

EXECUTIVE SUMMARY

Draft

Environmental Impact Statement (EIS)
KC-46A Main Operating Base #4 (MOB 4) Beddown

Headquarters Air Mobility Command



**November
2017**

EXECUTIVE SUMMARY
ABBREVIATIONS AND ACRONYMS

AFB	Air Force Base
AMC	Air Mobility Command
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DOD	Department of Defense
EIS	Environmental Impact Statement
JB MDL	Joint Base McGuire-Dix-Lakehurst
KC-10	KC-10 Extender
KC-135	KC-135 Stratotanker
MOA	Memorandum of Agreement
MOB 4	Main Operating Base #4
PAA	Primary Aerospace Vehicles Authorized
NEPA	National Environmental Policy Act
SHPO	State Historic Preservation Officer
USAF	U.S. Air Force
USC	United States Code

EXECUTIVE SUMMARY
Draft
ENVIRONMENTAL IMPACT STATEMENT
FOR
KC-46A MAIN OPERATING BASE #4 BEDDOWN

AIR MOBILITY COMMAND

NOVEMBER 2017

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Executive Summary

ES 1. Introduction

The U.S. Air Force (USAF) proposes to base 36 or 24 KC-46A Pegasus (KC-46A) aircraft at one or more active duty locations in the continental United States to beddown the KC-46A Main Operating Base #4 (MOB 4) mission. The MOB 4 mission includes the basing of the KC-46A aircraft and the infrastructure, facilities, airfield operations, training activities, personnel, and airspace required to support the mission. USAF has identified four alternative basing locations, as shown in **Figure ES-1**, for the MOB 4 mission:

- Fairchild Air Force Base (AFB), Washington
- Grand Forks AFB, North Dakota
- Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey
- Travis AFB, California.

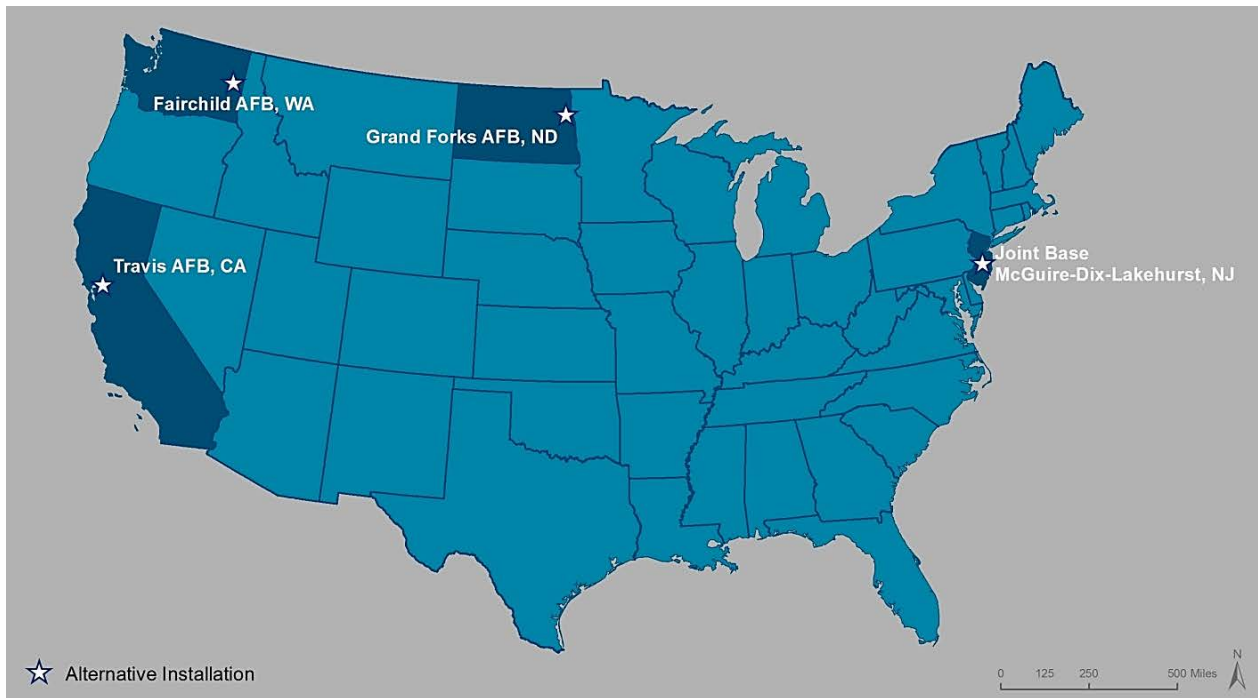


Figure ES-1. Alternative Locations for the KC-46A MOB 4 Beddown

This Executive Summary provides an overview of the KC-46A MOB 4 Beddown Environmental Impact Statement (EIS) and is organized to familiarize the reader with the structure and content of the EIS, which provides a more comprehensive discussion of the requirements for and potential environmental impacts of the MOB 4 beddown Proposed Action.

The lead agency for the Environmental Impact Statement (EIS) is the Department of the Air Force. Headquarters Air Mobility Command (AMC) is a USAF major command headquartered at Scott AFB, Illinois that developed this EIS on behalf of USAF. The EIS was prepared in

1 compliance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code
2 [USC] 4321 et seq.), the Council on Environmental Quality (CEQ) Regulations for Implementing
3 the Procedural Provisions of NEPA (Title 40 Code of Federal Regulations [CFR] §§ 1500–
4 1508), and the USAF implementing regulation for NEPA, the Environmental Impact Analysis
5 Process (EIAP), Air Force Instruction 32-7061, which adopts Title 32 CFR § 989, as amended,
6 as the controlling document for the EIAP.

7 ES 2. Purpose of and Need for the Proposed Action

8 The purpose of the Proposed Action is to recapitalize a portion of the aging USAF tanker aircraft
9 fleet with the KC-46A model to better address current and future mission requirements, offer
10 expanded capability, and provide life-cycle cost savings in comparison to continued operation of
11 existing KC-135 and KC-10 models.

12 The beddown of the MOB 4 mission is intended to provide a fully capable, combat operational
13 KC-46A aerial refueling force at one or more of the proposed MOB 4 location(s) to accomplish
14 aerial refueling and related missions. The mission-ready KC-46A squadrons would allow
15 immediate and effective employment in exercises, peacekeeping operations, contingencies, and
16 combat.

17 The MOB 4 beddown of the KC-46A is needed because the KC-46A provides mission essential
18 capabilities currently lacking in the existing tanker fleet. The following are examples of the
19 additional capabilities it provides:

- 20 • *Receiver Capable.* The KC-46A is able to receive fuel from other tanker aircraft, which
21 is a force multiplier. This capability is not currently available on all existing tanker
22 aircraft. This lack of capability limits persistence over the battlefield and results in
23 inefficient use of aerial refueling assets.
- 24 • *Night Vision Imaging System.* The current fleet lacks a standard night vision imaging
25 system for tanker cockpits and boom operators. External aircraft lighting is not currently
26 compatible with night vision imaging systems. This deficiency degrades effectiveness
27 for special operations support and limits the use of these aircraft for covert operations.
- 28 • *Multi-point Refueling.* Only a small number of existing tanker aircraft are equipped for
29 simultaneous multi-point refueling. This deficiency severely limits the aircraft's
30 functionality to support multiple simultaneous refueling operations, as well as boom and
31 drogue refueling on the same mission.
- 32 • *Command and Control Network.* The existing fleet lacks connectivity to command and
33 control assets. Furthermore, aircraft have no secure tactical datalink and only limited
34 connectivity to other combat support and mobility aircraft.
- 35 • *Defensive Protection.* Existing tankers are normally not equipped with aircraft defensive
36 systems, which limits aircraft from operating in anything other than a low-threat
37 environment.

ES 3. Interagency and Public Involvement

In accordance with NEPA, USAF completed public scoping for the MOB 4 Beddown EIS and is making the Draft EIS available for public review and comment. The public scoping period began by issuing a Notice of Intent in the *Federal Register* on December 22, 2016, and ended on February 3, 2017. AMC also issued notices in local newspapers and mailed scoping notification letters to federal, state, and local agencies; elected officials; federally recognized tribes; nongovernmental organizations; and interested individuals. Four public scoping meetings were held, one in each of the communities near the four alternative installations.

USAF has released this Draft EIS to the public and agencies for review and comment and published a Notice of Availability in the *Federal Register*, which initiated a 45-day public comment period on this Draft EIS. AMC also issued notices in local newspapers and mailed Draft EIS notification letters to federal, state, and local agencies; elected officials; federally recognized tribes; nongovernmental organizations; and interested individuals. Four public hearings are scheduled, full details are provided in the Notice of Availability, one in each of the communities near the four alternative installations. Comments received on this Draft EIS will be fully considered and addressed in the Final EIS, as appropriate.

ES 4. Description of the Proposed Action and Alternatives

ES 4.1 Proposed Action

The MOB 4 Proposed Action involves the basing of 36 or 24 KC-46A Primary Aerospace Vehicles Authorized (PAA) at one or more active duty locations in the continental United States to beddown the MOB 4 mission. Each squadron would require infrastructure, facilities, airfield operations, training activities, personnel, and airspace to support the KC-46A MOB 4 mission. Key elements of the Proposed Action with the potential to affect environmental resources at the installation(s) or under the training airspace include the following:

- Beddown 36 (three squadrons of 12 aircraft) or 24 (two squadrons of 12 aircraft) KC-46A aircraft in accordance with the aircraft delivery schedule.
- Renovate, construct, and manage facilities and infrastructure necessary to support the mission.
- Implement changes in personnel (increases or decreases) at the installation to conform to mission requirements.
- Depending on mission, conduct sorties at each installation for pilot, copilot, and boom operator training/certification; aerial refueling operations; and global reach missions.

Depending on the installation, the Proposed Action would either add to existing non-tanker missions or would replace the active duty current tanker mission. Implementation of the Proposed Action would occur in two stages: a beddown stage and an operational stage. Both stages are assessed in this EIS. The beddown stage involves construction/retrofit of required facilities, infrastructure, and prepared surfaces, which includes renovation, alteration, and demolition. The beddown stage also includes preparing support facilities for new personnel and

1 students to support the mission. The operational stage involves conducting day-to-day activities
2 (e.g., operational missions, maintenance) at the installation, including flight operations and
3 training in the existing regional airspace.

4 Requirements for a KC-46A MOB 4 squadron (12 aircraft per squadron) include the physical
5 infrastructure, land, airspace, personnel, water, and energy assets needed to beddown the
6 MOB 4 mission. The following paragraphs provide additional information on the key elements of
7 the MOB 4 beddown.

8 **Aircraft Beddown/Transition.** USAF would replace existing active duty tanker aircraft (i.e.,
9 KC-135 or KC-10) at the selected location(s) with 36 or 24 KC-46A PAA, regardless of how
10 many tanker aircraft are currently at the alternative location. Existing tanker aircraft would either
11 be relocated to other installations or retired out of the USAF inventory, depending on the life-
12 cycle status of each particular aircraft. Separate NEPA documentation, as needed, would be
13 prepared for the aircraft relocated to other installations. If a selected location does not have an
14 existing active duty tanker mission, no aircraft would be replaced and the KC-46A would be
15 added to the installation's current non-tanker mission.

16 **Facility and Infrastructure Requirements.** USAF proposes to utilize existing infrastructure to
17 the maximum extent feasible to support the KC-46A facility and infrastructure requirements.
18 Where existing facilities and infrastructure cannot meet the needs of the Proposed Action,
19 USAF would construct, renovate, or demolish facilities at the selected alternative installation.
20 The facility and infrastructure modifications vary by installation.

21 **Personnel Changes.** The KC-46A MOB 4 mission would require personnel to operate and
22 maintain the aircraft and to provide necessary support services. Depending on the number and
23 types of personnel associated with the current missions at the installation and on the proposed
24 Air Force Reserve or Air National Guard component of the MOB 4 mission, the requirement
25 would be between 2,100 and 3,200 full- and part-time personnel for 36 KC-46A PAA and 1,500
26 to 2,500 for 24 KC-46A PAA. This would include both active-duty, Air Force Reserve or Air
27 National Guard, officer, enlisted, Department of Defense civilian, contractor support personnel,
28 and Base Operating Support personnel.

29 **KC-46A Operations.** Under the Proposed Action, 36 KC-46A PAA would fly up to 33,710
30 operations per year, and 24 KC-46A PAA would fly up to 22,473 operations per year (e.g., an
31 operation is one takeoff or one landing). Because this is a new aircraft flying with a combination
32 of active duty and associate personnel, a uniform distribution of operations was assumed for
33 each alternative. Because existing missions differ between the four alternative installations,
34 total proposed operations also differ under the Proposed Action. Additionally, fluctuations in
35 operational tempo can vary between aircraft types and from year to year because of unit
36 deployments, funding levels, and other factors; therefore, a reduction or increase in number of
37 aircraft does not necessarily translate to a reduction or increase in flight operations,
38 respectively. All flight operations would take place within existing airspace and additions to or
39 alterations of airspace are not proposed. The Proposed Action would, depending on the
40 installation, either add to or replace the current flying operations.

1 ES 4.2 Action Alternatives

2 As stated in **ES 1**, USAF has identified four alternative basing locations for the beddown of the
3 MOB 4 mission:

- 4 • Fairchild AFB, Washington
- 5 • Grand Forks AFB, North Dakota
- 6 • JB MDL, New Jersey
- 7 • Travis AFB, California.

8 Implementation of the Proposed Action at each alternative location would include the key
9 elements discussed in **Section ES 4.1**- aircraft beddown, facility modifications, personnel
10 changes, and aircraft operations changes. **Table ES-1** provides a summary comparison of the
11 Action and No Action Alternatives.

12 **Table ES-1. Summary of Alternatives**

Alternative Components	Fairchild AFB 36/24 KC-46A PAA	Grand Forks AFB 36/24 KC-46A PAA	JB MDL 36/24 KC-46A PAA	Travis AFB 36/24 KC-46A PAA	No Action Alternative ^c
Reduction of Current Active Duty KC-135 PAA	36	0	0	0	0
Reduction of Current Active Duty KC-10 PAA	0	0	30	24	0
Proposed Active Duty KC-46A PAA	36/24	36/24	36/24	36/24	0
Facilities and Infrastructure	See Section 2.1.1 for MOB 4 36 PAA and 24 PAA-specific facilities and infrastructure requirements.				None
Total Personnel Change ^a	+377/-218	+2,240/+1,612	+551/-112	+706/+96	0
Total Dependent Change ^a	+219/-486	+2,709/+1,950	+696/-54	+834/+137	0
Aircraft Operations Change ^b	+18,796/+7,559	+33,710/+22,473	+10,058/-1,179	+6,670/-4,567	0

^a The personnel and dependent numbers are noticeably different because the mission at Grand Forks AFB would be additive and the mission at the other locations would be a replacement mission.

^b Aircraft operations change is the difference between the total baseline and total projected for all aircraft types.

^c Under the No Action Alternative, ongoing and currently planned activities and programs would continue regardless of whether the basing of KC 46A would be implemented. These activities have been approved by USAF and are supported by existing NEPA documentation.

13 ES 4.3 No Action Alternative

14 CEQ's regulations for implementing NEPA, specifically 40 CFR § 1502.14(d), requires the
15 analysis of a No Action Alternative in EISs, which provides a benchmark, enabling decision
16 makers to compare the magnitude of the environmental effects to a proposed action and
17 alternatives. No action means that an action would not take place and the resulting

1 environmental effects from taking no action would be compared with the effects of allowing the
2 proposed activity to go forward.

3 The No Action Alternative reflects the status quo, where the KC-46A beddown would not occur
4 at any installation at this time. No KC-46A aircraft would arrive and all existing aircraft would
5 remain in place. No construction, renovation, or demolition of any structure or other
6 infrastructure would occur. Changes in personnel and to existing flight operations would not
7 occur. At each installation, ongoing and currently planned activities and programs would
8 continue regardless of whether the basing of KC-46A would be implemented. These activities
9 have been approved by USAF and are supported by existing NEPA documentation.

10 ES 5. Preferred and Reasonable Alternatives

11 According to CEQ guidelines, an agency's preferred alternative under NEPA is the alternative
12 that the agency believes would fulfill its statutory mission and responsibilities, giving
13 consideration to economic, environmental, technical, and other factors (CEQ 1981). CEQ
14 regulations require the section of the EIS on alternatives to "identify the agency's preferred
15 alternative or alternatives if one or more exists, in the draft statement, and identify such
16 alternative in the final statement..." (CEQ 1981).

17 USAF's Preferred Alternative is to beddown the MOB 4 mission with 24 KC-46A PAA at JB
18 MDL, or Travis AFB, or both. USAF is identifying the Preferred Alternative pursuant to 40 CFR §
19 1502.14(e); however, no final decision selecting an alternative for implementation has been
20 made.

21 Based on operational analysis; results of detailed, on-the-ground site surveys at each of the four
22 alternative installations; and military judgment factors, as described in **Section 2.2** of the EIS,
23 USAF has also identified the option to beddown 36 KC-46A PAA and has identified Fairchild
24 AFB and Grand Forks AFB as reasonable alternatives. Along with the No Action Alternative, all
25 four installations and the option to beddown either 36 or 24 KC-46A PAA for the MOB 4 mission
26 will be evaluated as alternatives in this EIS.

27 The USAF decision maker will use the information and analysis contained in the EIS to support
28 the decision about how best to satisfy the stated purpose and need. A final determination
29 regarding which installations are selected for the MOB 4 beddown, and the number of aircraft to
30 be beddown, will be reflected in the Record of Decision.

31

ES 6. Summary of Environmental Impacts

NEPA requires focused analysis on environmental resources and topics potentially affected by the Proposed Action. Based on the potential for the Proposed Action to affect the environment at and surrounding the four alternative locations, as well as public and agency concerns, several specific environmental resources were evaluated in detail in the EIS.

Environmental impacts that might result from the implementation of USAF's Proposed Action alternatives and the No Action Alternative have been summarized in **Table ES-2**. This table presents potential impacts that could occur and includes consideration of compliance with federal and local regulations and requirements. Potential impacts identified in this document are also based on the current status of consultations with federal and state agencies responsible for ensuring compliance with resource-specific regulations (e.g., Section 106 consultation with State Historic Preservation Officers [SHPO]; Section 7 consultation with U.S. Fish and Wildlife Service). All consultations for each of the alternative locations have been initiated and will be completed prior to issuance of the Final EIS and incorporated into the Final EIS impacts analysis. Detailed descriptions of the existing environmental conditions and environmental consequences for resources potentially affected by the Proposed Action and alternatives are provided in **Chapter 3** and **Chapter 4** of the EIS, respectively.

Table ES-2. Summary of Environmental Impacts

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Noise				
<p>36 PAA. Minor impacts due to noise generated by heavy equipment during construction, renovation, and demolition; and negligible impacts due to incremental increases in aircraft noise in areas surrounding Fairchild AFB because of increased operations.</p>	<p>36 PAA and 24 PAA. Minor impacts due to noise generated by heavy equipment during construction, renovation, and demolition and increases in aircraft noise in areas surrounding the installation because of changes in aircraft operations.</p>			<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on the ambient noise environment.</p>
<p>24 PAA. Minor impacts due to noise generated by heavy equipment during construction, renovation, and demolition; and beneficial impacts due to an incremental decrease in aircraft noise in areas surrounding Fairchild AFB because of decreased operations.</p>				
Biological Resources				
<p>36 and 24 PAA. Negligible impacts on vegetation because of disturbance during construction, renovation, and demolition. Minor impacts on wildlife from habitat displacement or avoidance because of construction, renovation, and demolition. Negligible impacts on wildlife and increased potential of bird/wildlife aircraft strikes from increased aircraft operations. No effect on special status species. No impacts on wetlands would be expected.</p>	<p>36 and 24 PAA. Negligible impacts on vegetation because of disturbance during construction and renovation. Minor impacts on wildlife and some special status species from habitat displacement or avoidance due to construction and renovation. Minor impacts on wildlife and increased potential of bird/wildlife aircraft strikes from increased aircraft operations. No effect on federally threatened and endangered species. Adverse impacts on wetlands from removal and filling during construction, which could also affect, but would not be likely to adversely affect, the state-listed northern leopard frog.</p>	<p>36 PAA. Negligible impacts on vegetation from construction, renovation, and demolition or aircraft operation. Negligible impacts on wildlife from construction, renovation, and demolition and aircraft operation. Minor impacts on bird/wildlife aircraft strike hazards because of increased aircraft operations. No effect on federally threatened and endangered species. No significant impacts expected on state-listed special status species.</p>	<p>36 PAA. Negligible to minor impacts on vegetation and wildlife due to disturbance during construction, renovation, and demolition and increased aircraft operations. Minor impacts on bird/wildlife aircraft strike hazards because of increased aircraft operations. Negligible to minor impacts on state-listed special status species from construction, renovation, and demolition and aircraft operations. Construction, renovation, and demolition are likely to adversely affect the California tiger salamander, and may affect, but are not likely to adversely affect the vernal pool fairy shrimp, and the vernal pool tadpole shrimp. No impacts on wetlands would be expected.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on vegetation, wildlife, special status species, or wetlands.</p>

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Biological Resources (continued)				
		<p>24 PAA. No impact on vegetation would be anticipated. Negligible impacts on wildlife from construction, renovation, and demolition. No effect on federally threatened and endangered species. No significant impacts expected on state-listed special status species.</p>	<p>24 PAA. Negligible to minor impacts on vegetation and wildlife due to disturbance during construction, renovation, and demolition. Negligible to minor impacts on state-listed special status species from construction, renovation, and demolition and aircraft operations. Construction, renovation, and demolition are likely to adversely affect the California tiger salamander and may affect, but are not likely to adversely affect the vernal pool fairy shrimp and the vernal pool tadpole shrimp. No impacts on wetlands would be expected.</p>	
Cultural Resources				
<p>36 PAA. Adverse impacts on the Flight Line Historic District and seven contributing buildings from building demolition. Adverse impacts have been previously mitigated and would not be significant. Adverse impacts on Building 2050 because of exterior building modifications. USAF is consulting with the Washington SHPO to resolve adverse effects prior to signature of the ROD. No impacts on archaeological resources or resources of traditional religious or cultural importance would be expected.</p>	<p>36 and 24 PAA. No impacts on archaeological resources, architectural resources, or known resources of traditional religious or cultural importance would be expected.</p>	<p>36 and 24 PAA. USAF determined the Proposed Action would not adversely affect Building 3209 based on commitment to develop project designs that maintain the historic integrity of the property. USAF is consulting with the New Jersey SHPO and is seeking concurrence with its determination of no adverse effect. No impacts on archaeological resources or resources of traditional religious or cultural importance would be expected.</p>	<p>36 PAA. No impacts on archaeological resources or resources of traditional religious or cultural importance would be expected. Adverse impact on Building 810 from demolition. Previous documentation was prepared for Building 810 in 2002. USAF continues to discuss potential measures with the SHPO that would be appropriate to avoid, minimize, or mitigate potential adverse effects on Building 810.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on archaeological resources, architectural resources, or resources of traditional religious or cultural importance.</p>

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Cultural Resources (continued)				
<p>24 PAA. Adverse impacts on the Flight Line Historic District and two contributing buildings from building demolition. Adverse impacts have been previously mitigated and would not be significant. Adverse impacts on Building 2050 from exterior building modifications. USAF is consulting with the Washington SHPO to resolve adverse effects prior to signature of the ROD. No impacts on archaeological resources or resources of traditional religious or cultural importance would be expected.</p>			<p>24 PAA. No impacts on archaeological resources, architectural resources, or resources of traditional religious or cultural importance would be expected.</p>	
Socioeconomics				
<p>36 PAA. Negligible impacts on population from increase in full-time military personnel, dependents, and family members. Beneficial impacts on the local economy from construction-related employment and spending. No impacts would be expected on housing, education, public services, or installation services.</p>	<p>36 and 24 PAA. Beneficial impacts on the local economy from construction-related employment and spending. No significant impacts would be expected on housing, schools, public services, or installation services. Housing and schools could experience short-term capacity constraints. Some installation services would need to be reconfigured or renovated to accommodate increased demand.</p>	<p>36 PAA. Negligible impacts on population from increase in full-time military personnel, dependents, and family members. Beneficial impacts on the local economy from construction-related employment and spending. No significant impacts would be expected on housing, schools, public services, or installation services. Some installation services may require slight manpower increases.</p>	<p>36 and 24 PAA. Negligible impacts on population from increase in full-time military personnel, dependents, and family members. Beneficial impacts on the local economy from construction-related employment and spending. No significant impacts would be expected on housing, schools, or public services. Some installation services could experience short-term constraints but would not be adversely affected.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on socioeconomics.</p>
<p>24 PAA. Negligible impacts on population from decrease in personnel. Beneficial impact on local economy from construction-related employment and spending. Adverse impact on the local economy from loss of indirect and induced jobs. Negligible impacts would be expected on housing, schools, public services, and installation services.</p>		<p>24 PAA. Negligible impacts on population from decrease in personnel. Beneficial impact on local economy from construction-related employment and spending. Adverse impacts on the local economy from loss of indirect and induced jobs. No impacts would be expected on housing, schools, public services, or installation services.</p>		

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Soils and Geology				
<p>36 and 24 PAA. Negligible impacts on topography and minor impacts on soils as a result of demolition, site preparation, and construction activities. No impacts would be expected on geology, geological hazards, or prime farmland.</p>				<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on soils and geology.</p>
Water Resources				
<p>36 and 24 PAA. No impacts would be expected on groundwater quality or quantity. Possible impacts on surface water due to increased sedimentation and stormwater runoff during construction, renovation, or demolition and from increased surface area. No significant impacts would be expected on surface water. No impacts on floodplains would occur.</p>	<p>36 and 24 PAA. Minor impacts on groundwater quality due to increased risk of groundwater contamination. Possible impacts on surface water due to increased sedimentation and stormwater runoff during construction and renovation and from increased surface area. Significant impacts would not be expected on surface water from construction and renovation or aircraft operations, including deicing. No impacts on floodplains would occur.</p>	<p>36 PAA. No impacts would be expected on groundwater quality or quantity. Possible impacts on surface water due to increased sedimentation and stormwater runoff during construction, renovation, and demolition and from increased surface area. No significant impacts would be expected on surface water. No impacts on floodplains would occur.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on water resources.</p>	
			<p>24 PAA. No impacts would be expected on groundwater quality or quantity. Possible impacts on water quality due to increased sedimentation and stormwater runoff during construction, renovation, and demolition and from increased surface area. No significant impacts would be expected on surface water. No impacts on floodplains would occur.</p>	

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Infrastructure and Transportation				
<p>36 PAA. Minor impacts on potable water, electrical, and natural gas distribution systems and communications infrastructure from construction, renovation, and demolition. Minor impacts on potable water supply and electrical demand from population increase. Adverse impacts on the stormwater system due to increase in impervious surface area. Adverse impacts on transportation due to congestion during renovation, construction, and demolition. No significant impacts on infrastructure and transportation would be expected.</p>	<p>36 and 24 PAA. Minor impacts on potable water, electrical, and natural gas distribution systems and communications infrastructure from construction and renovation. Moderate impact on electrical demand from population increase. Adverse impacts on the stormwater system due to increase in impervious surface area. Adverse impacts on transportation due to congestion during renovation and construction. No significant impacts on infrastructure and transportation would be expected.</p>	<p>36 PAA. Minor impacts on potable water, electrical, and natural gas distribution systems and communications infrastructure from construction, renovation, and demolition. Moderate impacts on electrical demand from population increase. Adverse impacts on the stormwater system due to increase in impervious surface area. Adverse impacts on transportation due to congestion during renovation, construction, and demolition. No significant impacts on infrastructure and transportation would be expected.</p>	<p>36 and 24 PAA. Minor impacts on potable water, electrical, and natural gas distribution systems and communications infrastructure from construction, renovation, and demolition. Adverse impacts on the stormwater system due to increase in impervious surface area. Adverse impacts on transportation due to congestion during renovation, construction, and demolition. No significant impacts on infrastructure and transportation would be expected.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on infrastructure and transportation.</p>
<p>24 PAA. Minor impacts on potable water, electrical, and natural gas distribution systems and communications infrastructure from construction, renovation, and demolition. Adverse impacts on transportation due to congestion during renovation, construction, and demolition. No significant impacts on infrastructure and transportation would be expected.</p>		<p>24 PAA. Minor impacts on potable water, electrical, and natural gas distribution systems and communications infrastructure from construction, renovation, and demolition. Adverse impacts on the stormwater system due to increase in impervious surface area. Adverse impacts on transportation due to congestion during renovation, construction, and demolition. No significant impacts on infrastructure and transportation would be expected.</p>		

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Land Use				
<p>36 PAA. Minor impacts on-installation from noise, dust, and increased traffic during the construction, renovation, and demolition period. Negligible impacts on- and off-installation from increased aircraft noise.</p>	<p>36 PAA. Minor impacts on-installation from noise, dust, and increased traffic during the construction and, renovation period. Minor impacts from increased population and potential on-installation residential land-use constraints. Negligible impacts on-installation from increased aircraft noise. Minor impacts on off-installation residential and community land uses from increased land area exposed to higher noise levels.</p>	<p>36 PAA. Minor impacts on-installation from noise, dust, and increased traffic during the construction, renovation, and demolition period. Negligible impacts on-installation from increased aircraft noise. Minor impacts off-installation from increased land area exposed to higher noise levels.</p>	<p>36 PAA. Minor impacts on-installation from noise, dust, and increased traffic during the construction, renovation, and demolition period. Negligible impacts on- and off-installation from increased land area exposed to higher noise levels.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on land use.</p>
<p>24 PAA. Minor adverse impacts on-installation from noise, dust, and increased traffic during the construction, renovation, and demolition period. Beneficial impacts on- and off-installation because the land area underlying noise contour would be reduced.</p>	<p>24 PAA. Minor impacts on-installation from noise, dust, and increased traffic during the construction and renovation period. Negligible impacts on-installation from increased aircraft noise. Minor adverse impact on off-installation land uses from increased land area exposed to higher noise levels.</p>	<p>24 PAA. Minor impacts on-installation from noise, dust, and increased traffic during the construction period. Minor adverse impact on off-installation land uses from increased land area exposed to higher noise levels.</p>	<p>24 PAA. Minor impacts on-installation from noise, dust, and increased traffic during the construction, renovation, and demolition period. Minor impacts on-installation from increased aircraft noise. No impacts on off-installation land uses.</p>	
Hazardous Materials and Wastes				
<p>36 and 24 PAA. Negligible impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes during construction, renovation, and demolition. Minor impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes associated with aircraft operation and maintenance. Minor impacts from special hazards during facility renovation and demolition. Beneficial impacts from reduction in potential for future human exposure to special hazards. Possible minor impacts from radon.</p>	<p>36 and 24 PAA. Negligible impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes during construction and renovation. Minor impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes associated with aircraft operation and maintenance. Minor impacts from special hazards during facility renovation. Beneficial impacts from reduction in potential for future human exposure to special hazards. Possible minor impacts from radon.</p>	<p>36 and 24 PAA. Negligible impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes during construction, renovation, and demolition. Minor impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes associated with aircraft operation and maintenance. Minor impacts from special hazards during facility renovation and demolition. Beneficial impacts from reduction in potential for future human exposure to special hazards. No impacts from radon would be expected.</p>	<p>36 and 24 PAA. Negligible impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes during construction, renovation, and demolition. Minor impacts from the use of hazardous materials and petroleum products and the generation of hazardous wastes associated with aircraft operation and maintenance. Minor impacts from special hazards during facility renovation and demolition. Beneficial impacts from reduction in potential for future human exposure to special hazards. No impacts from radon would be expected.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on hazardous materials and wastes.</p>

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Health and Safety				
<p>36 PAA. Negligible impacts on flight safety from the increase in operational tempo. Minor impacts due to increased risk of bird/wildlife-aircraft strikes. Minor impacts on occupational safety due to construction, renovation, and demolition and the presence, maintenance, and operation of aircraft. Negligible impacts on occupational safety from increased operations.</p>	<p>36 and 24 PAA. Minor impacts on flight safety due to increased number of aircraft and operations and increased risk of bird/wildlife-aircraft strikes. Minor adverse impacts on occupational safety due to construction and renovation. Negligible impacts on occupational safety from increased aircraft and operations.</p>	<p>36 PAA. Negligible impacts on flight safety due to increased number of aircraft and operations. Minor impact on air safety due to increased potential for bird/wildlife aircraft strikes. Minor adverse impacts on occupational safety due to construction, renovation, and demolition. Negligible impacts on occupational safety from increased aircraft and operations.</p>	<p>36 PAA. Negligible impacts on flight safety due to increased number of aircraft and operations and increased risk of bird/wildlife-aircraft strikes. Minor adverse impacts on occupational safety due to construction, renovation, and demolition. Negligible impacts on occupational safety from increased aircraft and operations.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on health and safety.</p>
<p>24 PAA. Beneficial impacts on health and safety from net decrease in aircraft. Minor impacts on flight safety due to increase in operational tempo and increased risk of bird/wildlife-aircraft strikes. Minor impacts on occupational safety due to construction, renovation, and demolition. Negligible impacts on occupational safety from presence of new aircraft.</p>		<p>24 PAA. Beneficial impacts on flight safety due to decreased number of aircraft and operations and decreased risk of bird/wildlife-aircraft strikes. Minor impacts on occupational safety due to construction, renovation, and demolition and the presence of new aircraft.</p>	<p>24 PAA. Beneficial impacts on flight safety due to decreased number of operations and decreased risk of bird/wildlife-aircraft strikes. Minor impacts on occupational safety due to construction, renovation, and demolition. Beneficial impacts on occupational safety from decreased operations.</p>	

Fairchild AFB	Grand Forks AFB	JB MDL	Travis AFB	No Action Alternative
Air Quality				
<p>36 and 24 PAA. Minor impacts on air quality due to emissions during construction, renovation, and demolition. Moderate adverse impacts due to increases in aircraft operations and emissions of certain pollutants. Beneficial impacts due to reduction in some emissions. The beddown would not be expected to cause or contribute to an exceedance of federal, state, or local ambient air quality standards.</p>	<p>36 and 24 PAA. Minor impacts on air quality due to emissions during construction and renovation. Moderate adverse impacts due to increases in aircraft operations and emissions of certain pollutants. An increase of greenhouse gas emissions would be adverse but not significant. The beddown would not be expected to cause or contribute to an exceedance of federal, state, or local ambient air quality standards.</p>	<p>36 and 24 PAA. Minor impacts on air quality due to aircraft emissions and emissions during construction, renovation, and demolition. Beneficial impacts on some pollutants due to decreased aircraft emissions. The beddown would not be expected to cause or contribute to an exceedance of federal, state, or local ambient air quality standards.</p>	<p>36 PAA. Minor impacts on air quality due to emissions during construction, renovation, and demolition. Minor impacts due to increases emissions of certain pollutants from aircraft operations. Beneficial impacts due to reduction in some emissions. The beddown would not be expected to cause or contribute to an exceedance of federal, state, or local ambient air quality standards.</p> <p>24 PAA. Minor, beneficial impacts on air quality mainly due to reductions in aircraft emissions for all pollutants. Minor impacts on air quality from emissions generated by heavy equipment during construction. The beddown would not be expected to cause or contribute to an exceedance of federal, state, or local ambient air quality standards.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on air quality.</p>
Environmental Justice and Other Sensitive Receptors				
<p>36 and 24 PAA. No significant or disproportionate impacts on minority, low-income, child, or other sensitive receptors would be expected.</p>	<p>36 and 24 PAA. No significant or disproportionate impacts on minority, low-income, child, or other sensitive receptors would be expected.</p>	<p>36 and 24 PAA. No significant or disproportionate impacts on minority, low-income, child, or other sensitive receptors would be expected.</p>	<p>36 and 24 PAA. No significant or disproportionate impacts on minority, low-income, child, or other sensitive receptors would be expected.</p>	<p>Under the No Action Alternative, conditions at each installation would remain unchanged. There would be no additional impacts on minority, low-income, child, or other sensitive receptors.</p>

ES 7. Cumulative Effects

CEQ defines cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” Informed decision making is served by consideration of cumulative impacts resulting from projects that are proposed, under construction, recently completed, or anticipated to be implemented in the reasonably foreseeable future.

A cumulative project list was developed to identify projects at and in the region of each installation, based on readily available information. A detailed description of the cumulative projects considered and the potential cumulative effects are provided in **Chapter 5** of the EIS.

ES 8. Mitigation Measures

The Proposed Action has the potential to result in adverse environmental impacts as summarized in **Table ES-2**. Mitigation measures to facilitate implementation of the Proposed Action and minimize, avoid, or compensate for potential impacts on specific resource areas have been identified and would be implemented as required. Unavoidable impacts would be minimized or compensated to the extent practicable. All mitigation measures identified in this Draft EIS have been developed specifically in response to the MOB 4 beddown. These are new measures that are not currently in place and would be implemented to avoid, minimize, remediate, or compensate the impacts anticipated from the Proposed Action.

Mitigation measures identified in this document are also based on the current status of consultations with federal and state agencies responsible for ensuring compliance with resource-specific regulations (e.g., Section 106 consultation with SHPOs; Section 7 consultation with USFWS). All consultations for each of the alternative locations have been initiated and will be completed prior to issuance of the Final EIS; mitigations identified in these consultations will be incorporated into the Final EIS. Mitigation measures identified for the Draft EIS are described by alternative in **Table ES-3**, and **Section 2.7**, and in **Chapter 4** of the Draft EIS in the environmental consequences evaluations for each installation.

1 Table ES-3. Mitigation Measures to Reduce the Potential for Environmental Impacts

Resource Area/ Alternative	Mitigation Measures to Reduce the Potential for Environmental Impacts
Noise	
All installations	No installation-specific mitigation is identified.
Biological Resources	
Grand Forks AFB	<ul style="list-style-type: none"> The installation would be required to confirm the delineated boundary of the 1.46 acres of wetlands within proposed construction areas. If wetlands with a watershed greater than 80 acres are drained or filled, a permit is required from the North Dakota State Engineer. USAF would work with regulators to determine any permit conditions, including mitigation requirements (as appropriate).
Travis AFB	<ul style="list-style-type: none"> Travis AFB would implement conservation measures outlined in the Biological Assessment, and avoidance and minimization measures outlined in the Biological Opinion, for the California tiger salamander, vernal pool fairy shrimp and vernal pool tadpole shrimp developed in support of the Section 7 consultation process.
Cultural Resources	
Fairchild AFB	<ul style="list-style-type: none"> The installation would complete the diorama and educational display stipulated in a 2012 MOA with the Washington SHPO to mitigate adverse effects on the Flight Line Historic District. The installation would implement measures to mitigate adverse impacts from the exterior modification of Building 2050, as stipulated in an agreement document with the SHPO to be developed under the Section 106 consultation process.
JB MDL	<ul style="list-style-type: none"> The installation would provide final building designs to the SHPO for review prior to construction. USAF would ensure the project design for Building 3209 meets the Secretary of the Interior's Standards for the Treatment of Historic Properties.
Travis AFB	<ul style="list-style-type: none"> If selected for the beddown of 36 KC-46A PAA, Travis AFB would implement measures to mitigate demolition of Building 810. These measures could consist of, or include, updating previously prepared documentation of the building.
Socioeconomics	
All installations	No installation-specific mitigation is identified.
Soils and Geology	
All installations	No installation-specific mitigation is identified.
Water Resources	
All installations	No installation-specific mitigation is identified.
Infrastructure and Utilities	
All installations	No installation-specific mitigation is identified.
Land Use	
All installations	No installation-specific mitigation is identified.
Hazardous Materials and Wastes	
All installations	No installation-specific mitigation is identified.
Health and Safety	
All installations	No installation-specific mitigation is identified.
Air Quality	
All installations	No installation-specific mitigation is identified.
Environmental Justice and Other Sensitive Receptors	
All installations	No installation-specific mitigation is identified.

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