MOB6

KC-46A MAIN OPERATING
BASE NO.6 BEDDOWN

Draft

Environmental Impact Statement (EIS)

KC-46A Main Operating Base #6 (MOB 6) Beddown

Summary

February 2023

HEADQUARTERS AIR
MOBILITY COMMAND

MOB6
KC-46A MAIN OPERATING BASE NO.6 BEDDOWN

PRIVACY ADVISORY

The Draft Environmental Impact Statement (EIS) is provided for public comment in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA regulations (40 Code of Federal Regulations [CFR] 1500–1508), and the United States Department of the Air Force's (DAF) Environmental Impact Analysis Process (32 CFR 989).

The NEPA EIS process provides an opportunity for public input on DAF decision making, allows the public to offer inputs on alternative ways for the DAF to accomplish what it is proposing, and solicits comments on DAF's analysis of potential environmental effects.

Public commenting allows the DAF to make better, informed decisions. Letters or other written or oral comments provided on the Draft EIS may be published in the Final EIS. Substantive comments provided will be addressed in the Final EIS and made available to the public. Providing personal information with comments is voluntary. Any personal information provided will be used only to identify an individual's desire to make a comment or to fulfill requests for copies of the EIS or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies. Personally identifiable information, such as home addresses and telephone numbers, will not be published in the Final EIS. If you choose not to provide personal identifying information, your comments will be given the same weight and consideration as other comments submitted.

Information regarding the Draft EIS is available on the project website at www.kc46amob6eis.com

ABBREVIATIONS AND ACRONYMS

ACM	asbestos containing material
AFB	Air Force Base
AFRC	Air Force Reserve Command
AMC	Air Mobility Command
ANG	Air National Guard
BMP	best management practice
CFR	Code of Federal Regulations
DAF	United States Department of the Air Force
dBA	A-weighted decibel
DNL	day-night average sound level
DoD	Department of Defense
EIS	Environmental Impact Statement
ERP	Environmental Restoration Program
FUT	Fuselage Training
FY	fiscal year
KC-46A	KC 46A Pegasus
KC-135	KC-135 Stratotanker
LBP	Lead-based paint
MOB	Main Operating Base
MOB 6	Main Operating Base #6
NEPA	National Environmental Policy Act
PAA	Primary Aerospace Vehicle Authorization
PCB	polychlorinated biphenyls
PFAS	per- and polyfluoroalkyl substances
SHPO	State Historic Preservation Office

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SUMMARY

DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR

KC-46A MAIN OPERATING BASE #6 (MOB 6) BEDDOWN

U.S. DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR MOBILITY COMMAND

FEBRUARY 2023

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Summary

Introduction

The United States Department of the Air Force (DAF) proposes the continuation of ongoing efforts to recapitalize (replace and restructure) portions of the existing fleet of 1950s-era aerial refueling tankers (KC-135 Stratotanker [KC-135]) through the Main Operating Base (MOB) beddown of the modern KC-46A Pegasus (KC-46A). The KC-46A, the newest aerial refueling aircraft in the DAF fleet, provides expanded operational capabilities to receive fuel from other tankers, enables multi-point refueling to support aerial refueling efficiency, adds night vision and defensive systems, and provides an optimized command and control function compared with the existing tanker fleet. Since 2006, efforts to recapitalize tanker aircraft have occurred as a phased progression to integrate a total of 179 modern aerial refueling tankers into the Total Aircraft Inventory at DAF installations by 2029. In 2011, following several years of heavily contested bids to produce a new tanker aircraft, the KC-46A aircraft was selected for production, and a phased strategic basing plan for the new tanker program was begun.

The Air Mobility Command (AMC) is the lead command responsible for maintaining the DAF's air mobility mission, including command and control of airlift and aerial refueling. The goal of KC-46A basing and fielding is to continue to provide optimum combatant commander support, and to efficiently meet regional and global receiver demands while replacing existing KC-135s. Consistent with the prior recapitalization efforts, if an installation that has an existing tanker mission is selected for the Main Operating Base #6 (MOB 6) mission, the existing KC-135 aircraft would be either relocated to another installation or retired out of the DAF inventory, depending on the age and maintenance status of each aircraft.

Since 2014, the DAF has prepared separate Environmental Impact Statements (EISs) and issued corresponding Records of Decision for the KC-46A Formal Training Unit and MOB 1 (DAF 2014a), MOB 2 (DAF 2014b), MOB 3 (DAF 2017a), and MOB 4 (DAF 2018a) missions. Respectively, these DAF actions replaced aged tanker aircraft with KC-46A aircraft at active duty, Air National Guard (ANG), and Air Force Reserve Command (AFRC) Air Force Bases (AFBs) in Oklahoma, Kansas, New Hampshire, North Carolina, New Jersey, and California. An EIS to address the MOB 5 mission is currently being developed.

This EIS addresses DAF's MOB 6 mission to beddown two squadrons of 12 KC-46A Primary Aerospace Vehicle Authorization (PAA) and the supporting base facilities, infrastructure, and workforce to support at one active duty Continental United States AMC AFB between fiscal year (FY) 2026 and FY 2028. MacDill AFB in Florida (Alternative 1 – Preferred Alternative) and Fairchild AFB in Washington State (Alternative 2) are the only AMC active duty installations that are operating KC-135 aircraft that support aerial refueling mission operations and have the capacity to support the KC-46A MOB 6 beddown. Following the guidance in Air Force Instruction 10-503, *Strategic Basing*, these two AFBs were identified as the reasonable location alternatives for implementing the MOB 6 mission (see **Figure ES-1**).

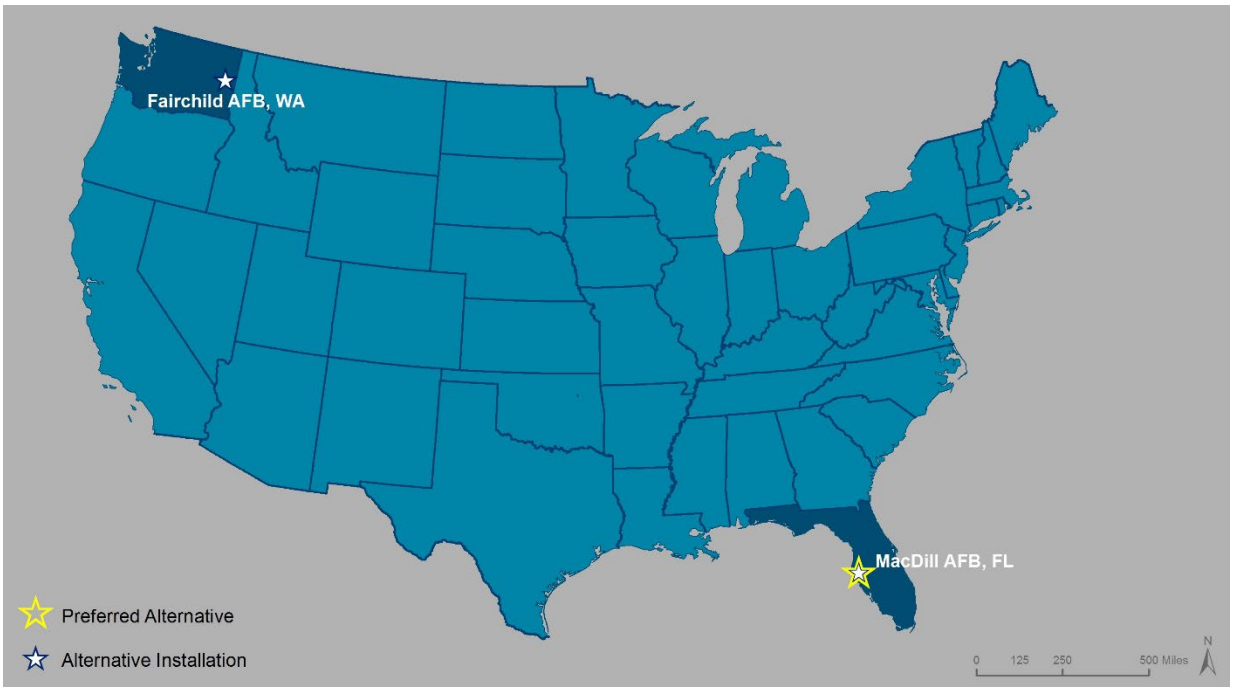

Figure ES-1. Reasonable Alternative Basing Locations for the KC-46A MOB 6 Beddown

Purpose of and Need for Proposed Action

Purpose

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

Need

The MOB 6 beddown of the KC-46A is needed because the KC-46A would provide mission essential capabilities currently lacking in the existing tanker fleet, including receiver capability, night vision imaging system, multi-point refueling, command and control network, and defensive protection.

Description of the Proposed Action and Alternatives

Proposed Action

The Proposed Action would base 24 KC-46A aircraft in two squadrons of 12 PAA at an active duty, Continental United States location for the KC-46A MOB 6 beddown. Each squadron would require infrastructure, facilities, airfield operations, training activities, personnel, and airspace to support the KC-46A MOB 6 mission. The KC-46A MOB 6 beddown would occur in two stages: beddown and operations. The beddown stage would involve construction/retrofit of required facilities, infrastructure, and prepared surfaces, which includes renovation, alteration, and demolition. The beddown stage would also include preparing support facilities for new personnel and students to support the mission. The operational stage would involve conducting day-to-day activities (e.g., operational missions, maintenance) at the installation, including flight operations and training in the existing regional airspace.

Key elements associated with the KC-46A MOB 6 beddown under the Proposed Action with the potential to affect environmental resources at the installation(s) or under the training airspace include the following:

- Beddown 24 KC-46A aircraft in accordance with the aircraft delivery schedule (first arrival anticipated in FY 2026; last arrival anticipated in FY 2028)
- Renovate, construct, and manage existing and new facilities and infrastructure necessary to support the mission
- Increase personnel at the installation to conform to mission requirements
- Depending on the mission, conduct sorties (i.e., flight operations that include a takeoff and landing) at each installation for pilot, copilot, and boom operator training and certification; aerial refueling operations; and global reach missions

The following sections identify the beddown and operational requirements for the Proposed Action at either installation.

Facilities and Infrastructure

The installation allocation and physical requirements necessary to support 24 KC-46A PAA and associated personnel are as follows:

- Three general maintenance hangars, which function primarily as inspection hangars and secondarily as repair hangars
- One fuel cell hangar, which would primarily be used to remove, repair, and replace fuel cell tanks from aircraft
- One corrosion control hangar, which includes a self-contained paint booth for touch-ups and also functions as a wash rack
- Two Squadron Operations (Squad Ops) facilities and two Aircraft Maintenance Unit facilities, which are typically combined in a two-story facility, with the Aircraft Maintenance Unit on the first floor (home base for technicians and administrative functions for the flightline) and office space for command, administration, mission planning, briefing, and support on the second floor
- One Flight Training Center, consisting of:
    - Two Weapon System Trainers
    - Two Boom Operator Trainers
    - One or two Pilot Part Task Trainers
    - An adjoined or adjacent classroom
    - Office Space
- One Fuselage Training (FUT) Facility, consisting of:
    - Administrative and academic space
    - One FUT bay
    - One FUT associated cargo yard
- One Maintenance Training Facility
- Mission planning center
- Supply warehousing, flightline support facility, and aircraft parts storage
- Aerospace Ground Equipment storage and parking
- Crash recovery shop with adequate vehicle parking

- Alternate Mission Equipment storage and maintenance facility (e.g., pallets)
- Runway that is minimally 7,000 feet long by 147 feet wide with a weight-bearing capability of 415,000 pounds
- 15 taxi on/off aircraft parking spots with fuel pits and a Type III fuel hydrant system on the parking ramp
- Radar approach control, instrument landing system, tactical air navigation system, and navigational aids that can support the KC-46A
- Appropriate fuel supply to support up to 240,000 gallons of jet fuel per day from commercial sources, storage facilities with up to 1.2 million gallons of capacity, and distribution systems
- A variety of shop areas (e.g., welding, hydraulics, composite repair, sheet metal) required for the mission
- Dormitories for all unaccompanied enlisted students and for permanently assigned, unmarried, first-term Airmen
- Adequate childcare, medical, fitness center, and other base operating support/force support

Personnel

The KC-46A MOB 6 beddown requires basing of sufficient personnel to operate and maintain the aircraft and to provide necessary support services, including active duty and AFRC enlisted, officer, Department of Defense (DoD) civilian, contractor support, and base operating support personnel. Depending on the number and types of personnel at each installation associated with the current missions, and on the proposed ANG or AFRC component of the MOB 6 missions, between 1,000 and 2,000 full-time and part-time personnel are required to support 24 PAA. This includes active duty and ANG or AFRC enlisted, officer, DoD civilian, contractor support, and base operating support personnel. The dependents or family members of full-time military personnel are also included in the analysis.

KC-46A Operations

KC-46A aircrews would complete operational sorties as part of their global reach missions as well as local training sorties to maintain proficiency in the aircraft.

Flight training, including air refueling and training in the flight simulator, provides basic and continuation aircrew training needs. A typical KC-46A proficiency training sortie would be similar to a KC-135 training sortie and would include a departure from the installation, climb to altitude for air refueling training in appropriate airspace, and return to the home installation for additional closed pattern training before landing for the sortie termination.

Proficiency training sorties to fulfill the requirements of Air Force Manual 11-2KC-46 Volume I typically depart from and return to the home installation on the same day. A global reach mission however typically departs the home installation, returns on a later day, and accomplishes training as a by-product of the operational mission. Although some in-flight training and certification would occur during proficiency training and global reach missions, the majority of KC-46A system continuation training would be completed in simulators.

Alternatives Carried Forward for Analysis

Under Alternative 1 (Preferred Alternative), the Proposed Action would occur at MacDill AFB in Florida. Under Alternative 2, the Proposed Action would occur at Fairchild AFB in Washington State. In conformance with Council on Environmental Quality National Environmental Policy Act (NEPA) regulations (40 Code of Federal Regulations [CFR] Part 1502.14[c]), the EIS includes analysis of a No Action Alternative, which consists of not completing the KC-46A MOB 6 beddown and a continuation of ongoing operations and implementation of other approved plans. **Table ES-1** summarizes the comparison of the Proposed Action and alternatives, including the No Action Alternative.

No Action Alternative

The No Action Alternative for this EIS reflects the status quo, where the KC-46A beddown would not occur at any base at this time, and no change would occur to the existing KC-135 operations or mission at either installation. No construction, renovation, or demolition of any structure or other infrastructure would occur. Changes in personnel and to existing flight operations would also not occur. At each installation, ongoing and currently planned activities and programs would continue regardless of implementation of the KC-46A beddown as these activities have been approved by DAF and are supported by existing NEPA documentation.

Identification of Preferred Alternative

On December 21, 2021, the Secretary of the Air Force Public Affairs identified the Alternative 1 at MacDill AFB, Florida as the Preferred Alternative for the KC-46 MOB 6 beddown.

Table ES-1. Summary Comparison of Alternatives

Alternative Components	Alternative 1 (Preferred Alternative – MacDill AFB, Florida)		Alternative 2 (Fairchild AFB, Washington)		No Action Alternative
	Baseline	Proposed	Baseline	Proposed	
Total Change in Aircraft[a]	**--**	**No change in total PAA**	**--**	**No change in total PAA**	**No change**
Active Duty KC-135 PAA	24	0	48	24	No change from baseline at either AFB
Active Duty KC-46A PAA	0	24	0	24	
Total Change in Refueling Tanker Aircraft Operations	**--**	**15% increase to 13,221 operations per year[b]**	**--**	**29% increase to 21,600 operations per year**	**No change**
Active Duty KC-135 Operations	11,522	0	16,758	8,379	No change from baseline at either AFB
Active Duty KC-46A Operations	0	13,221	0	13,221	
Total Change in Infrastructure and Facilities	**--**	**Requires 21 development actions; disturbs approximately 16.6 acres, and adds approximately 9.4 acres of impervious surface**	**--**	**Requires 17 development actions; disturbs approximately 70.7 acres, and adds approximately 24.5 acres of impervious surface**	**No change**
Infrastructure and Facilities	See existing features shown in Chapter 2 of the EIS	Constructs 2 new facilities (+0.6 acre); renovates 7 existing facilities (+0 acre); entails 11 alteration actions to expand existing facilities and infrastructure (+8.8 acres)[e]; and upgrades by replacement of the existing hydrant fuel system, which would add 3 hydrant pits (up to 0.01 acre), resulting in an increase of approximately 9.4 acres of impervious surfaces	See existing features shown in Chapter 2 of the EIS	Constructs 5 new facilities (+7.2 acres), renovates 9 existing facilities (+0 acre), and entails 3 alteration actions to expand existing facilities and infrastructure (+17.3 acres)[e], resulting in a net increase of 24.5 acres of impervious surfaces	No change from baseline at either AFB
Total Personnel Change[c]	**--**	**Net increase in installation personnel and associated dependents by approximately 1%**	**--**	**Net increase in installation personnel and associated dependents by approximately 13%**	**No change**

Alternative Components	Alternative 1 (Preferred Alternative – MacDill AFB, Florida)		Alternative 2 (Fairchild AFB, Washington)		No Action Alternative
	Baseline	Proposed	Baseline	Proposed	
Number KC-135 Personnel[d]	3,822	-858 relocating; 2,964 realign into the KC-46A mission	3,816	-1,626 relocating; 2,190 remain and continue the KC-135 mission	No change from baseline at either AFB
Number KC-135 Dependents	4,543	-1,625 relocating; 2,918 remain	2,458	-2,458	No change
Number KC-46A Personnel[d]	0	+1,092	0	+1,964	No change
Number KC-46A Dependents	0	+1,674	0	+3,112	No change

[a] Aircraft operations change is the difference between the total baseline and total projected for all aircraft types.

[b] Percent differences represents comparison of the projected KC-46A operational capacity with the FY 2021 representative year of operational activity for the KC-135 missions at MacDill AFB and Fairchild AFB, respectively (HMMH 2022). Mission data show that flight activities have steadily increased at the installation since 2018. Despite the anticipated increase in flight operations at MacDill AFB, actual flight activities would be minimized through operational efficiency and added capabilities of the incoming KC-46A aircraft and mission to fully replace the sole existing KC-135 mission there, as well as use of simulators to conduct KC-46A system continuation training. The increase in flight operations at Fairchild AFB would be anticipated because the MOB 6 mission would be additive to the other existing and ongoing mission programs at the installation.

[c] The personnel and dependent numbers are noticeably different between the installations because the KC-46A mission at MacDill AFB would be a replacement mission and the mission at Fairchild AFB would be additive. Remaining KC-135 personnel at Fairchild AFB would continue in the ongoing KC-135 mission. The numbers of dependents and family members incoming with the KC-46A mission were conservatively estimated using the DoD's standard calculation: 2.5 times 65 percent of incoming full-time military personnel (DAF 2021d). The numbers of school-age dependents were estimated using the standard calculation of 1.5 times 65 percent of the full-time military personnel.

[d] Numbers of KC-135 and KC-46A personnel represent the sum of full-time military and civilian mission personnel at each installation (see Chapter 2 of the EIS).

[e] Additional square footage for facility expansions on existing pavement is not included in the ground disturbance or change in impervious surfaces calculations.

Key: AFB = Air Force Base; PAA = Primary Aerospace Vehicle Authorization; EIS = Environmental Impact Statement; MOB = Main Operating Base

Environmental Consequences

In compliance with NEPA, Council on Environmental Quality, and DAF Environmental Impact Analysis Process (32 CFR Part 989) guidelines, the EIS focuses on those resources potentially subject to impacts from the Proposed Action or alternatives, including the No Action Alternative. The environmental resources analyzed are noise, biological resources, cultural resources, socioeconomics, soils and geology, water resources, infrastructure and transportation, land use, hazardous materials and wastes, health and safety, air quality, and environmental justice and other sensitive receptors. **Table ES-2** summarizes the impacts on each of these environmental resources under each alternative.

Table ES-2. Summary of Environmental Impacts

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
Noise		
Short-term, minor, adverse impacts on the noise environment would be expected under Alternative 1 due to noise generated from heavy equipment used during construction. Long-term, minor, beneficial impacts would be expected under Alternative 1 because of a decrease in land that would be affected by the 65+ "A" weighted decibels (dBA) day-night average sound level (DNL) of aircraft noise. No changes to sleep disturbing events would be expected at most of the MacDill AFB point of interests selected for analysis, except for two locations where the increase in nighttime closed pattern operations conducted by the KC-46 would increase the annual number of potentially sleep disturbing events. The annual number of speech interference and classroom learning interference would decrease or remain the same in the vicinity of MacDill AFB. No change to existing noise impacts on wildlife would be expected.	Short-term, minor, adverse impacts on the noise environment would be expected under Alternative 2 due to noise generated from heavy equipment used during construction. Long-term, minor, adverse impacts would be expected because of increased annual aircraft operations. No off-installation land would be impacted by the 65+ dBA DNLs. Two Fairchild AFB points of interest would be expected to experience eight potentially sleep disturbing events per year and an increased number of outdoor speech interference events, while no change would be expected to the number of potentially sleep disturbing or speech interference events elsewhere in the vicinity of Fairchild AFB. Classroom learning interference would not be expected. No change to existing noise impacts on wildlife would be expected.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.
Biological Resources		
Short- and long-term, minor, adverse impacts on vegetation would occur due to temporary disturbance of vegetation and soil compaction during construction, demolition, and renovation and from permanent vegetation removal for new facilities and infrastructure. Because portions of the Project Area are already highly disturbed and are of low ecological value, these impacts would be negligible to minor. Short-term, minor, and long-term, negligible, adverse impacts on wildlife and special status species may occur from increased noise and potential displacement associated with construction, demolition, and renovation activities. Long-term, minor, adverse impacts on wildlife and special status species would occur from a slightly increased risk of Bird/Wildlife Aircraft Strike Hazard from the proposed approximately 15 percent increase in aircraft operations. No	Short- and long-term, minor, adverse impacts on vegetation would occur due to temporary disturbance of vegetation and soil compaction during construction, demolition, and renovation and from permanent vegetation removal for new facilities and infrastructure. Because portions of the Project Area are already highly disturbed and are of low ecological value, these impacts would be negligible to minor. Short-term, minor, and long-term, negligible, adverse impacts on wildlife and special status species may occur from increased noise and potential displacement of wildlife due to actions associated with construction, demolition, and renovation. Long-term, negligible, adverse impacts from permanent habitat loss; and long-term, minor to moderate, adverse impacts from an anticipated increase in annual aircraft operations would occur on wildlife and special status species.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
change to existing noise impacts on wildlife would be expected. No impacts on wetlands are anticipated because no wetlands occur within or proximal to the Project Area.	No impacts on wetlands are anticipated because no wetlands occur within or proximal to the Project Area.	
Cultural Resources		
Alternative 1 would require additions to Hangars 1–5, which would adversely affect the individual properties and the MacDill Field Historic District to which they contribute. Potential short-term impacts to historic properties under NEPA would include temporary atmospheric (visual, noise, and vibration) impacts from construction activities, and would be considered negligible. Potential long-term impacts to historic properties under NEPA include the renovation of historic properties and introduction of new buildings and structures within the MacDill Field Historic District. It is anticipated that the potentially long-term, major, adverse effects on architectural resources under the National Historic Preservation Act Section 106 that would result from Alternative 1 could be successfully mitigated in consultation with the Florida State Historic Preservation Office (SHPO) through the development and implementation of a Memorandum of Agreement, and the resulting long-term effects would be reduced to moderate. No known archaeological resources, traditional cultural resources, or sacred sites are within the Project Area or have been identified through consultation with tribes. Therefore, no impacts on these resources would be anticipated.	Potential short-term impacts on historic properties under NEPA would include temporary atmospheric and auditory impacts from construction activities, and would be considered negligible. Potential long-term impacts to historic properties under NEPA include the renovation of one individually eligible historic property, Building 2050. Historic American Building Survey documentation of Building 2050 was completed to mitigate adverse effects under Section 106 for a previous action. It is anticipated that any additional mitigation efforts required under Alternative 2, if implemented, could be successfully mitigated in consultation with the Washington SHPO, and the long-term impacts under NEPA would be considered negligible. At the time of publication of this EIS, Section 106 consultation with the Washington SHPO is ongoing. No impacts on archaeological or traditional resources would be anticipated under Alternative 2.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.
Socioeconomics		
Long-term, negligible, adverse impacts on population, housing, education, public services, and base services at MacDill AFB would occur due to an increase in installation personnel and associated dependents under Alternative 1. Long-term, negligible, beneficial impacts on economic activity would be expected because the net increase in personnel and dependents would increase economic activity (purchase of goods and services, tax revenue, etc.)	Long-term, negligible, adverse impacts on population, housing, education, public services, and base services at Fairchild AFB would occur due to an increase in installation personnel and associated dependents under Alternative 2. Long-term, negligible, beneficial impacts on economic activity would be expected because the net increase in personnel and dependents would increase economic activity (purchase of goods and services, tax revenue, etc.)	No change from existing conditions at either installation. Ongoing operations and other separately

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
in the local community, providing direct and indirect economic benefits. Short-term, minor, beneficial, economic impacts would also be generated through local construction employment and project-related spending to support facility and infrastructure improvements.	in the local community, providing direct and indirect economic benefits. Short-term, minor, beneficial, economic impacts would also be generated through local construction employment and project-related spending to support facility and infrastructure improvements.	approved plans would continue.
Soils and Geology		
Long-term, negligible, adverse impacts would be expected on the natural topography from site preparation (i.e., grading, excavating, recontouring) and construction. No impacts on geology would be expected under Alternative 1. Short-term, negligible, adverse impacts on or from geologic hazards would be expected from an increased risk of sinkhole development during construction-related ground disturbance under Alternative 1. Short- and long-term, minor, adverse impacts on soils would be expected due to an increase in impervious surfaces and associated erosion, sedimentation, and ground disturbance.	Long-term, negligible, adverse impacts would be expected on the natural topography from site preparation (i.e., grading, excavating, recontouring) and construction. No impacts on geology would be expected under Alternative 2. Long-term, negligible, adverse impacts on or from geologic hazards would be expected from the risk of structural failure or damage to new or renovated facilities associated with seismic activity in the area. Short- and long-term, moderate, adverse impacts on soils would be expected due to an increase in impervious surfaces and associated erosion, sedimentation, and ground disturbance.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.
Water Resources		
Short-term, negligible to minor, adverse impacts on the surficial aquifer at MacDill AFB could occur due to the potential for intersection between construction and the surficial aquifer. A decrease in infiltration and increase in flow rate could intensify erosion and sedimentation from impervious surface runoff. Best management practices (BMPs) to decrease sedimentation and soil erosion in runoff could include stabilized construction entrances, silt fencing, berms and swales, check dams, vegetated channels, basins and traps, outlet protection, erosion control blankets, and level spreaders. Alternative 1 could result in short- and long-term, minor, adverse impacts on surface water and water quality at MacDill AFB due to increased runoff and associated erosion and sedimentation as a result of construction, demolition,	Short-term, negligible to minor, adverse impacts on groundwater resources could occur at Fairchild AFB as a result of increased demand for potable water and impacts on recharge rates due to increased impervious surfaces. Alternative 2 could result in short- and long-term, minor to moderate, adverse impacts on surface water at Fairchild AFB due to increased runoff and associated erosion and sedimentation as a result of construction, demolition, and renovation, and an increase in impervious surfaces under Alternative 2. No impact on floodplains would be anticipated because no floodplains occur in the Project Area.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
and renovation, and an increase in impervious surfaces under Alternative 1. Alternative 1 would result in long-term, minor, adverse impacts on the surrounding floodplains from an increase in runoff and erosion rate.		
Infrastructure and Transportation		
Short-term, negligible, adverse impacts on the potable water system, electrical system, natural gas system, the sanitary sewer and wastewater system, the stormwater system, and the communications system at MacDill AFB would be expected from temporary interruptions during construction, demolition, and renovation associated with Alternative 1. Long-term, negligible to minor, adverse impacts on the potable water supply system, electrical system, natural gas supply, and solid waste management at MacDill AFB would occur due to increased demand from the personnel increase and additional facility operations associated with Alternative 1. Short-term, negligible, adverse impacts on the liquid fuel supply would be expected due to the minimal amounts of petroleum that would be required during construction, demolition, and renovation activities under Alternative 1. Long-term, negligible, adverse impacts on the liquid fuel system at MacDill AFB would be expected from increased annual aircraft operations associated with Alternative 1. Long-term, negligible, adverse impacts on the MacDill AFB stormwater system would be expected runoff from an increase in impervious surfaces associated with Alternative 1. Short-term, minor, adverse impacts on solid waste management would be expected from construction, demolition, and renovation activities under Alternative 1. Short-term, minor, adverse impacts on the airfield at MacDill AFB would be expected from operational disruptions during construction, demolition, and renovation. Long-term, minor, beneficial impacts on the airfield at MacDill AFB would	Short-term, negligible, adverse impacts on the potable water system, electrical system, natural gas system, sanitary sewer and wastewater system, and communications system at Fairchild AFB would be expected from temporary interruptions during construction, demolition, and renovation associated with Alternative 2. Long-term, negligible to minor, adverse impacts on the potable water supply system, electrical system, natural gas supply, and solid waste management at Fairchild AFB would occur due to increased demand from the personnel increase and additional facility operations associated with Alternative 2. Short- and long-term, negligible to minor, adverse impacts on the liquid fuel supply would be expected due to the minimal amounts of petroleum that would be required during construction, demolition, and renovation activities under Alternative 2 and from the 29 percent increase in annual aircraft operations at the installation, which would require greater quantities of jet fuel when compared with the existing demand. Long-term, minor, beneficial impacts on the liquid fuel system at Fairchild AFB would be expected from the facility and airfield improvement projects. Short- and long-term, negligible to moderate, adverse impacts on the Fairchild AFB stormwater system would be expected due to construction-related temporary disruptions and increased erosion, sedimentation, and runoff from an increase in impervious surfaces associated with Alternative 2. Short- and long-term, minor, adverse impacts on solid waste management would be expected from construction,	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
occur from the addition of ramp space, expansion of facilities, and replacement of pavements. Short- and long-term, negligible to minor, adverse impacts on the regional and on-installation transportation, parking, and roadway networks would occur from increased traffic during construction, demolition, and renovation and daily operations and an increase in cars and commuters accessing the installation. The increase in traffic likely would not permanently increase traffic beyond the functionality of any regional roadway.	demolition, and renovation activities and increased installation personnel under Alternative 2. Short-term, minor, adverse impacts on the airfield at Fairchild AFB would be expected from operational disruptions during construction, demolition, and renovation. Long-term, minor, beneficial impacts on the airfield at Fairchild AFB would occur from the addition of ramp space, expansion of facilities, and replacement of pavements. Short- and long-term, negligible to minor, adverse impacts on the regional and on-installation transportation, parking, and roadway networks would occur from increased traffic during construction, demolition, and renovation and daily operations and an increase in cars and commuters accessing the installation. The increase in traffic likely would not permanently increase traffic beyond the functionality of any regional roadway.	
Land Use		
Alternative 1 would have short-term, negligible to minor, adverse impacts on installation land use from increased noise and potentially constrained access of nearby facilities due to construction, demolition, and renovation actions and requirements to temporarily fence areas for public safety. Long-term, minor, beneficial impacts on installation land use from more efficient use of land and decreased land area within noise zones. No impacts from the proposed construction, demolition, nor renovation projects on off-installation land use would be expected because MacDill AFB has the physical real estate and infrastructure required for Alternative 1 and would not need land outside the installation boundaries. Long-term, minor, beneficial impacts would be expected due to the decrease in acres exposed to the 65-dBA DNL or greater contours because the KC-46A aircraft is generally quieter than the KC-135 aircraft. Alternative 1 would be consistent with the Florida Coastal Management Program.	Alternative 2 would have short- and long-term, negligible to minor, adverse impacts on installation land use from increased noise and potentially constrained access of nearby facilities due to construction, demolition, and renovation actions and requirements to temporarily fence areas for public safety. Long-term, minor, beneficial impacts on from more efficient use of land. Long-term, minor, adverse impacts would occur due to the proposed 29 percent increase in aircraft operations that would increase operational noise and expand the noise zone area on the installation.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
Hazardous Materials and Wastes		
Short-term, minor, adverse impacts would occur from the use of hazardous materials and petroleum products as well as the generation of hazardous wastes during the proposed construction, demolition, and renovation. Long-term, negligible, adverse impacts would occur from the slightly increased use of hazardous materials and petroleum products and generation of hazardous wastes due to the associated approximately 15 percent increase in annual aircraft operations under Alternative 1. Short-term, minor, adverse impacts from toxic substances would occur during facility demolition and renovation because these activities could disturb asbestos containing materials (ACMs), lead-based paint (LBP), and polychlorinated biphenyls (PCBs). Long-term, beneficial impacts would occur from reducing the potential for future human exposure to these toxic substances by reducing the amount of ACMs, LBP, and PCBs at MacDill AFB. Short-term, minor, adverse impacts would occur because some facility construction, demolition, and renovation locations are co-located with active Environmental Restoration Program (ERP) sites. No long-term impacts would occur from operations within the ERP sites because the implemented land use controls would be complied with and would not conflict with the operation of proposed facilities. Areas of per- and polyfluoroalkyl substances (PFAS) are currently being investigated on MacDill AFB and are expected to occur throughout the Project Area. Therefore, short-term, minor, adverse impacts could occur from the ground-disturbing activities within the Project Area. No impacts on the use of the proposed facilities would be expected from PFAS because they have a low potential for vapor intrusion. Long-term, negligible, adverse impacts from radon are possible but unlikely due to construction and operation of new and renovated facilities under Alternative 1.	Short- and long-term, minor, adverse impacts would occur from the use of hazardous materials and petroleum products as well as the generation of hazardous wastes during the proposed construction, demolition, and renovation, and from the increased use of hazardous materials and petroleum products and the generation of hazardous wastes due to the 29 percent increase in annual aircraft operations under Alternative 2. Short-term, minor, adverse impacts from toxic substances would occur during facility demolition and renovation because these activities could disturb ACMs, LBP, and PCBs. Long-term, beneficial impacts would occur from reducing the potential for future human exposure to these toxic substances by reducing the amount of ACMs, LBP, and PCBs at Fairchild AFB. Short-term, minor, adverse impacts would occur because some facility construction, demolition, and renovation locations are co-located with active ERP sites and an area of PFAS contamination. No long-term impacts would occur from operations within the ERP sites because the implemented land use controls would be complied with and would not conflict with the operation of proposed facilities. Additionally, no impacts on the use of the proposed facilities would be expected from PFAS because they have a low potential for vapor intrusion. Long-term, minor, adverse impacts from radon are possible due to construction and operation of new and renovated facilities under Alternative 2. Based on the United States Environmental Protection Agency rating of Radon Zone 1 for Spokane County, it is possible the new and renovated facilities could have indoor radon screening levels greater than 4 picocuries per liter.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
Health and Safety		
No impacts on flight safety would be expected because no change would occur in the number of aircraft operating or the type of operations under Alternative 1. Long-term, negligible, adverse impacts would be expected from a slightly increased potential for bird/wildlife aircraft strikes associated with the proposed increase in operations under Alternative 1. Short-term, negligible to minor, adverse impacts on occupational safety at MacDill AFB would be anticipated during construction from increased occupational hazards from vehicles, noise/dust, air emissions, construction zones, and detours.	Long-term, negligible, adverse impacts on flight safety would be expected because of an increased risk of an incident due to increased annual aircraft operations under Alternative 2. Long-term, minor, adverse impacts would be expected due to the increased potential for bird/wildlife aircraft strikes associated with the proposed 29 percent increase in operations. Short-term, negligible to minor, adverse impacts on occupational safety at Fairchild AFB would be anticipated during construction from increased occupational hazards from vehicles, noise/dust, air emissions, construction zones, and detours.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.
Air Quality		
Air emissions from construction activities under Alternative 1 would result in short-term, minor, adverse impacts on air quality. The air pollutant of greatest concern during construction is particulate matter, such as fugitive dust. Construction contractors would employ BMPs and environmental control measures, to the greatest extent applicable, to reduce impacts. Long-term, moderate, adverse, and minor, beneficial impacts on air quality would occur from Alternative 1. Air emissions would be directly produced from operation and heating and cooling of new facilities, KC-46A aircraft operations, and additional personnel at MacDill AFB, but would result in an annual net decrease of several pollutants. Air emissions produced during construction and operation of the new facilities would not meaningfully contribute to the potential effects of global climate change and would not increase the total carbon dioxide equivalent emissions produced by Hillsborough County.	Air emissions from construction activities under Alternative 2 would result in short-term, minor, adverse impacts on air quality. The air pollutant of greatest concern during construction is particulate matter, such as fugitive dust. Construction contractors would employ BMPs and environmental control measures, to the greatest extent applicable, to reduce impacts. Long-term, moderate, adverse, and minor, beneficial impacts on air quality would occur under Alternative 2. Air emissions would be directly produced from operation and heating of new facilities, KC-46A aircraft operations, and additional personnel at Fairchild AFB, but would result in an annual net decrease of two pollutants. Air emissions produced during construction and operation of the new facilities would not meaningfully contribute to the potential effects of global climate change and would not increase the total carbon dioxide equivalent emissions produced by Spokane County.	No change from existing conditions at either installation. Ongoing operations and other separately approved plans would continue.
Environmental Justice and Other Sensitive Receptors		
Short-term, negligible, adverse impacts on environmental justice or sensitive receptor populations could occur from	Short-term, negligible, adverse impacts on environmental justice or sensitive receptor populations could occur from	No change from existing conditions

Alternative 1 (Preferred Alternative) – MacDill AFB, FL	Alternative 2 – Fairchild AFB, WA	No Action Alternative
increased noise and actions associated with construction, demolition, and renovation under Alternative 1. These impacts would be distributed evenly across the surrounding area and would not be disproportionate on any populations, including minority and low-income populations; nor would exposure of children and elderly persons to environmental health risks or safety risks be increased. Long-term, negligible, beneficial impacts would be expected due to the decrease in acres exposed to the 65-dBA DNL or greater contours. No long-term, disproportionate impacts on environmental justice populations and other sensitive receptors would be expected from Alternative 1.	increased noise and actions associated with construction, demolition, and renovation under Alternative 2. These impacts would be distributed evenly across the surrounding area and would not be disproportionate on any populations, including minority and low-income populations; nor would exposure of children and elderly persons to environmental health risks or safety risks be increased. No long-term, disproportionate impacts on environmental justice populations and other sensitive receptors would be expected from Alternative 2.	at either installation. Ongoing operations and other separately approved plans would continue.

Key: AFB = Air Force Base; NEPA = National Environmental Policy Act; SHPO = State Historic Preservation Office; EIS = Environmental Impact Statement; BMP = best management practice; ACM = asbestos containing materials; LBP = lead-based paint; PCB = polychlorinated biphenyl; ERP = Environmental Restoration Program; dBA = "A"-weighted decibel; DNL = day-night average sound; PFAS = per- and polyfluoroalkyl substances

MOB6

KC-46A MAIN OPERATING BASE NO.6 BEDDOWN

HEADQUARTERS AIR MOBILITY COMMAND