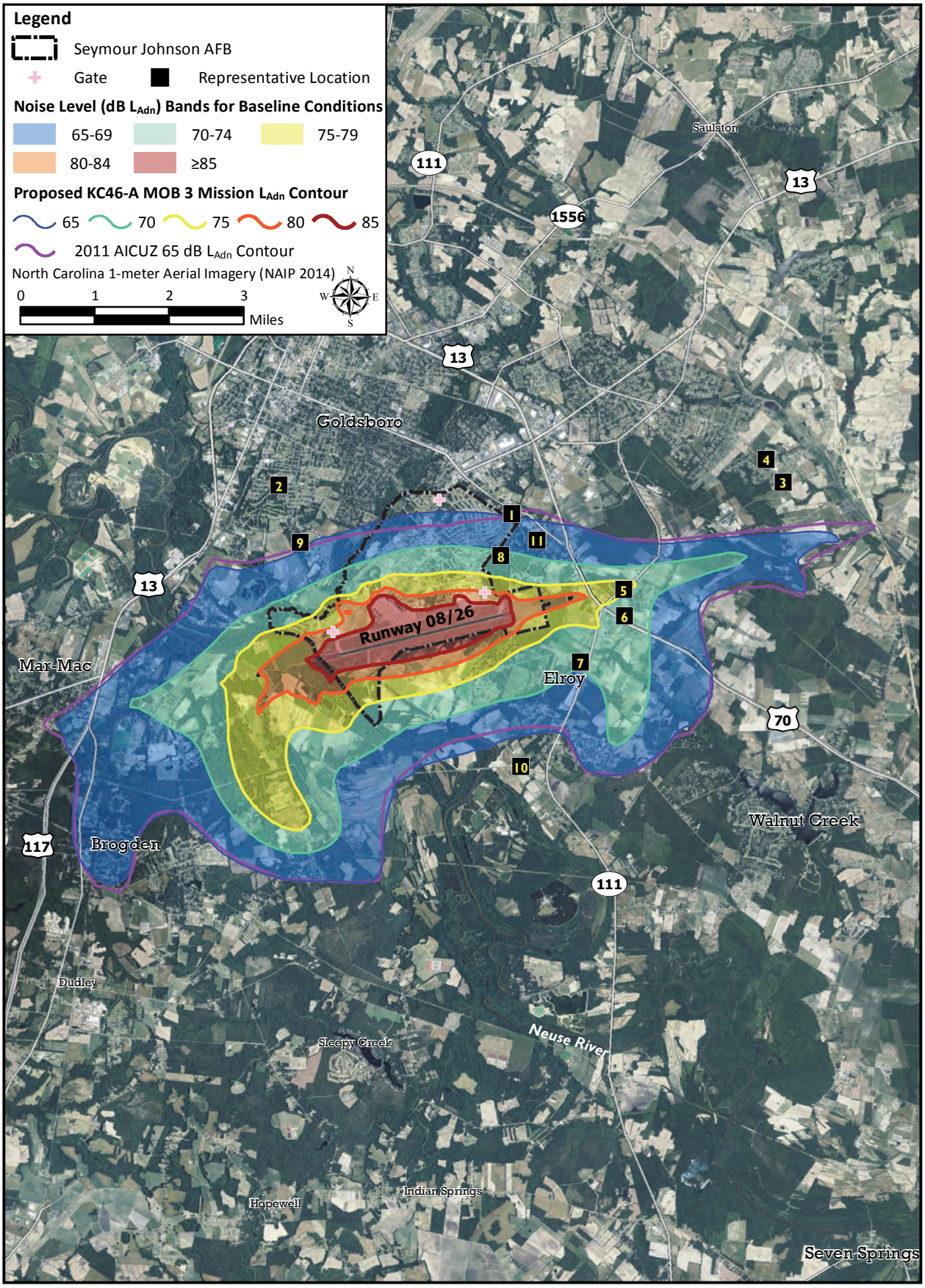

Figure ES-7. Baseline and Proposed MOB 3 Mission Noise Contours (dB L_{Adn}) at Seymour Johnson AFB

ES 4.2.3 Safety

Implementation of the proposed KC-46A MOB 3 mission is not anticipated to result in any net increase in the safety risks associated with aircraft mishaps or any increase in the risks of occurrence of those mishaps. No significant impact would occur related to bird/wildlife-aircraft strike hazard issues. The USAF does not anticipate any significant safety impacts as a result of construction, demolition, or renovation if all applicable AFOSH and OSHA requirements are implemented.

ES 4.2.4 Soils and Water

The total disturbed area would be less than 5 acres for new construction. No changes to current deicing operations would be required. Upon implementation of the proposed MOB 3 mission, the Stormwater Plan (SWP) would be revised to include an evaluation of deicing procedures and ways to minimize the use of deicing materials and prevent the release of deicing materials from entering stormwater systems. In addition, the revised SWP would include an evaluation of the means that may be practicable for modifying current use and practices to collect deicing effluent runoff.

Relevant stormwater and land disturbance permits would be required and the SWP would be updated. During the design phase, a variety of stormwater controls would be incorporated into construction plans. These could include planting vegetation in disturbed areas as soon as possible after construction; constructing retention facilities; and implementing structural controls (e.g., interceptor dikes, swales [excavated depressions], silt fences, straw bales, and other storm drain inlet protection), as necessary, to prevent sediment from entering inlet structures. No significant impacts to soil and water resources are anticipated.

ES 4.2.5 Biological Resources

No significant impacts to biological resources or wetlands are anticipated to result from implementation of the proposed KC-46A MOB 3 mission.

ES 4.2.6 Cultural Resources

Seymour Johnson AFB has determined that none of the facilities planned for demolition or renovation are eligible for the National Register of Historic Places (NRHP), and the SHPO has concurred.

Seymour Johnson AFB has conducted consultation with the Eastern Band of the Cherokee Nation. The tribe has indicated that they do not have any cultural or tribal resources at Seymour Johnson AFB and no interest in Wayne County.

Inadvertent discovery of archaeological resources is considered unlikely. An inadvertent discovery of previously unrecorded cultural resources would be managed in compliance with Federal and state laws and USAF regulations.

ES 4.2.7 Land Use

Implementation of the proposed MOB 3 mission would increase the off-base area affected by noise levels of 65 dB L_{Adn} or greater by 1 acre. The 1 acre of additional land affected by noise is not located near sensitive receptors. The anticipated noise increase to this 1-acre area would not cause unsafe conditions and would not change or conflict with any current or planned land uses in this area. No significant impacts to land use resources would result from the proposed MOB 3 mission.

ES 4.2.8 Infrastructure

Implementation of the proposed MOB 3 mission is not anticipated to result in significant impacts to infrastructure systems (e.g., potable water, wastewater, stormwater, electrical, natural gas, solid waste management, and transportation).

ES 4.2.9 Hazardous Materials and Waste

The types of hazardous materials and wastes that would be used and generated by the proposed MOB 3 mission are consistent with those currently utilized and generated by the KC-135 mission; however, the quantities of hazardous materials used and wastes generated would increase with implementation of the proposed MOB 3 mission. No significant impacts to hazardous materials and waste would result from implementation of the proposed MOB 3 mission.

ES 4.2.10 Socioeconomics

Implementation of the proposed MOB 3 mission at Seymour Johnson AFB would result in a 0.08 percent increase in the ROI population and a total increase of 53 on-base full-time military personnel, DoD civilians, and contractors for an estimated 22 jobs. Total construction costs of $103.4 million could generate 1,144 jobs and $13.7 million in indirect and induced income for the duration of the construction activity.

Assuming all incoming full-time mission personnel would require off-base housing, there would be a potential need for 38 off-base housing units.

Approximately 37 military and non-military dependents of school age would enter public school districts in the Wayne County Public School District. Public services would be anticipated to support the incoming population.

Base services have adequate capacity in the CDC, housing, fitness, and dining facilities under the existing infrastructure to support replacement of the KC-135 mission with the proposed MOB 3 mission. No significant impacts to socioeconomics would result from implementation of the proposed MOB 3 mission.

ES 4.2.11 Environmental Justice and Other Sensitive Receptors

Implementation of the proposed MOB 3 mission is not anticipated to disproportionately impact any off-base minority, low-income, elderly, or youth populations.

ES 4.3 TINKER AFB

ES 4.3.1 Acoustic Environment

An additional 7 off-base acres and an estimated six additional off-base residents would be affected by noise levels greater than 65 dB L_{Adn} (Figure ES-8). No significant impacts to the acoustic environment would result from implementation of the proposed MOB 3 mission.

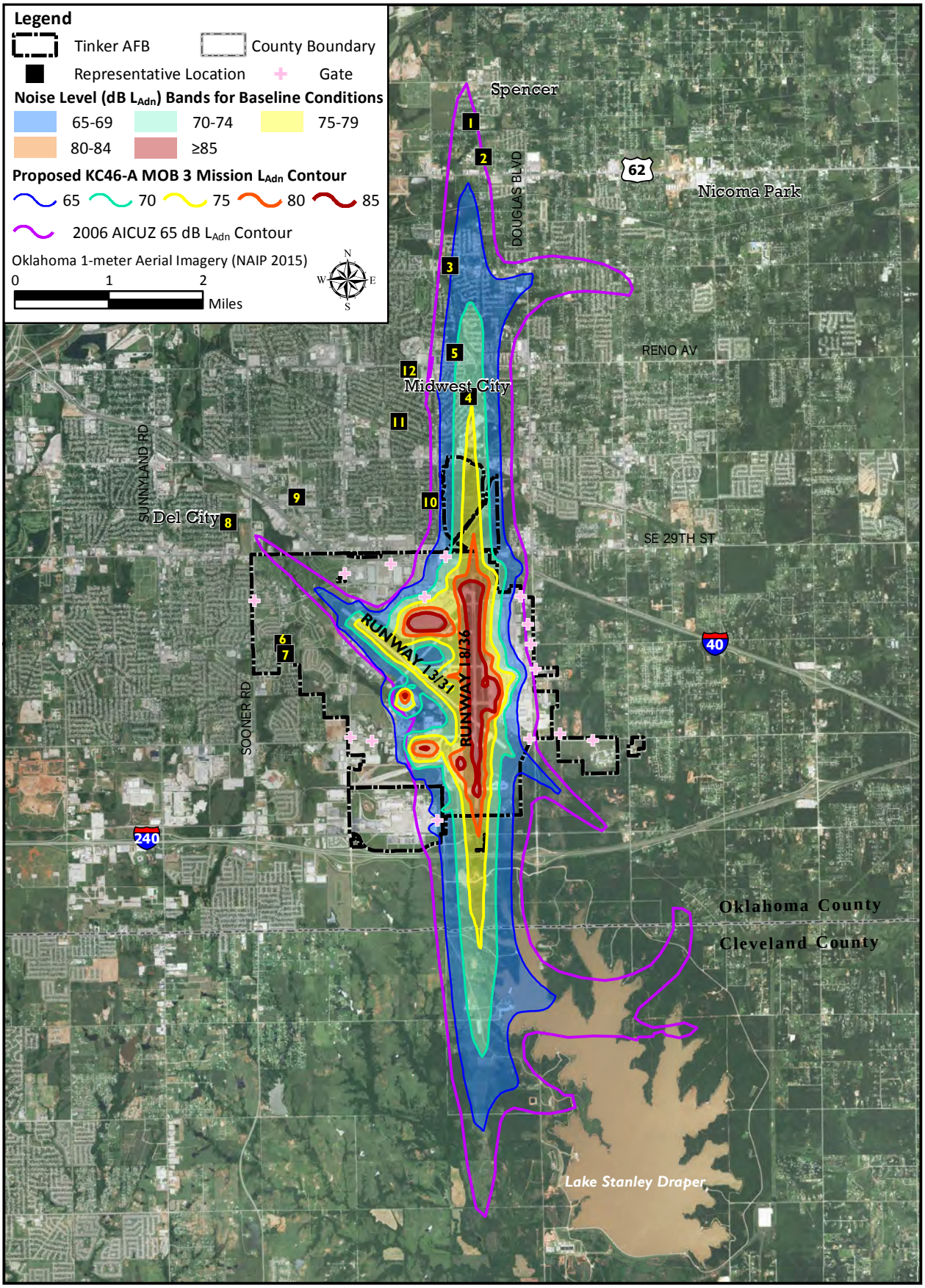

Figure ES-8. Baseline and Proposed MOB 3 Mission Noise Contours (dB L_{Adn}) at Tinker AFB

ES 4.3.2 Air Quality

Emissions from the proposed KC-46A MOB 3 operations would not exceed PSD thresholds for volatile organic compounds (VOCs), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter less than or equal to 10 micrometers in diameter (PM_{10}), or particulate matter less than or equal to 2.5 micrometers in diameter ($PM_{2.5}$). The PSD criterion threshold is only being used only to determine if an impact occurs, as the area is in attainment and neither a PSD analysis or conformity determination is required. Nitrogen oxide (NO_x) emissions from the proposed KC-46A MOB 3 operations would exceed the 250-tons-per-year PSD threshold. These NO_x emission increases would amount to 1 percent of the total NO_x emissions generated by Oklahoma County in 2011. Given that the county attains all of the NAAQS, these NO_x emission increases would not be substantial enough to contribute to an exceedance of any NAAQS (such as the ozone [O_3] and nitrogen dioxide [NO_2] standards).

Construction for the proposed MOB 3 mission at Tinker AFB would produce a total of 1,447 metric tons of CO_2e emissions. Operation of the proposed MOB 3 mission at Tinker AFB would result in a net increase of 32,485 metric tons per year of CO_2e emissions.

The proposed MOB 3 mission at Tinker AFB would not result in significant air quality impacts. Emissions from construction activities would be below any PSD pollutant threshold of 250 tons per year.

ES 4.3.3 Safety

Implementation of the proposed KC-46A MOB 3 mission is not anticipated to result in any net increase in the safety risks associated with aircraft mishaps or any increase in the risks of occurrence of those mishaps. No significant safety impacts would occur related to bird/wildlife-aircraft strike hazard issues. The USAF does not anticipate any significant safety impacts as a result of construction, demolition, or renovation if all applicable AFOSH and OSHA requirements are implemented.

ES 4.3.4 Soils and Water

The total disturbed area would be less than 8 acres for new construction. Expansion of the 507 ARW parking ramp would impact approximately 3.5 acres of floodplain and a jurisdictional water. Impacts to the jurisdictional water would be permitted by the U.S. Army Corps of Engineers (USACE) under Nationwide Permit 39. Because impacts to the jurisdictional water would be less than 300 linear feet, no mitigation would be required. To avoid altering the elevation, function, and capacity of the floodplain, material would be excavated adjacent to and from within the same floodplain to be used as fill for the proposed ramp expansion. Should Tinker AFB be selected for the proposed MOB 3 mission, a Finding of No Practicable Alternative (FONPA) would be prepared.

Relevant stormwater and land disturbance permits would be required and stormwater plans would be updated. During the design phase, a variety of stormwater controls would be incorporated into construction plans. These could include planting vegetation in disturbed areas as soon as possible after construction; constructing retention facilities; and implementing structural controls (e.g., interceptor dikes, swales [excavated depressions], silt fences, straw bales, and other storm drain inlet protection), as necessary, to prevent sediment from entering inlet structures. No significant impacts to soil and water resources are anticipated.

ES 4.3.5 Biological Resources

Expansion of the 507 ARW parking ramp would impact approximately one acre of forested floodplain habitat. This area is described in the Integrated Natural Resources Management Plan (INRMP) as habitat for migratory bird species at risk. To minimize potential impacts to migratory birds, removal of trees in this area would not occur during the migratory bird breeding season (1 April-31 July).

In 2009 a federally listed piping plover was struck by an aircraft at Tinker AFB. In a comment received on 5 May 2016, the U.S. Fish and Wildlife Service (USFWS) indicated that with an increase in aircraft operations there is a potential for additional takes of the piping plover. The USAF prepared a Biological Evaluation (BE) for the least tern, the piping plover, the whooping crane, and the red knot. The BE was submitted to the USFWS on 19 September 2016. Based on the information contained in the BE, the USAF has determined that implementation of the proposed KC-46A MOB 3 mission may affect, but is not likely to adversely affect any of these species. No significant impacts to biological resources would result from implementation of the proposed MOB 3 mission.

ES 4.3.6 Cultural Resources

No adverse Section 106 impacts to cultural or tribal resources are anticipated.

Section 106 consultation with the SHPO resulted in a concurrence from the SHPO that no historical properties are located in the area of potential affect (APE). Should Tinker AFB be selected for the proposed MOB 3 mission, the Oklahoma Archaeological Survey (OAS) indicated that an archaeological field inspection would be required prior to construction.

Tinker AFB has completed consultation with tribes potentially affiliated with the base. The Seminole Nation of Oklahoma has expressed an interest in discussing the project with the Commander of Tinker AFB. Col Stephanie Wilson of Tinker AFB met with Chief Harjo of the Seminole Nation of Oklahoma on 5 August 2016. Although Chief Harjo was interested in small business opportunities for the Seminole Nation of Oklahoma, he had no comments or concerns specific to the proposed KC-46A MOB 3 mission. No concerns regarding traditional cultural properties, properties of traditional, religious, or cultural importance, or other cultural concerns have been received.

Inadvertent discovery of archaeological resources is considered unlikely. An inadvertent discovery of previously unrecorded cultural resources would be managed in compliance with Federal and state laws and USAF regulations.

ES 4.3.7 Land Use

Implementation of the proposed MOB 3 mission would increase the off-base area affected by noise levels of 65 dB L_{Adn} or greater by 7 acres. These 7 acres are not located near sensitive receptors. The anticipated noise increase to these off-base areas would not cause unsafe conditions and would not change or conflict with any existing or planned land uses in this area. No significant impacts to land use resources would result from the proposed MOB 3 mission.

ES 4.3.8 Infrastructure

Implementation of the proposed MOB 3 mission is not anticipated to result in significant impacts to infrastructure systems (e.g., potable water, wastewater, stormwater, electrical, natural gas, solid waste management, and transportation).

ES 4.3.9 Hazardous Materials and Waste

The types of hazardous materials and wastes that would be used and generated by the proposed MOB 3 mission are consistent with those currently utilized and generated by the KC-135 mission; however, the quantities of hazardous materials used and wastes generated would increase with implementation of the proposed MOB 3 mission. No significant impacts to hazardous materials and waste would result from implementation of the proposed MOB 3 mission.

ES 4.3.10 Socioeconomics

Implementation of the proposed MOB 3 mission at Tinker AFB would result in a 0.1 percent increase in the ROI population and a total increase of 308 on-base full-time military personnel, DoD civilians, and contractors for an estimated 94 new jobs. Total construction costs of $101 million could generate 968 jobs and $31.2 million in indirect and induced income for the duration of the construction activity.

Assuming all 293 incoming full-time mission personnel would require off-base housing, the housing market in the ROI would be anticipated to support the incoming personnel. Approximately 286 military and non-military dependents of school age would enter public school districts in Oklahoma County. Public services would be anticipated to support the incoming population. There is adequate infrastructure and capacity to support incoming military populations, and no significant impacts to socioeconomic resources would result from implementation of the proposed MOB 3 mission.

ES 4.3.11 Environmental Justice and Other Sensitive Receptors

Implementation of the proposed MOB 3 mission is not anticipated to disproportionately impact any off-base minority, low-income, elderly or youth populations.

ES 4.4 WESTOVER ARB

ES 4.4.1 Acoustic Environment

C-5 aircraft operations are the largest driver of noise at Westover ARB. As part of a previously scheduled program that is not connected with the KC-46A beddown process, all Westover ARB-based C-5B aircraft are being converted to the quieter C-5M model. This planned conversion has the largest influence on noise at Westover ARB. It is anticipated that this conversion, along with the addition of the 12 KC-46A aircraft, would result in a decrease of 396 acres and an estimated 38 less people exposed to noise levels greater than 65 dB L_{Adn} (Figure ES-9). No significant impacts to the acoustic environment would result from implementation of the proposed MOB 3 mission.

ES 4.4.2 Air Quality

Emissions from the proposed KC-46A MOB 3 operations would not exceed PSD thresholds for VOCs, CO, SO_x, PM_{10}, or $PM_{2.5}$. The PSD criterion threshold is only being used only to determine if an impact occurs, as the area is in attainment and neither a PSD analysis or conformity determination is required. NO_x emissions from the proposed KC-46A MOB 3 operations would exceed the 250-tons-per-year PSD threshold. These NO_x emission increases would amount to 1 percent of the total NO_x emissions generated by Hampden County in 2011. Given that the county attains all of the NAAQS, these NO_x emission increases would likely not be substantial enough to contribute to an exceedance of an NAAQS.

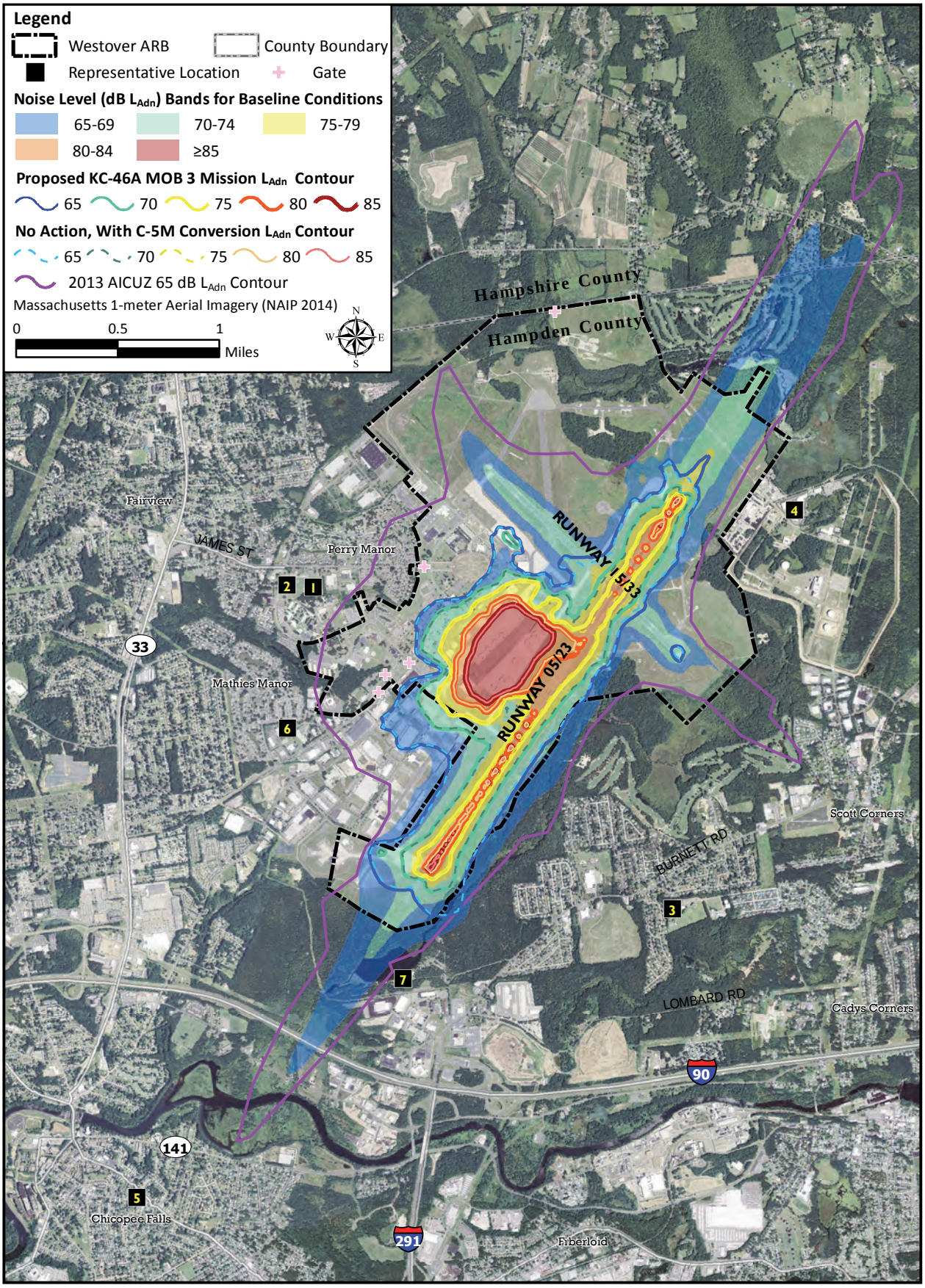

Figure ES-9. No Action, Baseline, and Proposed MOB 3 Mission Noise Contours (dB L_{Adn}) at Westover ARB

Construction for the proposed MOB 3 mission at Westover ARB would produce a total of 2,422 metric tons of CO_2e emissions. Operation of the proposed MOB 3 mission at Westover ARB would result in an increase of 55,332 metric tons per year of CO_2e emissions.

The proposed MOB 3 mission at Westover ARB would not produce significant air quality impacts. Emissions from construction activities would be below any PSD pollutant threshold of 250 tons per year.

ES 4.4.3 Safety

Implementation of the proposed KC-46A MOB 3 mission is not anticipated to result in any net increase in the safety risks associated with aircraft mishaps or any increase in the risks of occurrence of those mishaps. No significant impact to safety would occur related to bird/wildlife-aircraft strike hazard issues. The USAF does not anticipate any significant safety impacts as a result of construction, demolition, or renovation if all applicable AFOSH and OSHA requirements are implemented.

ES 4.4.4 Soils and Water

The total disturbed area would be less than 12 acres, which equates to a less than 1 percent increase in impervious surface at Westover ARB. If the proposed MOB 3 mission would require the use of more than 100,000 gallons of deicing fluid on an average annual basis, additional water quality monitoring would be required If the monitoring results exceed the benchmark levels, additional controls would require evaluation and possible implementation. Because the nature of the activity (aircraft deicing) is not changing, a change to the permit would not be required. Although increases in aircraft operations could increase the amount of deicing fluid utilized, long-term significant adverse impacts to water quality are not anticipated to result from deicing operations associated with the proposed KC-46A MOB 3 mission at Westover ARB.

Relevant stormwater and land disturbance permits would be required and stormwater plans would be updated. During the design phase, a variety of stormwater controls would be incorporated into construction plans. These could include planting vegetation in disturbed areas as soon as possible after construction; constructing retention facilities; and implementing structural controls (e.g., interceptor dikes, swales [excavated depressions], silt fences, straw bales, and other storm drain inlet protection), as necessary, to prevent sediment from entering inlet structures. No significant impacts to soil and water resources are anticipated.

ES 4.4.5 Biological Resources

No significant impacts to biological resources or wetlands are anticipated to result from implementation of the proposed KC-46A MOB 3 mission.

ES 4.4.6 Cultural Resources

Construction of the new facilities would require demolition of Buildings 2426, 7071, 7045, and 7046. Renovation projects would occur along the parking ramp taxi lane and to Buildings 7072, 7073, 5103, 5375, and 5377. On 4 August 2016, Westover ARB submitted a letter to the Massachusetts Historical Commission (MHC) identifying the APE, which includes the Historic District. This letter stated that the proposed undertaking includes the demolition of Hangar 7071 and Building 2426, contributing resources to the Historic District, and will therefore result in an adverse effect on the historic property. Pursuant to 36 *CFR* § 800.6(c), the letter also stated that the USAF was seeking concurrence from MHC on the adverse effect determination and will continue

to consult with the MHC in order to avoid, minimize, or mitigate the potential adverse effects of the undertaking. In a response dated 26 August 2016, the MHC concurred with the USAF letter (see Volume II, Appendix A, Section A.5.4.1). Should the proposed MOB 3 mission be located at Westover ARB, the USAF would prepare Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) recordation of Hangar 7071 and Building 2426, and develop a map that identifies the boundaries of the Westover ARB Historic District. In addition, the MHC has agreed to participate in the design review process for new construction.

Westover ARB has completed consultation with tribes potentially affiliated with the base. No concerns regarding traditional cultural properties, properties of traditional, religious, or cultural importance, or other cultural concerns have been received.

Because ground-disturbing activities would occur in previously disturbed contexts, it is extremely unlikely that any previously undocumented archaeological resources would be encountered during facility demolition, renovation, addition, or construction. In the case of unanticipated or inadvertent discoveries, the USAF would comply with 36 *CFR* 800.13.

ES 4.4.7 Land Use

Implementation of the proposed MOB 3 mission in conjunction with C-5B to C-5M conversion would result in a net decrease in acres (-396 acres) and estimated residents (-38) exposed to noise levels of 65 dB L_{Adn} or greater.

No significant impacts to land use resources would result from the proposed MOB 3 mission.

ES 4.4.8 Infrastructure

Implementation of the proposed MOB 3 mission is not anticipated to result in significant impacts to infrastructure systems (e.g., potable water, wastewater, stormwater, electrical, natural gas, solid waste management, and transportation).

ES 4.4.9 Hazardous Materials and Waste

Although the quantities and types of hazardous materials used and wastes generated by the proposed MOB 3 mission would increase relative to the current C-5 mission, the types of materials would be similar and hazardous wastes generated would be similar to those currently generated at Westover ARB. No significant impacts to hazardous materials and waste would result from implementation of the proposed MOB 3 mission. No significant impacts to hazardous materials and waste would result from implementation of the proposed MOB 3 mission at Westover ARB.

ES 4.4.10 Socioeconomics

Implementation of the proposed MOB 3 mission at Westover ARB would result in a 0.17 percent increase in the ROI population and a total increase of 411 on-base full-time military personnel, DoD civilians, and contractors for an estimated 100 new jobs. Total construction costs of $196.9 million could generate 2,137 jobs and $41.5 million in indirect and induced income for the duration of the construction activity.

Assuming all 396 incoming full-time military personnel associated with KC-46A would require off-base housing, the housing market in the ROI would be anticipated to support the change in personnel. Approximately 386 military and non-military dependents of school age would enter public school districts in the ROI. Public services would be anticipated to support the incoming

population. Several base services would require additional manpower and facilities to accommodate the incoming personnel. No childcare or military dining facilities are available on Westover ARB. No significant impacts to socioeconomic resources would result from implementation of the proposed MOB 3 mission.

ES 4.4.11 Environmental Justice and Other Sensitive Receptors

Implementation of the proposed MOB 3 mission is not anticipated to disproportionately impact any off-base minority, low-income, elderly, or youth populations.

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ES 5.0 CUMULATIVE EFFECTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The assessment of cumulative effects considers other projects that coincide with the location and timetable of implementation of the proposed KC-46A MOB 3 mission. The USAF has identified past and present actions in the region of each of the four bases and more specifically reasonably foreseeable actions that are in the planning phase or unfolding at this time in the regions surrounding Grissom ARB in Indiana, Seymour Johnson AFB in North Carolina, Tinker AFB in Oklahoma, and Westover ARB in Massachusetts. Although auxiliary airfields have been identified for use by KC-46A aircrews associated with Seymour Johnson AFB, no construction, ground disturbance, or other activities beyond flight operations are proposed at this auxiliary airfield; therefore, cumulative effects are not evaluated for the auxiliary airfields.

The irreversible environmental changes that would result from implementation of the proposed MOB 3 mission involve the consumption of material resources and energy resources. The use of these resources is considered to be permanent. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the impacts that use of these resources will have on future generations. Irreversible impacts primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments also involve the loss in value of an affected resource that cannot be restored as a result of the action.

For the beddown of KC-46A aircraft at any of the bases, most resource commitments are neither irreversible nor irretrievable. Most impacts are anticipated to be short-term and temporary or longer lasting but negligible.

ES 5.1 GRISSOM ARB

Implementation of the proposed MOB 3 mission at Grissom ARB is not anticipated to contribute to cumulative effects on safety, cultural resources, land use, socioeconomics, or environmental justice and other sensitive receptors.

ES 5.1.1 Acoustic Environment

Implementation of the proposed MOB 3 mission would incrementally increase noise levels on and near Grissom ARB. C&D activities in the vicinity of the project locations, in combination with potential C&D activities on and near Grissom ARB, are expected to result only in short-term, intermittent increases in noise levels. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on the acoustic environment at Grissom ARB would not be significant.

ES 5.1.2 Air Quality

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., Top Five Military Construction [MILCON] Projects) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Grissom ARB. These projects would generate the same types of construction related impacts as described for the proposed MOB 3 mission (e.g., fugitive dust emissions, increases in construction-related criteria pollutant emissions). Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on air quality at Grissom ARB would not be significant.

ES 5.1.3 Soils and Water

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., Top Five MILCON Projects) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Grissom ARB. These construction projects would increase the amount of soil disturbed and have the potential to increase erosion and sedimentation into surface water features. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on the soil and water resources at Grissom ARB would not be significant.

ES 5.1.4 Biological Resources

The reasonably foreseeable C&D projects proposed at Grissom ARB and described in the EIS are anticipated to have similar types of impacts to vegetation, wildlife, and special status species as the construction projects proposed for the KC-46A MOB 3 mission and described in the EIS. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on biological resources at Grissom ARB would not be significant.

ES 5.1.5 Infrastructure

The proposed MOB 3 mission would require additional facility C&D when considered in combination with the Grissom ARB Installation Development Plan (IDP). The proposed MOB 3 mission would require the construction of new facilities, renovation/alteration/additions to existing facilities, and demolition of facilities. These new facilities would not be expected to significantly increase the demand on existing infrastructure. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on infrastructure at Grissom ARB would not be significant.

ES 5.1.6 Hazardous Materials and Waste

Hazardous materials and waste resulting from the proposed reasonably foreseeable projects listed in EIS are anticipated to be similar to the existing hazardous materials and waste currently being used at Grissom ARB. The use of these materials could increase with the additional projects, but that use is not anticipated to exceed the base's capability for handling hazardous waste and materials. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on hazardous materials and waste at Grissom ARB would not be significant.

ES 5.2 SEYMOUR JOHNSON AFB

Implementation of the proposed KC-46A MOB 3 mission at Seymour Johnson AFB is not anticipated to contribute to cumulative effects on safety, cultural resources, land use, or socioeconomics.

ES 5.2.1 Acoustic Environment

C&D projects associated with the proposed MOB 3 beddown would occur near other ongoing and future C&D projects (e.g., projects identified in the 2014 Installation Master Plan) occurring during the same time periods. C&D projects are a regular occurrence on and near active USAF installations such as Seymour Johnson AFB. C&D noise would be localized and temporary.

Construction work is generally limited to normal working hours (i.e., 7:00 A.M. to 5:00 P.M.). Furthermore, the projects are or would be located in an acoustic environment that includes elevated aircraft operation noise levels. In the instance that multiple C&D projects affect a single area at the same time, construction noise would be a slightly more noticeable component of the acoustic environment, but would still not be expected to result in impacts that would be considered significant. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on the acoustic environment at Seymour Johnson AFB would not be significant.

ES 5.2.2 Air Quality

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., projects identified in the 2014 Installation Master Plan) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Seymour Johnson AFB. These projects would generate the same types of construction-related impacts as described for the proposed MOB 3 mission (e.g., fugitive dust emissions, increases in construction-related criteria pollutant emissions). Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on air quality at Seymour Johnson AFB would not be significant.

ES 5.2.3 Soils and Water

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., projects identified in the 2014 Installation Master Plan) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Seymour Johnson AFB. These construction projects would increase the amount of soil disturbed and have the potential to increase erosion and sedimentation into surface water features. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on soil and water resources at Seymour Johnson AFB would not be significant.

ES 5.2.4 Biological Resources

The reasonably foreseeable C&D projects described in the EIS for Seymour Johnson AFB are anticipated to have similar types of impacts to vegetation, wildlife, and special status species as the construction projects proposed for the KC-46A MOB 3 mission and described in the EIS. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on biological resources at Seymour Johnson AFB would not be significant.

ES 5.2.5 Infrastructure

The proposed MOB 3 mission would require additional facility C&D when considered in combination with the IDP. The proposed MOB 3 mission would require the construction of new facilities, renovation/alteration/additions to existing facilities, and demolition of facilities. These new facilities would not be expected to significantly increase the demand on existing infrastructure. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on infrastructure at Seymour Johnson AFB would not be significant.

ES 5.2.6 Hazardous Materials and Waste

Hazardous materials and waste resulting from the reasonably foreseeable projects listed in the EIS are anticipated to be similar to the existing hazardous materials and waste currently being used at Seymour Johnson AFB. The use of these materials could increase with the additional projects, but that use is not anticipated to exceed the base's capability for handling hazardous waste and materials. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on hazardous materials and waste at Seymour Johnson AFB would not be significant.

ES 5.2.7 Environmental Justice and Other Sensitive Receptors

Implementation of the proposed KC-46A MOB 3 mission at Seymour Johnson AFB would result in nearly identical conditions as those resulting from baseline conditions. Noise from existing and reasonably foreseeable MILCON activities at Seymour Johnson AFB would not be anticipated to extend off base boundaries. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on environmental justice and other sensitive receptors at Seymour Johnson AFB would not be significant.

ES 5.3 TINKER AFB

Implementation of the proposed MOB 3 mission at Tinker AFB is not anticipated to contribute to cumulative effects on safety, cultural resources, land use, or socioeconomics.

ES 5.3.1 Acoustic Environment

C&D projects associated with the proposed MOB 3 beddown would occur near other ongoing and future C&D projects (e.g., New Control Tower) occurring during the same time periods. C&D projects are a regular occurrence on and near active USAF installations such as Tinker AFB. C&D noise is localized and temporary. Construction work is generally limited to normal working hours (i.e., 7:00 A.M. to 5:00 P.M.). Furthermore, the projects are or would be located in an acoustic environment that includes elevated aircraft operation noise levels.

Noise generated during operations at the new KC-46A Maintenance Depot has been assessed for environmental impacts (USAF 2014) and is included in baseline conditions. KC-46A depot maintenance operations will occur in the context of an active installation currently supporting a multitude of similar operations. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on the acoustic environment at Tinker AFB would not be significant.

ES 5.3.2 Air Quality

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., New Control Tower, New KC-46A Maintenance Depot) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Tinker AFB. These projects would generate the same types of construction-related impacts as described for the proposed MOB 3 mission (e.g., fugitive dust emissions, increases in construction-related criteria pollutant emissions). Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on air quality at Tinker AFB would not be significant.

ES 5.3.3 Soils and Water

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., New Control Tower, New KC-46A Maintenance Depot) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Tinker AFB. These construction projects would increase the amount of soil disturbed and have the potential to increase erosion and sedimentation into surface water features. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on soil and water resources at Tinker AFB would not be significant.

ES 5.3.4 Biological Resources

The reasonably foreseeable C&D projects described in the EIS would be anticipated to have similar types of impacts to vegetation, wildlife, and special status species as the construction projects proposed for the KC-46A MOB 3 mission and described in the EIS. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on biological resources at Tinker AFB would not be significant.

ES 5.3.5 Infrastructure

The proposed MOB 3 mission would require additional facility C&D when considered in combination with the Installation Master Plan. The proposed MOB 3 mission would require the construction of new facilities, renovation/alteration/additions to existing facilities, and demolition of facilities. These new facilities would not be expected to significantly increase the demand on existing infrastructure. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on infrastructure at Tinker AFB would not be significant.

ES 5.3.6 Hazardous Waste and Materials

Hazardous materials and waste resulting from the reasonably foreseeable projects listed in the EIS are anticipated to be similar to the existing hazardous materials and waste currently being used at Tinker AFB. The use of these materials could increase with the additional projects, but that use is not anticipated to exceed the base's capability for handling hazardous waste and materials. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on hazardous waste and materials at Tinker AFB would not be significant.

ES 5.3.7 Environmental Justice and Other Sensitive Receptors

Implementation of the proposed KC-46A MOB 3 mission at Tinker AFB would result in nearly identical conditions as those resulting from baseline conditions. Noise from current and reasonably foreseeable MILCON activities at Tinker AFB would not be anticipated to extend off base boundaries. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on environmental justice and other sensitive receptors at Tinker AFB would not be significant.

ES 5.4 WESTOVER ARB

Implementation of the proposed KC-46A MOB 3 mission at Westover ARB is not anticipated to contribute to cumulative effects on safety, cultural resources, land use, socioeconomics, or environmental justice and other sensitive receptors.

ES 5.4.1 Acoustic Environment

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., Top 5 MILCON Projects) occurring during the same time periods. C&D projects are a regular occurrence on and near active USAF installations such as Westover ARB. C&D noise is localized and temporary, and construction work is generally limited to normal working hours (i.e., 7:00 A.M. to 5:00 P.M.). Furthermore, the projects are or would be located in an acoustic environment that includes aircraft operations noise. In the instance that multiple C&D projects affect a single area at the same time, construction noise would be a slightly more noticeable component of the acoustic environment, but would still not be expected to result in impacts that would be considered significant.

The conversion of the Westover ARB-based C-5 fleet from C-5B aircraft to C-5M aircraft, in combination with proposed MOB 3 mission aircraft operations, would result in reduction in L_{Adn} aircraft noise levels on and near the installation. The C-5 conversion is currently under way, and is scheduled for completion at approximately the same time that the proposed MOB 3 mission would begin operations.

Noise generated by weapons firing in indoor small arms training ranges is muffled by the exterior walls of the structure. While weapons noise is typically audible outside of indoor firing ranges, it does not typically occur at levels that have the potential to disrupt activities. Weapons noise generated at the indoor firing range would be a part of the long-term acoustic environment, similar to aircraft noise generated by KC-46A aircraft if the proposed MOB 3 mission were to occur at Westover ARB. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on the acoustic environment at Westover ARB would not be significant.

ES 5.4.2 Air Quality

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., Top Five MILCON Projects) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Westover ARB. These projects would generate the same types of construction-related impacts as described for the proposed MOB 3 mission (e.g., fugitive dust emissions, increases in construction-related criteria pollutant emissions). Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on air quality at Westover ARB would not be significant.

ES 5.4.3 Soils and Water

C&D projects associated with the proposed MOB 3 mission would occur near other ongoing and future C&D projects (e.g., Top Five MILCON Projects) during the same time periods. C&D projects have been and will continue to be a regular occurrence on and near installations such as Westover ARB. These construction projects would increase the amount of soil disturbed and have the potential to increase erosion and sedimentation into surface water features. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past,

present, and reasonably foreseeable future actions on soil and water resources at Westover ARB would not be significant.

ES 5.4.4 Biological Resources

The current and reasonably foreseeable C&D projects would be anticipated to have similar types of impacts to vegetation, wildlife, and special status species as the construction projects proposed for the KC-46A MOB 3 mission and described in the EIS. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on biological resources at Westover ARB would not be significant.

ES 5.4.5 Infrastructure

The proposed MOB 3 mission would require additional facility C&D when considered in combination with the Westover ARB Installation Plan and other reasonably foreseeable projects. The proposed MOB 3 mission would require the construction of new facilities, renovation/alteration/additions to existing facilities, and demolition of facilities. These new facilities would not be expected to significantly increase the demand on existing infrastructure. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on infrastructure at Westover ARB would not be significant.

ES 5.4.6 Hazardous Materials and Waste

Hazardous materials and waste resulting from the reasonably foreseeable projects listed in the EIS are anticipated to be similar to the existing hazardous materials and waste currently being used at Westover ARB. The use of these materials could increase with the additional projects, but that use is not anticipated to exceed the base's capability for handling hazardous waste and materials. Cumulative impacts resulting from implementation of the proposed MOB 3 mission in conjunction with past, present, and reasonably foreseeable future actions on hazardous materials and waste at Westover ARB would not be significant.

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ES 6.0 COMPARISON OF ENVIRONMENTAL CONSEQUENCES

Comparing and differentiating among alternatives is a fundamental premise of the NEPA process. The summary comparison of environmental consequences in Table ES-10 provides an overview of the consequences associated with implementation of the proposed MOB 3 mission at each base along with the No Action alternative. The following NEPA activities have been completed to ensure that decision makers have a comprehensive understanding of the potential environmental consequences of their decision.

- Scoping, with four public scoping meetings, conducted over a 2-week period, with public and agency input identifying important environmental resources.
- Documentation of existing environmental conditions for each alternative base. The baseline conditions for these resources relied heavily on recent environmental materials and Federal and state databases prepared at and near each base.
- Base-specific assessments of environmental consequences of the proposed KC-46A MOB 3 mission. Each assessment overlaid the development proposed for each alternative upon the baseline conditions to estimate potential base-specific environmental consequences.

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Table ES-10. Comparative Summary of Environmental Consequences

Resource Area	Grissom ARB	Seymour Johnson AFB	Tinker AFB	Westover ARB	No Action
Acoustic Environment	The proposed KC-46A MOB 3 mission would replace 16 KC-135 aircraft with 12 KC-46A aircraft. The proposed MOB 3 mission would result in a decrease of 1,490 annual airfield operations, or a 9 percent decrease in overall annual airfield operations at Grissom ARB. Affected by 65 dB L_{Adn} or greater: Off-base Acres: -21 Estimated off-base residents: 0	The proposed KC-46A MOB 3 mission would replace 16 KC-135 aircraft with 12 KC-46A aircraft. The proposed MOB 3 mission would result in an increase of 1,746 annual airfield operations, or a 3 percent increase in overall annual airfield operations at Seymour Johnson AFB. Affected by 65 dB L_{Adn} or greater: Off-base Acres: +1 Estimated off-base residents: +1	The proposed KC-46A MOB 3 mission would replace 8 KC-135 aircraft with 12 KC-46A aircraft. The proposed MOB 3 mission would result in an increase of 4,041 annual airfield operations, or a 13 percent increase in overall annual airfield operations at Tinker AFB. Affected by 65 dB L_{Adn} or greater: Off-base Acres: +7 Estimated off-base residents: +6	The proposed KC-46A MOB 3 mission would add 12 KC-46A aircraft. The proposed MOB 3 mission would result in an increase of 7,032 annual airfield operations, or a 41 percent increase in overall annual airfield operations at Westover ARB. Affected by 65 dB L_{Adn} or greater: Off-base Acres: -396 Estimated off-base residents: -38 C-5 aircraft operations are the largest driver of noise at Westover ARB. The planned replacement of C-5B models with the quieter C-5M model has the largest influence on noise at Westover ARB. It is anticipated that replacement of the C-5B with the C-5M would result in an overall decrease in noise at Westover ARB, even with the addition of the 12 KC-46A aircraft as part of the proposed MOB 3 mission.	Under the No Action Alternative at Grissom ARB, Seymour Johnson AFB, and Tinker AFB, existing flying operations would continue unchanged and construction associated with the proposed KC-46A MOB 3 mission would not occur. Noise levels would remain as they are under existing conditions, and there would be no new noise impacts. Under the No Action Alternative at Westover ARB, implementation of the proposed KC-46A MOB 3 mission would not occur, but conversion of the 439 AW fleet from C-5B to C-5M aircraft would be completed. The off-base area and people affected by noise levels greater than 65 dB L_{Adn} would decrease by 398 acres and 38 people, respectively.
Air Quality	Emissions from the proposed KC-46A MOB 3 operations would not exceed PSD thresholds for any of the NAAQS pollutants. No significant impacts to air quality are anticipated.	Emissions from the proposed KC-46A MOB 3 operations would not exceed PSD thresholds for any of the NAAQS pollutants. No significant impacts to air quality are anticipated.	Emissions from the proposed KC-46A MOB 3 operations would not exceed PSD thresholds for VOCs, CO, SO_x, PM_{10}, or $PM_{2.5}$. NO_x emissions from the proposed KC-46A MOB 3 operations would exceed the 250-tons-per-year PSD threshold. These NO_x emission increases would amount to 1 percent of the total NO_x emissions generated by Oklahoma County in 2011. Given that the county attains all of the NAAQS, these NO_x emission increases would not be substantial enough to contribute to an exceedance of any NAAQS (such as the O_3 and NO_2 standards). Therefore, the proposed MOB 3 mission at Tinker AFB would not result in significant air quality impacts.	Emissions from the proposed KC-46A MOB 3 operations would not exceed PSD thresholds for VOCs, CO, SO_x, PM_{10}, or $PM_{2.5}$. NO_x emissions from the proposed KC-46A MOB 3 operations would exceed the 250-tons-per-year PSD threshold. These NO_x emission increases would amount to 1 percent of the total NO_x emissions generated by Hampden County in 2011. Given that the county attains all of the NAAQS, these NO_x emission increases would likely not be substantial enough to contribute to an exceedance of an NAAQS. Therefore, the proposed MOB 3 mission at Westover ARB would not produce significant air quality impacts.	Under the No Action Alternative, baseline conditions at Grissom ARB, Seymour Johnson AFB, and Tinker AFB would remain as described in Sections 3.1.2, 3.2.2, and 3.3.2. No changes would occur. No construction emissions would occur, and operational emissions would be identical to the current baseline conditions. Impacts under the No Action Alternative would be minor. At Westover ARB, the No Action Alternative would cause minor changes in air quality emissions. Impacts under the No Action Alternative would be minor.
	Emissions from construction activities would be below any PSD pollutant threshold of 250 tons per year.				
Safety	Implementation of the proposed KC-46A MOB 3 mission is not anticipated to result in any net increase in the safety risks associated with aircraft mishaps or any increase in the risks of occurrence of those mishaps. No significant impact would occur related to bird/wildlife-aircraft strike hazard issues. The USAF does not anticipate any significant safety impacts as a result of construction, demolition, or renovation if all applicable AFOSH and OSHA requirements are implemented.				Under the No Action Alternative, baseline conditions at Grissom ARB, Seymour Johnson AFB, and Tinker AFB would remain unchanged. At Westover ARB, the No Action Alternative is not anticipated to significantly change safety, as the number and types of operations would remain the same as those described under baseline conditions.

Table ES-10. Comparative Summary of Environmental Consequences (Continued)

Resource Area	Grissom ARB	Seymour Johnson AFB	Tinker AFB	Westover ARB	No Action
Soil and Water Resources	The total disturbed area would be less than 5 acres for new construction.	The total disturbed area would be less than 5 acres for new construction. No changes to current deicing operations would be required. Upon implementation of the proposed MOB 3 mission, the SWP would be revised to include an evaluation of deicing procedures and ways to minimize the use of deicing materials and prevent the release of deicing materials from entering stormwater systems. In addition, the revised SWP would include an evaluation of the means that may be practicable for modifying current use and practices to collect deicing effluent runoff.	The total disturbed area would be less than 8 acres for new construction. Expansion of the 507 ARW parking ramp would impact approximately 3.5 acres of floodplain and approximately 45 linear feet of East Crutcho Creek. East Crutcho Creek is a jurisdictional water of the United States, and according to the Tulsa District of the USACE, this work would be permitted using Nationwide Permit 39. Because impacts to East Crutcho Creek would be less than 300 linear feet, no mitigation would be required To avoid altering the elevation, function, and capacity of the floodplain, material would be excavated adjacent to and from within the same floodplain to be used as fill for the proposed ramp expansion. A FONPA would be prepared should Tinker AFB be selected for the proposed MOB 3 mission.	The total disturbed area would be less than 12 acres. If the proposed MOB 3 mission would require the use of more than 100,000 gallons of deicing fluid on an average annual basis, additional water quality monitoring would be required. If the sample results exceed the benchmark levels, additional controls would require evaluation and possible implementation. Because the nature of the activity (aircraft deicing) is not changing, a change to the permit would not be required. Although increases in aircraft operations could increase the amount of deicing fluid utilized, long-term, significant, adverse impacts to water quality are not anticipated to result from deicing operations associated with the proposed KC-46A MOB 3 mission at Westover ARB.	Under the No Action Alternative, conditions at each base would remain unchanged. None of the construction associated with the proposed KC-46A MOB 3 mission would occur and there would be no additional impacts to soil and water resources.
	Relevant stormwater and land disturbance permits would be required and stormwater plans would be updated. During the design phase, a variety of stormwater controls would be incorporated into construction plans. These could include planting vegetation in disturbed areas as soon as possible after construction; constructing retention facilities; and implementing structural controls (e.g., interceptor dikes, swales [excavated depressions], silt fences, straw bales, and other storm drain inlet protection), as necessary, to prevent sediment from entering inlet structures. No significant impacts to soil and water resources are anticipated.				
Biological Resources	No significant impacts to biological resources or wetlands are anticipated to result from implementation of the proposed KC-46A MOB 3 mission.		Expansion of the 507 ARW parking ramp would impact approximately 1 acre of forested floodplain habitat. This area is described in the INRMP as habitat for migratory bird species at risk. The USAF prepared a BE for the least tern, the piping plover, the whooping crane, and the red knot. The BE was submitted to the USFWS on 19 September 2016. Based on the information contained in the BE, the USAF has determined that should Tinker AFB be selected for the proposed KC-46A MOB 3 mission, implementation of the mission may affect, but is not likely to adversely affect any of these species.	No significant impacts to biological resources or wetlands are anticipated to result from implementation of the proposed KC-46A MOB 3 mission. The USFWS concurred with the USAF determination that no threatened or endangered species would be affected by implementation of the proposed MOB 3 mission (See letter dated 30 June 2016, Volume II, Appendix A, Section A.6.4.2).	Under the No Action Alternative, baseline conditions at each base would remain unchanged. No vegetation or wildlife habitat would be disturbed. No additional impacts to biological resources would be anticipated.

Table ES-10. Comparative Summary of Environmental Consequences (Continued)

Resource Area	Grissom ARB	Seymour Johnson AFB	Tinker AFB	Westover ARB	No Action
Cultural Resources	No adverse Section 106 impacts to cultural or tribal resources are anticipated. The Indiana SHPO has concurred that no cultural resources occur at Grissom ARB. Therefore, the proposed MOB 3 mission would not have an adverse impact on cultural resources. The USAF has conducted consultation with tribes potentially affiliated with the base. No comments or concerns have been raised regarding tribal resources.	Seymour Johnson AFB has determined that no facilities are NRHP-eligible, and the SHPO has concurred with this finding (see letter dated 14 June 2016, EIS Volume II, Appendix A, Section A.5.2). Seymour Johnson AFB has conducted consultation with the Eastern Band of the Cherokee Nation. The tribe has indicated that they do not have any cultural or tribal resources at Seymour Johnson AFB and no interest in Wayne County.	Tinker AFB has determined that no historic properties would be affected. The SHPO has concurred with this finding and requested additional concurrence on archaeological resources from the OAS. The OAS concluded that prior to any construction, an archaeological field inspection would be required (see letter dated 19 May 2016, EIS Volume II, Appendix A, Section A.5.3). Should Tinker AFB be selected for the proposed MOB 3 mission, an archaeological field inspection of the construction area would be completed. Col Stephanie Wilson of Tinker AFB met with Chief Harjo of the Seminole Nation of Oklahoma on 5 August 2016. Although Chief Harjo was interested in small business opportunities for the Seminole Nation of Oklahoma, he had no comments or concerns specific to the proposed KC-46A MOB 3 mission.	On 4 August 2016, Westover ARB submitted a letter to the MHC identifying the APE, which includes the Historic District. This letter stated that the proposed undertaking includes the demolition of Hangar 7071 and Building 2426, contributing resources to the Historic District, and will therefore result in an adverse effect on the historic property. Pursuant to 36 *CFR* § 800.6(c), the letter also stated that USAF was seeking concurrence from the MHC on the adverse effect determination and will continue to consult with the MHC in order to avoid, minimize, or mitigate the potential adverse effects of the undertaking. In a response dated 26 August 2016, the MHC concurred with the USAF letter (see Volume II, Appendix A, Section A.5.4.1). Should the proposed MOB 3 mission be located at Westover ARB, the USAF would prepare HABS/HAER recordation of Hangar 7071 and Building 2426 and develop a map that identifies the boundaries of the Westover ARB Historic District. In addition, the MHC has agreed to participate in the design review process for new construction. Consultation with tribes potentially affiliated with the base has been completed. No issues or concerns were raised regarding tribal resources.	Under the No Action Alternative, baseline conditions at each base would remain unchanged. No additional impacts to historical buildings or other cultural resources would occur.
	Inadvertent discovery of archaeological resources is considered unlikely. An inadvertent discovery of previously unrecorded cultural resources would be managed in compliance with Federal and state laws and USAF regulations.				
Land Use	Implementation of the proposed MOB 3 mission would decrease the off-base area affected by noise levels of 65 dB L_{Adn} or greater by 21 acres. No significant impacts to land use resources would result from the proposed MOB 3 mission.	Implementation of the proposed MOB 3 mission would increase the off-base area affected by noise levels of 65 dB L_{Adn} or greater by 1 acre. The 1 acre of additional land affected by noise is not located near sensitive receptors. The anticipated noise increase to this 1-acre area would not cause unsafe conditions and would not change or conflict with any current or planned land uses in this area. No significant impacts to land use resources would result from the proposed MOB 3 mission.	Implementation of the proposed MOB 3 mission would increase the off-base area affected by noise levels of 65 dB L_{Adn} or greater by 7 acres. These 7 acres are not located near sensitive receptors. The anticipated noise increase to these off-base areas would not cause unsafe conditions and would not change or conflict with any existing or planned land uses in this area. No significant impacts to land use resources would result from the proposed MOB 3 mission.	Implementation of the proposed MOB 3 mission in conjunction with C-5B to C-5M conversion would result in a net decrease in acres (-396 acres) and estimated residents (-38) exposed to noise levels of 65 dB L_{Adn} or greater. No significant impacts to land use resources would result from the proposed MOB 3 mission.	Under the No Action Alternative, conditions at each base would remain unchanged. No changes would occur to planning noise contours surrounding the bases and no land use changes would occur within the base boundaries.
Infrastructure	Implementation of the proposed MOB 3 mission is not anticipated to result in significant impacts to infrastructure systems (e.g., potable water, wastewater, stormwater, electrical, natural gas, solid waste management, and transportation).				Under the No Action Alternative, baseline conditions at each base would remain unchanged. No new construction would occur and no new personnel would arrive or decrease at any of the bases. No additional impacts to the infrastructure system at any of the bases would occur.

Table ES-10. Comparative Summary of Environmental Consequences (Continued)

Resource Area	Grissom ARB	Seymour Johnson AFB	Tinker AFB	Westover ARB	No Action
Hazardous Materials and Waste	The types of hazardous materials and wastes that would be used and generated by the proposed MOB 3 mission are consistent with those currently utilized and generated by the KC-135 mission and other missions at each base; however, the quantities of hazardous materials used and wastes generated would increase with implementation of the proposed MOB 3 mission.			Although the types of hazardous materials used and wastes generated by the proposed MOB 3 mission would increase relative to the current C-5 mission, the types of materials would be similar and hazardous wastes generated would be similar to those currently generated at Westover ARB.	Under the No Action Alternative, conditions at each base would remain unchanged. Each base would continue to use hazardous materials and dispose of hazardous waste as described for each base's baseline conditions.
	The systems engineering process has eliminated halon and minimized the use of the hazardous materials hexavalent chromium and cadmium. Other hazardous materials (e.g., trichloroethane) have available alternates and would not be required for the KC-46A. The preference would be to use the least hazardous material when alternatives are available. Any structures proposed for upgrade or retrofit would be inspected for asbestos-containing materials (ACM) and lead-based paint (LBP) according to established procedures. Modifications and/or additions to existing buildings would occur in proximity to existing Environmental Restoration Program (ERP) sites. The USAF would coordinate with regulatory agencies for any impacts to monitoring wells and any excavation on or near active ERP sites. Formal construction waivers would not be required, but the USAF would require the review of excavation and/or construction siting and compatibility with environmental cleanup sites to be conducted and documented in accordance with current environmental impact analysis processes. During the design phase for each development project, proximity to the various types of ERP sites would be evaluated to determine if additional costs would need to be included in project estimates to maintain the proper land use controls and the groundwater monitoring well networks, and to incorporate proper health and safety precautions into construction plans.				
Socioeconomics (all numbers are approximated)	***Population*** Overall population increase of 530 full-time mission personnel (not including contractors) and military and DoD civilian dependents (0.7 percent increase in the ROI). ***Economic Activity*** Total increase on-base full-time military personnel, DoD civilians, and contractors: 217 (estimated 29 jobs). Total construction costs of $117.8 million could generate 1,197 jobs and $11.4 million in indirect and induced income for the duration of the construction activity. ***Housing*** The housing market in the ROI and surrounding communities within adjacent counties would be anticipated to support the incoming personnel. ***Education*** An estimated 197 military dependents of school-age would enter the school districts in surrounding communities. Based on the number of school corporations and schools in the ROI, as well as class size for the state, the schools in the county would be anticipated to have the capacity to support the incoming population.	***Population*** Overall population increase of 100 full-time mission personnel (not including contractors) and military and DoD civilian dependents to Wayne County (0.08 percent increase in the ROI). ***Economic Activity*** Total increase on-base full-time military personnel, DoD civilians, and contractors: 53 (estimated 22 jobs). Total construction costs of $103.4 million could generate 1,144 jobs and $13.7 million in indirect and induced income for the duration of the construction activity. ***Housing*** Under the assumption that all incoming full-time personnel (not including contractors) would require off-base housing, there would be a potential need for 38 off-base housing units. ***Education*** An estimated 37 military dependents of school age would be anticipated to enter the Wayne County Public School District.	***Population*** Overall population increase of 769 full-time mission personnel (not including contractors) and military and DoD civilian dependents to Oklahoma County (0.1 percent increase in the ROI). ***Economic Activity*** Total increase on-base full-time military personnel, DoD civilians, and contractors: 308 (94 estimated jobs). Total construction costs of $101 million could generate 968 jobs and $31.2 million in indirect and induced income for the duration of the construction activity. ***Housing*** Assuming all 293 incoming full-time mission personnel would require off-base housing, the housing market in the ROI would be anticipated to support the incoming personnel. ***Education*** Approximately 286 military and non-military dependents of school age would enter public school districts in Oklahoma County.	***Population*** Overall population increase of 1,040 full-time mission personnel (not including contractors) and military and DoD civilian dependents to the ROI (0.17 percent increase in the ROI). ***Economic Activity*** Total increase on-base full-time military personnel, DoD civilians, and contractors: 411 (estimated 100 jobs). Total construction costs of $196.9 million could generate 2,137 jobs and $41.5 million in indirect and induced income for the duration of the construction activity. ***Housing*** Assuming all 396 incoming full-time military personnel associated with the MOB 3 mission would require off-base housing, the housing market in the ROI would be anticipated to support the change in personnel. ***Education*** Approximately 386 military and non-military dependents of school age would enter public school districts in the ROI.	Under the No Action Alternative, conditions would remain as described in EIS Volume I, Chapter 3. No new personnel increases or decreases would occur at any of the bases, and none of the bases would receive the benefits of a population increase. No construction would occur, thus no construction-related beneficial expenditures would occur.

Table ES-10. Comparative Summary of Environmental Consequences (Continued)

Resource Area	Grissom ARB	Seymour Johnson AFB	Tinker AFB	Westover ARB	No Action
Socioeconomics (Continued) (all numbers are approximated)	***Public Services*** Demand for public services in the ROI would increase with the projected change in the population; however, it would not be anticipated to result in a significant change due to the small increase in population partially offset with the recent annual decline in population in the ROI. ***Base Services*** Several base services would require additional manpower and facilities to accommodate the incoming personnel.	***Public Services*** Public services would be anticipated to support the incoming population. ***Base Services*** Base services have adequate capacity in the CDC, housing, fitness, and dining facilities under the existing infrastructure to support replacement of the KC-135 mission with the proposed MOB 3 mission.	***Public Services*** Public services would be anticipated to support the incoming population. ***Base Services*** There is adequate infrastructure and capacity to support incoming military populations.	***Public Services*** Public services would be anticipated to support the incoming population. ***Base Services*** Several base services would require additional manpower and facilities to accommodate the incoming personnel. No childcare or military dining facilities are available on Westover ARB.	
Environmental Justice and Other Sensitive Receptors	Implementation of the proposed MOB 3 mission is not anticipated to disproportionately impact any off-base minority, low-income, youth, or elderly populations.				Under the No Action Alternative, baseline conditions at each base would remain unchanged. There would be no environmental justice impacts or impacts to youth or elderly populations at any of the bases.

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ACRONYMS AND ABBREVIATIONS

ABW	Air Base Wing
ACM	asbestos-containing material
AFB	Air Force Base
AFOSH	Air Force Occupational and Environmental Safety, Fire Protection, and Health
AFRC	Air Force Reserve Command
AMC	Air Mobility Command
APE	area of potential effect
AR	air refueling
ARB	Air Reserve Base
ARW	Air Refueling Wing
AW	Airlift Wing
BE	Biological Evaluation
C&D	construction and demolition
CDC	child development center
CEQ	Council on Environmental Quality
CFR	*Code of Federal Regulations*
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CONUS	continental United States
dB	decibel(s)
DoD	U.S. Department of Defense
EIS	Environmental Impact Statement
ERP	Environmental Restoration Program
ES	Executive Summary
FONPA	Finding of No Practicable Alternative
FW	Fighter Wing
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
IDP	Installation Development Plan
INRMP	Integrated Natural Resources Management Plan
L_{Adn}	A-weighted day-night average sound level
LBP	lead-based paint
MHC	Massachusetts Historical Commission
MILCON	military construction
MOB 3	Third Main Operating Base
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NRHP	National Register of Historic Places
O_3	ozone
OAS	Oklahoma Archeological Survey
OSHA	Occupational Safety and Health Administration
PAA	Primary Aerospace Vehicles Authorized
PM_{10}	particulate matter less than or equal to 10 micrometers in diameter

ACRONYMS AND ABBREVIATIONS (Continued)

$PM_{2.5}$	particulate matter less than or equal to 2.5 micrometers in diameter
PSD	Prevention of Significant Deterioration
ROD	Record of Decision
ROI	region of influence
SHPO	State Historic Preservation Office
SO_x	sulfur oxides
SWP	Stormwater Plan
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound