

Draft

**Environmental Impact Statement for
Basing F-35A Lightning II Formal Training Unit
at Kingsley Field Air National Guard Base,
Klamath Falls, Oregon**



April 2026

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Cover

DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR BASING F-35A LIGHTNING II FORMAL TRAINING UNIT AT KINGSLEY FIELD AIR NATIONAL GUARD BASE KLAMATH FALLS, OREGON

- a. *Lead and Cooperating Agencies:* United States Department of the Air Force (DAF) and National Guard Bureau (NGB) (Responsible Agencies); and the Federal Aviation Administration (FAA) is a Cooperating Agency.
- b. *Title of Action:* Basing F-35A Lightning II Formal Training Unit at Kingsley Field Air National Guard Base, Klamath Falls, Oregon
- c. *Comments and Inquiries:* Ms. Alicia Treece, NGB/A4FR, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157, (240) 612-8531, NGB.CCA4F.NEPACOMMENTS@us.af.mil.
- d. *Designation:* Draft Environmental Impact Statement (EIS)
- e. *Abstract:* This Draft EIS has been prepared in accordance with the National Environmental Policy Act (NEPA) to analyze the proposed beddown, operation, and construction of associated infrastructure for one formal training unit (FTU) squadron of F-35A Lightning II aircraft at Kingsley Field Air National Guard Base at the Crater Lake-Klamath Regional Airport, in Klamath Falls, Oregon. The squadron would consist of up to 24 Primary Aerospace Vehicles Authorized and 2 Backup Aerospace Vehicles Authorized F-35A aircraft to replace 26 F-15C/D aircraft. The No Action Alternative provides the basis for comparing effects in this Draft EIS, despite faster-than-anticipated F-15C/D divestment. The public and agency scoping process resulted in the analysis of the following environmental resources: noise; airspace; air quality; socioeconomic/children's health and safety; land use/noise compatible land use; Department of Transportation, Section 4(f); water resources/floodplains/wild and scenic rivers; geological resources/soils/farmlands; cultural resources; safety; hazardous materials/waste; biological resources/coastal resources/wetlands; effects to visual resources; and infrastructure/utilities/natural resources and energy supply/transportation/public transportation.
- f. *Comments:* Comments on the Draft EIS must be received by May 11, 2026 in order to be considered during development of the Final EIS.
- g. EIS Identification Number: EISX-007-57-UAF-1756812380.

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ACRONYMS AND ABBREVIATIONS

°F	degree Fahrenheit	EPA	United States Environmental Protection Agency
173 FW	173d Fighter Wing	ERP	Environmental Restoration Program
ACAM	Air Conformity Applicability Model	ESCP	Erosion and Sediment Control Plan
ACC	Air Combat Command	FAA	Federal Aviation Administration
ACDP	Air Contaminant Discharge Permit	FEMA	Federal Emergency Management Agency
ACM	asbestos-containing material	FTU	Formal Training Unit
ADAIR	Adversary Air	FUD	Formerly Used Defense
AEDT	Aviation Environmental Design Tool	FY	Fiscal Year
AESA	Active Electronically Scanned Array	GHG	greenhouse gas
AETC	Air Education and Training Command	HAF/A3	Headquarters Air Force Operations, Plans and Requirements
AFB	Air Force Base	ICRMP	Integrated Natural Resources Management Plan
AFFF	Aqueous Film-Forming Foam	IFR	Instrument Flight Rule
AFI	Air Force Instruction	IPaC	Information for Planning and Consultation
AFMAN	Air Force Manual	LBP	lead-based paint
AGE	Aerospace Ground Equipment	L _{dnmr}	Onset-Rate Adjusted Day-Night Average A-weighted Sound Level
AGL	Above Ground Level	L _{eq(8hr)}	8-hour Equivalent Sound Level
ALP	Airport Layout Plan	LID	Low Impact Development
ANG	Air National Guard	L _{max}	Maximum Sound Level
ANGB	Air National Guard Base	LMT	Crater Lake-Klamath Regional Airport
AOI	Area of Interest	MACA	Mid-air Collision Avoidance
APE	Area of Potential Effects	MBTA	Migratory Bird Treaty Act
APZ	Accident Potential Zone	mm	millimeter
ASD	Average Sortie Duration	MOA	Military Operations Area
AST	aboveground storage tank	MSA	Munitions Storage Area
AT/FP	Antiterrorism/Force Protection	MSL	Mean Sea Level
ATC	Air Traffic Control	MTR	Military Training Route
ATCAA	Air Traffic Control Assigned Airspace	NAAQS	National Ambient Air Quality Standards
BAA	Backup Aerospace Vehicle Authorized	NEPA	National Environmental Policy Act
BASH	Bird/Wildlife Aircraft Strike Hazard	NGB	National Guard Bureau
BMP	Best Management Practice	NHPA	National Historic Preservation Act
CAP	Central Accumulation Point	NIPTS	Noise-Induced Permanent Threshold Shift
CDNL	C-weighted Day-Night Average Sound Level	NO _x	nitrogen oxides
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	NPDES	National Pollutant Discharge Elimination System
CFR	Code of Federal Regulations	NPS	National Park Service
CO	carbon monoxide	NRCS	Natural Resources Conservation Service
CO _{2e}	carbon dioxide equivalent	NRHP	National Register of Historic Places
DAF	Department of the Air Force	O ₃	ozone
DAFI	Department of the Air Force Instruction	ODFW	Oregon Department of Fish and Wildlife
DAFMAN	Department of the Air Force Manual	OVS	oil/water separator
dB	decibel	PA	Probability of Awakening
dBC	C-weighted decibel	PAA	Primary Aerospace Vehicle Authorized
DEQ	Department of Environmental Quality	PCB	polychlorinated biphenyl
DERP	Defense Environmental Restoration Program	PDARS	Performance Data Analysis and Reporting System
DESR	Defense Explosives Safety Regulation	PFAS	per- and polyfluoroalkyl substances
DNL	Day-Night Average Sound Level	PFOA	perfluorooctanoic acid
DNWG	Department of Defense Noise Working Group	PFOS	perfluorooctanesulfonic acid
DoD	Department of Defense	PHL	Potential for Hearing Loss
EA	Environmental Assessment		
EIS	Environmental Impact Statement		
EO	Executive Order		

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PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter	SHPO	State Historic Preservation Office
PM ₁₀	particulate matter less than or equal to 10 microns in diameter	SI	Site Inspection
POI	Point of Interest	SO ₂	sulfur dioxide
POL	petroleum, oil, and lubricant	STP	shovel test pit
PRL	Potential Release Location	SWPPP	Storm Water Pollution Prevention Plan
psf	pounds per square foot	TAF	Terminal Area Forecast
QD	quantity-distance	U.S.	United States
R-	Restricted Area	UFC	Unified Facilities Criteria
RAP	Ready Aircrew Program	USACE	United States Army Corps of Engineers
ROD	Record of Decision	USC	United States Code
ROI	Region of Influence	USCB	United States Census Bureau
RPZ	Runway Protection Zone	USFS	United States Forest Service
SAP	Satellite Accumulation Point	USFWS	United States Fish and Wildlife Service
SEL	Sound Exposure Level	UST	underground storage tank
SF	square foot/feet	VFR	Visual Flight Rules
		VOC	volatile organic compound
		W-	Warning Area

1.0 PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

The United States (U.S.) Department of the Air Force (DAF) and National Guard Bureau (NGB) propose to maintain the combat capability of the Air National Guard (ANG) fighter wings operating the F-15C/D aircraft. These aircraft have reached the end of their service life and will be phased out due to maintenance concerns and availability of aircraft parts. The proposal is the beddown, operation, and associated infrastructure construction of one formal training unit (FTU) squadron of F-35A Lightning II (F-35A) aircraft at Kingsley Field Air National Guard Base (ANGB) at the Crater Lake-Klamath Regional Airport (LMT), in Klamath Falls, Oregon. The squadron would consist of up to 24 F-35A Primary Aerospace Vehicles Authorized (PAA) and 2 Backup Aerospace Vehicles Authorized (BAA) that would replace the existing 26 F-15C/D aircraft. PAA is the number of aircraft authorized to a unit in order to perform its operational mission, while BAA is the aircraft that would be used only if one of the PAA aircraft is out of commission.

LMT is in south-central Oregon, approximately 5 miles south of downtown Klamath Falls in Klamath County, and about 15 miles north of the Oregon-California border (Figure 1.1-1). Owned and operated by the City of Klamath Falls, LMT is categorized as a nonprimary commercial service airport within the current National Plan of Integrated Airport Systems. The airport spans 1,251 acres and features two runways, Runway 14/32 and Runway 08/26. It hosts aviation-related businesses and facilities, including General Aviation and Specialized Aviation Service Organizations, the Oregon ANG, the U.S. Forest Service (USFS), and an Air Traffic Control Tower that is an FAA contract tower operated by the Oregon ANG with military and civilian controllers. Kingsley Field ANGB occupies 254 acres leased by the Oregon ANG from the City of Klamath Falls, in the western part of LMT (Figure 1.1-1). Its strategic location, roughly midway between Portland, Oregon and San Francisco, California makes it a vital connection for military bases along the West Coast.

Considering this location information, the region of influence (ROI) associated with the affected environment in this EIS includes the geographic areas surrounding LMT/Kingsley Field ANGB that may be directly or indirectly affected by the Proposed Action. These areas include:

- Areas under the flight paths where civil and military aircraft operate during takeoff and landing or other flight operations.
- Zones where land use compatibility is evaluated in relation to all civil and military aircraft operations.
- Areas identified for safety considerations, including those impacted by potential aviation accidents or incidents.
- Areas where aircraft noise affect residential or other noise sensitive land uses and commercial land uses, as depicted on noise contour maps showing the varying levels of aviation noise exposure.

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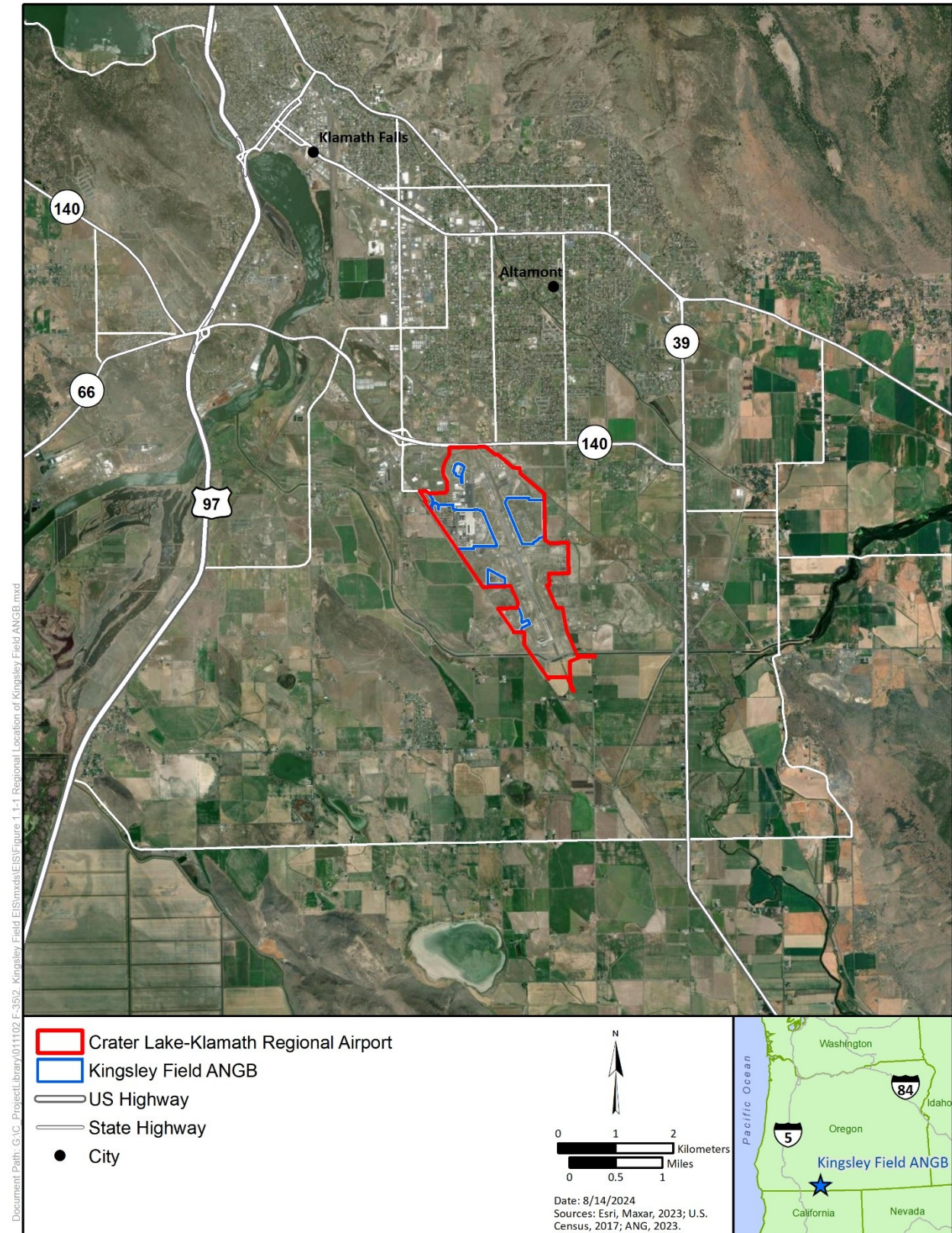


Figure 1.1-1 Regional Location of Kingsley Field ANGB

The 173d Fighter Wing (173 FW) is co-located with the Oregon ANG at Kingsley Field ANGB and uses the civil airfield for military aircraft training. The 173 FW’s mission is to produce the best air-to-air combat pilots, intelligence specialists, and healthcare professionals and serve the state of Oregon and the nation in times of peace and war. The 173 FW’s training mission falls under the Air Education and Training Command (AETC) and 19th Air Force. The Wing’s assigned aircraft fall under the purview of Air Combat Command (ACC), which is responsible for all DAF combat aircraft. As an integral component of AETC, the 173 FW trains F-15C/D air combat pilots to defend the homeland of the U.S., as well as deploy forces worldwide to meet threats to ensure the security of the U.S. To fulfill this role, the pilots must train as they would fight, which means that they must simulate battle conditions in a training environment. When the 173 FW was officially activated, the 114th Fighter Squadron became the flying component of the 173 FW to train an F-16 mission. F-16 pilot training continued for 9 years at LMT/Kingsley Field ANGB and in 1998 the 173 FW converted to the F-15C/D “Eagle.” The 173 FW was the only F-15C/D FTU in the DAF. In anticipation of planned F-15C/D divestment, the DAF identified the need to evaluate future mission options for the 173 FW.

1.2 PURPOSE OF ACTION

The purpose of the Proposed Action is to expand FTU capacity by providing an integrated F-35A training environment that supports full-spectrum pilot qualification in accordance with the AETC F-35A training syllabus. Expanding this capacity supports pilot production requirements and helps align pilot production with aircraft fielding in support of the 2026 National Defense Strategy (Department of War 2026).

1.3 NEED FOR ACTION

The F-15C/D fleet is reaching the end of its service life. The DAF evaluates fleet service life based on aircraft structural integrity, capability, sustainment feasibility, and long-term affordability. As aircraft age, maintenance demands increase and parts availability declines, reducing readiness and increasing sustainment burden. The DAF has determined it is not optimal to retain the F-15C/D aircraft beyond FY 2030 and advised Congress of the same; some active duty installations have already begun retiring their F-15C/D fleets.

Transitioning to the F-35A would maintain mission capability and enhance defense capabilities through next-generation technologies, including advanced sensors and radar and modern electronic warfare systems. In addition, DAF F-35A pilot production requires additional FTU capacity beyond that provided at Pilot Training Centers 1 and 2 at Eglin and Luke Air Force Bases (AFBs), respectively. As a DAF FTU, the 173 FW would provide additional training capacity needed to meet current and projected F-35A pilot production requirements.

Since the DAF Proposed Action involves construction of infrastructure necessary to support the military mission at LMT/Kingsley Field ANGB, the City of Klamath Falls (Airport Owner/Operator) will need to submit an updated Airport Layout Plan (ALP) to the Federal Aviation Administration (FAA) for certain changes to their ALP. When an Airport Owner/Operator requests approval for changes to their ALP, the FAA is required to review the ALP, and if appropriate, approve the updated ALP pursuant to 49 United States Code (USC) section 47107(a)(16) et seq., and Section 743 of the FAA Reauthorization Act of 2024. Thus, FAA’s federal action will be the approval of changes to the City of Klamath Falls ALP depicting

the DAF proposed infrastructure projects subject to FAA review pursuant to 49 USC section 47107(a)(16) et seq., and the FAA Reauthorization Act of 2024. The purpose and need of FAA’s action is to evaluate the City of Klamath Falls ALP update request for proposals that: materially impact the safe and efficient operation of aircraft at, to, or from the civil airport; would adversely affect the safety of people or property on the ground adjacent to the airport; and would adversely affect the value of prior federal investments to a significant extent. FAA responsibilities under 49 USC section 47101 et seq. and the FAA Reauthorization Act of 2024 establish the framework of the purpose and need for FAA’s action.

1.4 INTERAGENCY INVOLVEMENT

The DAF is the lead agency responsible for the scope and content of this Environmental Impact Statement (EIS). The NGB is the environmental planning function executing this action. Pursuant to 42 USC 4336a(a)(3) and 42 USC 4336e(2), the FAA is a Cooperating Agency because the scope of the Proposed Action involves activities within their jurisdiction by law and special expertise.

The FAA is serving as a cooperating agency for this EIS pursuant to 42 USC 4336a(a)(3) and 42 USC 4336e(2) (see Appendix B for a copy of the Cooperating Agency letter). The FAA has jurisdiction by law and special expertise relating to the DAF proposal at LMT. FAA’s authorities and special expertise are based on its statutory responsibilities under the Airport and Airway Improvement Act of 1982 (49 USC section 47101 et seq.), Section 743 of the FAA Reauthorization Act of 2024 (Public Law 118-254), and relevant implementing regulations. The FAA is also responsible for providing leadership in planning and developing a safe and efficient national airport system and satisfying the needs of aviation interests of the U.S., with due consideration for economics, the environment, local property rights, and safeguarding the public investment. This includes oversight and administration of airport planning and development, airport noise compatibility planning, safety of airport operations, protection of airspace on and immediately adjacent to an airport, and environmental reviews of airport improvement projects. The FAA Office of Airports is the lead within the FAA for the development of this EIS and coordinated internally to address all resources of concern under FAA’s jurisdiction to ensure the environmental review under the National Environmental Policy Act (NEPA) and other regulatory processes are completed in a timely manner. If FAA receives a request from the City of Klamath Falls for approval of certain changes to the ALP for LMT, FAA would be responsible for an environmental review under NEPA and may rely on the information and analyses in the Final EIS for its decision-making purposes. The FAA role as a Cooperating Agency in this environmental review neither expands nor diminishes its final decision-making authority.

As such, this EIS assesses the potential environmental, social, economic, historic, and cultural effects of the Proposed Action and No Action Alternative in order to meet each agency’s distinct obligations to support its decision-making; the document was prepared in accordance with NEPA as amended by the Fiscal Responsibility Act of 2023 (Public Law 118-5), the 2025 DoD NEPA Implementing Procedures and, as applicable, FAA Order 1050.1G, FAA National Environmental Policy Act Implementing Procedures.

The EIS lists all federal permits, licenses, and other authorizations that must be obtained in implementing the proposal. Table 1.4-1 presents a summary of these requirements as applicable to this Proposed Action.

Table 1.4-1 Summary of Applicable Federal Permits, Licenses, and Consultations

<i>Specific Action</i>	<i>Agency</i>	<i>Status</i>
ESA Section 7, consultation for federally listed species	USFWS	Informal consultation complete. USFWS concurred with the determination that the Project may affect, but is not likely to adversely affect federally listed species and designated critical habitat. Informal consultation is complete, and formal consultation is not anticipated.
NHPA, Section 106	SHPOs	The NGB is consulting with the California, Idaho, Nevada, and Oregon SHPOs.
CWA (33 USC 1344 et seq.) and implementing regulations	Oregon DEQ	Coverage under a construction stormwater general permit would be required for ground-disturbing activities exceeding 1 acre. An Erosion and Sediment Control Plan would be prepared consistent with permit requirements. No jurisdictional waters would be impacted.

Note: Table to be further developed during the Environmental Impact Analysis Process.

Legend: CWA = Clean Water Act; DEQ = Department of Environmental Quality; ESA = Endangered Species Act; NGB = National Guard Bureau; NHPA = National Historic Preservation Act; SHPO = State Historic Preservation Office; USC = United States Code; USFWS = United States Fish and Wildlife Service.

2.0 ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 PROPOSED ACTION ALTERNATIVE

2.1.1 Overview of the Proposed Action

The proposal is the beddown, operation, and associated infrastructure construction of one FTU squadron of F-35A aircraft at the 173 FW. The F-35A aircraft would replace the aging F-15C/D formerly operated by the 173 FW. Pilots operating the aircraft would conduct training from LMT/Kingsley Field ANGB and in existing military training airspace utilized by the 173 FW. Training operations would take place within existing military training airspace and military training ranges; however, there would likely be an increase in military training airspace operations, described in more detail in Section 2.1.2.2, *Military Training Airspace*. The Proposed Action also includes the addition of approximately 30 personnel.

2.1.2 Elements of the Proposed Action

2.1.2.1 Elements Affecting the Installation

Basing the F-35A

The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field ANGB could occur in FY 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 PAA (plus 2 BAA) F-35A aircraft would be based at Kingsley Field ANGB.

Airfield Operations

To provide the training needed to ensure combat readiness, F-35A aircrews would conduct operations in two types of areas: (1) an airfield associated with a base, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A would use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures.

The annual flying program for the F-35A is 250 hours per aircraft. Though each aircraft may not achieve the full amount of annual flying hours, this analysis will evaluate the full 250 hours per aircraft. Thus, with up to 24 PAA proposed for the F-35A, the total flying hour program for the 173 FW would be 6,000 hours annually. The number of sorties flown by the 173 FW depends on the training mission and the average sortie duration (ASD), which is influenced by the unit’s proximity to its military training airspace (Table 2.1-1).

Table 2.1-1 Existing Conditions (2023) and Proposed Annual Sorties and Duration

<i>Aircraft Type</i>	<i>Existing Average Sortie Duration (hours)</i>	<i>Total Aircraft Sorties</i>
F-15C/D (Existing Conditions [2023])	1.3	3,360
F-35A (Proposed Action)	1.3	4,615

Note: “Existing Conditions (2023)” reflects the modeled 2023 reference point used for analysis and alternatives comparison; it does not represent current-day fighter operations at LMT/Kingsley Field ANGB.

A sortie consists of a single military aircraft flight from a takeoff through a landing.

A closed pattern is a takeoff from an airfield, followed by a flight pattern that sets the aircraft up for an immediate landing at the same airfield, without intent to ever leave the local area. These include closed patterns under visual flight rules (VFR) and instrument flight rules (IFR) dependent on the fighter wing base and their inclusion in the analysis accounts for local training variations above the fighter wing’s operations based on sorties alone. The number of closed patterns per sortie flown with F-15C/D aircraft under Existing Conditions (2023) at the 173 FW was used to predict the proposed F-35A closed patterns.

The LMT/Kingsley Field ANGB supports a considerable number of military airfield operations; Table 2.1-2 compares Existing Conditions (2023) F-15C/D airfield operations with proposed F-35A airfield operations. The F-35A airfield operations are based on a 100 percent manned wing with assigned pilots maintaining basic mission capable status in accordance with the requirements of the AETC Ready Aircrew Program (RAP). The Existing Conditions (2023) operations provide a benchmark for assessing the proposed F-35A activities, based on historical noise studies, airfield management logs, and previous environmental documentation (NGB 2024a). The proposed F-35A beddown would not alter the number or type of other aircraft at LMT. However, civil aircraft operations are projected to increase by approximately 8 percent from Existing Conditions (2023), according to the 2023 FAA Terminal Area Forecast (TAF) data.

Table 2.1-2 Existing Conditions (2023) and Proposed Annual Airfield Operations

<i>Aircraft Type</i>	<i>Total Existing Conditions (2023) Aircraft Operations</i>	<i>Total Proposed Aircraft Operations</i>
F-15C/D	13,440	0
F-35A	0	20,780
Contract ADAIR	1,760	1,760
Civil ¹	24,197	26,102
Transient	1,638	1,638
Total Airfield Operations	41,035	50,280
Percent Change at Airfield	N/A	+22.5%

Notes: ¹Civil operations represent the combined annual runway operations of Air Carrier, Air Transport, and General Aviation.

Legend: ADAIR = Adversary Air; N/A = Not Applicable.

Source: FAA 2023.

All F-35A units have pilot proficiency requirements defined by Headquarters Air Force Operations, Plans and Requirements (HAF/A3) and published in the F-35A RAP (Air Force Manual 11-2F-35A, Volume 1, October 13, 2022). As is the case with Existing Conditions (2023) F-15C/D aircraft operations, F-35A training missions require flying during daylight and dark conditions, as well as under myriad weather conditions. FTU pilots have annual requirements for accomplishing “after dark” training in order to ensure viability in combat. For flight training purposes, “after dark” is considered to be the time period from 1 hour after sunset to 1 hour before sunrise. The time of day flown in the dark varies between the units because of their geographic location and also varies seasonally.

Construction, Renovation, and Demolition

To accommodate the proposed F-35A beddown, construction of new facilities, renovation of existing facilities, and selective demolition would be required. All new mission-support facilities and utility/infrastructure improvements under ANG control that are necessary to support the F-35A beddown would occur within the Kingsley Field ANGB leased property (leasehold). Two airfield

pavement projects would occur outside the ANG leasehold but within the overall LMT airfield boundary: (1) Repair Taxiway A Access Ramp to Building 400; and (2) construction of a C-17 parking ramp on the east side of the airfield to support C-17 movement for the Oregon Cascadia Zone. These two projects do not expand the ANG leasehold and would be implemented within the existing LMT airfield in coordination with the airport sponsor and FAA, as applicable. Examples of mission-support facilities and infrastructure within the leasehold include squadron operations/maintenance facilities, hangars, simulator facilities, installation communications infrastructure, electrical system upgrades, and other base support facilities (e.g., an engine repair shop and aircraft parking aprons).

Much of the proposed construction and renovation would occur before the first new aircraft arrive but would continue after the first aircraft arrives. The duration of construction is dependent upon the complexity and breadth of development needed to support the beddown.

Tables 2.1-3 and 2.1-4 summarize the proposed demolition, construction, and renovation projects for the Proposed Action and No Action Alternative. As shown in Table 2.1-4, preferred locations for each construction project at LMT/Kingsley Field ANGB have been identified, along with alternative locations for some projects, should the preferred locations become unfeasible as facility designs evolve. The construction projects associated with the No Action Alternative would support continued base operations, ensuring the functionality of the base regardless of which aircraft is based. The location of the proposed construction and renovation projects are shown in Figure 2.1-1, and the location of the proposed demolition projects are shown in Figure 2.1-2. For a more detailed footprint map of individual construction projects, see Appendix A.

Table 2.1-3 Proposed Demolition Projects

<i>Building Number</i>	<i>Total Area of Demolition (SF)</i>	<i>Year Building was Constructed</i>	<i>Year Proposed for Demolition</i>
B209	8,717	1989	2030
B213	15,271	1959	2030
B215	2,400	1959	2030
B219	83,305	1959	2026
B230	2,926	1959	2026
B231	2,916	1958	2026
B242	2,830	1961	2026
B243	32,570	1987	2030
B334	3,772	1987	2029
B500	12,112	1957	2030
B540	5,450	1959	2030
B541	5,450	1959	2026
Total SF of Demolition =	177,719		

Legend: B = Building; SF = square feet.

Personnel

A total of 1,144 personnel are assigned to the 173 FW (Table 2.1-5). Under the Proposed Action, approximately 30 contracted personnel would be added to support security, system administration, training, and simulator operations. This would increase total base personnel to 1,174, representing an approximate 2.65 percent increase relative to Existing Conditions (2023).

Table 2.1-4 Summary of Construction and Renovation Projects

<i>Project #/ Project Name</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Location</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#1 Provide Training Classrooms¹	1a	Modify existing B209 (existing simulator building) to house flight training classrooms (companion to Project 1b/1c).	Alternate	2027	0	0	Yes	No
	1b	Construct addition to B209 to include entire category code (i.e., authorized area) for flight training classrooms (companion to Project 1a/1c).	Alternate	2027	3,500	3,500	Yes	No
	1c	Construct new building containing 4 FMS, 6 MMRT, and contractor support (companion to Project 1a/1b).	Alternate	2027	29,583	29,583	Yes	No
	1d	Construct new building containing flight training classrooms, 4 FMS, 8 MMRT, and contractor support (includes demolition of B242, B230, B231).	Preferred	2027	40,400	40,400	Yes	No
#2 Construct Aircraft Shelter	2a	Construct 4-bay, 8 aircraft shelter along Echo sized to universal fighter standards.	Alternate	2027	50,000	0	Yes	No
	2b	Construct 4-bay, 8 aircraft shelter along Bravo row sized to universal fighter standards.	Preferred	2027	316,000	272,000	Yes	No
#3 Operations Group Facility²	3a	Repair B243 operations group facility to meet F-35 requirements for special access program facilities, office space, and contractor support.	Alternate	2028	0	0	Yes	No
	3b	Construct new operations group facility containing special access program facilities, office space, contractor support (includes demolition of B243).	Alternate	2028	25,200	0	Yes	No

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<i>Project #/ Project Name</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Location</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
	3c	Construct new operations group facility combined with maintenance facility containing special access program facilities, office space, contractor support, includes demolition of B243 (companion to Project 9d).	Preferred	2028	25,200	0	Yes	No
#4 ASE Facility³	4a	Repair B216 for use as aircraft support equipment facility.	Alternate	2029	0	0	Yes	No
	4b	Construct addition to B332 to accommodate increase requirement for ASE facility.	Preferred	2029	1,750	0	Yes	No
	4c	Construct new B332 for use as ASE facility.	Alternate	2029	15,000	0	Yes	No
	4d	Repair B213 for use as ASE facility.	Alternate	2029	0	0	Yes	No
#5 Engine Shop⁴	5a	Repair B213 engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	0	0	Yes	No
	5b	Construct new engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	15,000	5,000	Yes	No
#6 Avionics/ Pilot Fitment Facility	6a	Repair B331 to accommodate reduced avionics, battery room, and pilot fitment facility.	Preferred	2029	0	0	Yes	No
	6b	Construct new B331 avionics, battery room, and pilot fitment facility.	Alternate	2028	12,000	0	Yes	No
#7 Loading Dock	7	Repair loading dock for larger load leveler and better space utilization.	Preferred	2026	50,000	4,000	Yes	No
#8 Temporary LAMS Shelters	8	Install temporary LAMS shelters for aircraft on existing pavements.	Preferred	2027	0	0	Yes	No

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<i>Project #/ Project Name</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Location</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#9 Maintenance Hangar and Shops⁵	9a	Repair and reconfigure B219 maintenance hangar and shops to include improvements for seismic, lightning protection systems, and fire protection systems.	Alternate	2027	0	0	Yes	No
	9b	Construct new 6-aircraft maintenance hangar (Phase 1), includes demolition of east bay B219 (integrates with 9c Phase 2).	Alternate	2028	50,700	0	Yes	No
	9c	Construct new aircraft maintenance shops (Phase 2), includes demolition of west bay B219 (integrates with 9b Phase 1).	Alternate	2026	36,800	0	Yes	No
	9d	Construct new combined 6-aircraft maintenance hangar, aircraft maintenance shops, and AMU. Includes demolition of B219.	Preferred	2027	90,000	0	Yes	No
#10 Munitions Maintenance and Inspection Facility⁶	10a	Repair existing maintenance and inspection facility to meet secure area needs and update systems.	Preferred	2027	0	0	Yes	No
	10b	Construct new munitions maintenance and inspection facility for 1.1 (mass detonation) and 1.2 (fragmentation) explosives operations to meet minimum explosive standards.	Preferred	2026	3,900	3,900	Yes	No
#11 Munitions Trailer	11	Construct new pull through maintenance facility for large trailers.	Preferred	2026	1,500	0	Yes	No
#12 Munitions Assembly Pad	12	Construct new munitions assembly pad and inert storage facility.	Preferred	2030	20,000	20,000	Yes	No

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#13 Weapons Facility⁷	13a	Repair B500 weapons release facility to meet standards for F-35 and safety and seismic upgrades.	Alternate	2027	0	0	Yes	No
	13b	Construct new hangar bay for weapons load training and light protection system parking spot	Preferred	2027	15,000	15,000	Yes	No
	13c	Construct new facility attached to weapons load training bay including all shops for associated AMU AFSC's (currently AMXS).	Alternate	2027	22,400	22,400	Yes	No
	13d	Construct new weapons release facility attached to weapons load training facility.	Preferred	2027	18,000	18,000	Yes	No
#14 Fuel Cell Bay⁸	14	Construct additional fuel cell maintenance bay onto existing B333 fuel cell bay, and lightning and fire protection system parking spot.	Preferred	2029	6,800	0	Yes	No
#15 Taxiway A	15	Repair Taxiway A access ramp to B400.	Preferred	2026	8,500	0	Yes	No
#16 LRS Covered Parking	16	Construct LRS covered parking for LRS primary vehicles.	Preferred	2030	2,000	2,000	Yes	Yes
#17 Civil Engineering Covered Parking	17	Construct civil engineering covered parking for snow plowing vehicles.	Preferred	2030	4,000	4,000	Yes	Yes
#18 Troop Camp	18a	Repair existing B208 troop camp.	Preferred	2040	0	0	Yes	Yes
	18b	Construct new troop camp.	Alternate	2040	17,489	0	Yes	Yes
#19 Services Facility	19a	Repair B229 services facility.	Preferred	2035	0	0	Yes	Yes
	19b	Construct new services facility.	Alternate	2035	2,950	0	Yes	Yes
#20 Base Exchange/ Starbase	20a	Repair B302 base exchange and starbase facility.	Preferred	2035	0	0	Yes	Yes
	20b	Construct new base exchange and starbase facility.	Alternate	2035	7,860	0	Yes	Yes

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Project #/ Project Name	Project ID	Project Description	Preferred or Alternate Location	Construction Year	Total Area of New Ground Disturbance (SF)	New Impervious Surface (SF)	Proposed Action	No Action Alternative
#21 Civil Engineering Shops	21a	Construct new civil engineering combined facility.	Preferred	2030	30,000	25,600	Yes	Yes
	21b	Repair B220 civil engineering shops.	Alternate	2030	0	0	Yes	Yes
	21c	Repair B221 civil engineering administration.	Alternate	2030	0	0	Yes	Yes
	21d	Repair B234 civil engineering emergency management and storage.	Alternate	2030	0	0	Yes	Yes
#22 Dining Facility	22a	Repair B130 dining facility.	Preferred	2030	0	0	Yes	Yes
	22b	Construct new dining facility.	Alternate	2030	10,800	0	Yes	Yes
#23 C-17 Ramp	23	Construct C-17 Ramp on the east side of airfield for C-17 movement per the Oregon Cascadia Zone.	Preferred	2026	300,000	300,000	Yes	Yes

Notes: ¹Project 1 would require the choice of Project 1a, 1b, 1c combined or Project 1d alone. Project 1d would require the demolition of B242, B230, and B231.

²Project 3 would require the choice between Project 3a, 3b, or 3c. Project 3c requires selection of Project 9d.

³Project 4 would require the choice between Project 4a, 4b, 4c, or 4d.

⁴Project 5a/5b would not be implemented if the preferred Project 9d is implemented. Implementation of Project 5a or 5b required that Project 9a be implemented.

⁵Project 9 would require the choice of Project 9a, Project 9b/9c, or Project 9d. Implementation of the Project 9c or 9d options would eliminate the need for Project 5a/5b. Project 9d is the companion to Project 3c. Project 9d would eliminate the need for Project 13c.

⁶Project 10b would require demolition of B540 and B541.

⁷Project 13 would require the choice of the following: 13a/13b, 13b/c, or 13 b/d. Project 13c would not be compatible with 9d.

⁸Project 14 would require demolition of B334.

Legend: AMU = aircraft maintenance unit; AFSC = air force specialty code; AMXS = aircraft maintenance squadron; ASE = aircraft support equipment; B = Building, FMS = full motion simulator; LAMS = large area maintenance shelters; LRS = logistics readiness squadron; MMRT = mobile mission rehearsal trainer; PFF = pilot fitment facility; SF = square feet.

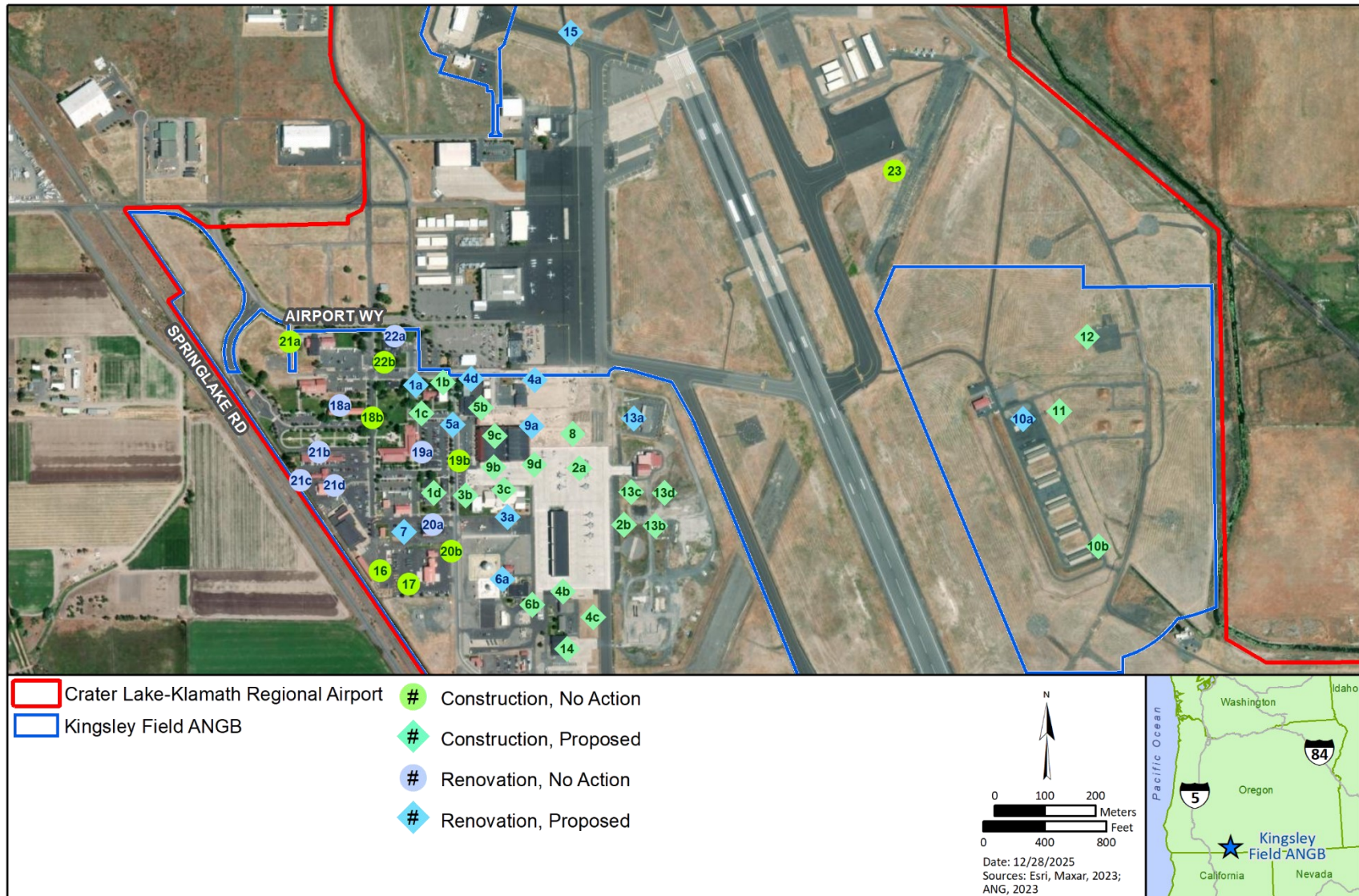


Figure 2.1-1 Proposed Construction and Renovation Projects

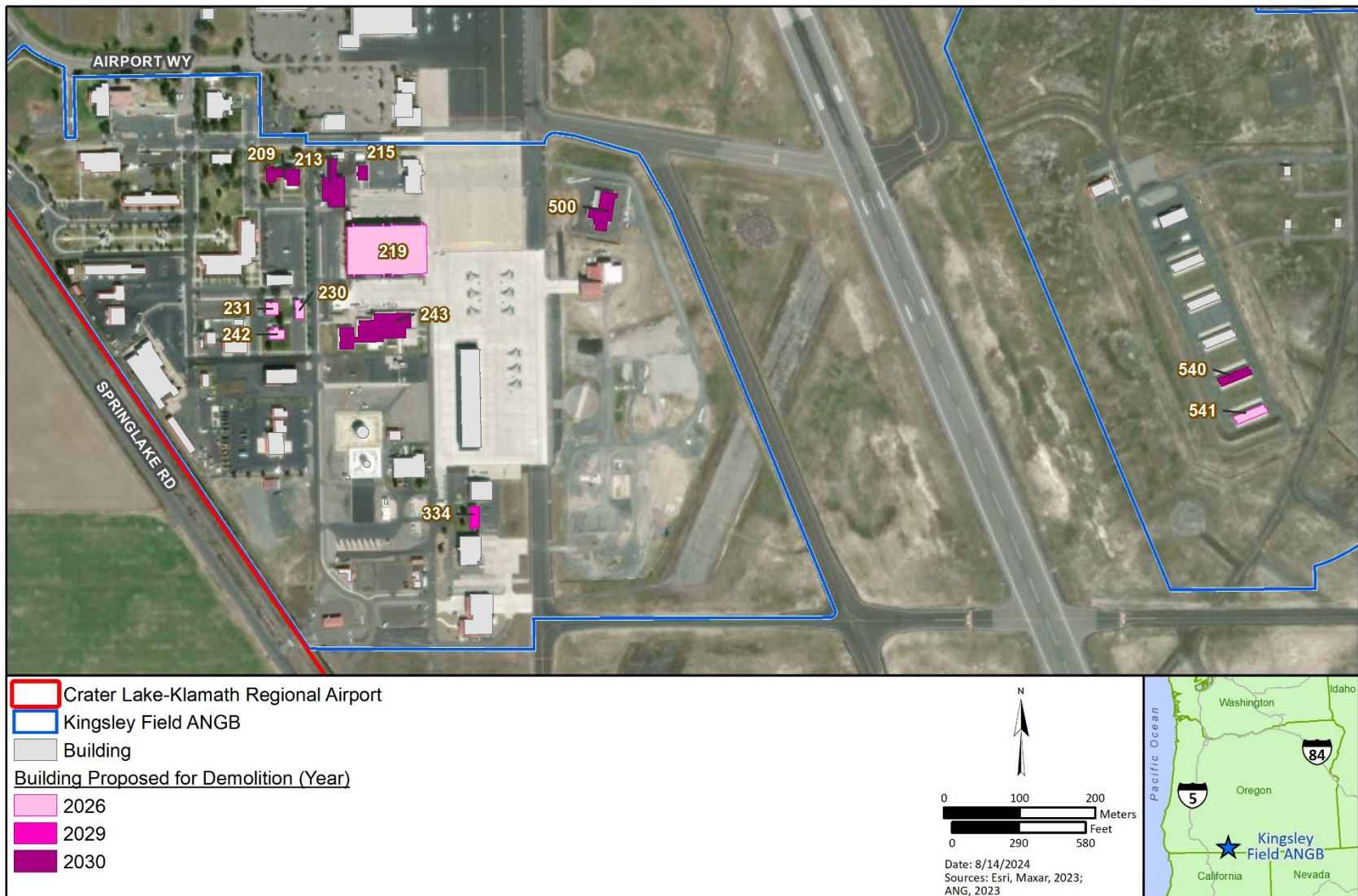


Figure 2.1-2 Proposed Demolition Projects

Table 2.1-5 Base Personnel: Existing Conditions (2023), No Action, and Proposed Action

<i>Personnel</i>	<i>Existing Conditions (2023)</i>	<i>No Action</i>	<i>Proposed Action</i>	<i>Percent Change from Existing Conditions (2023)</i>
Pilots	38	38	38	0%
Maintainers	451	451	451	0%
Support Personnel	575	575	575	0%
Contractors	60	60	90	+50%
Students	20	0	20	0%
Total	1,144	1,124 (-1.75% relative to Existing Conditions [2023])	1,174 (+4.45% relative to No Action)	+2.65%

Legend: % = percent.

2.1.2.2 Elements Affecting the Military Training Airspace

Military Training Airspace

F-35A pilots must conduct training in accordance with the applicable Ready Aircrew Program (RAP) to meet training requirements and maintain combat readiness. Military flight operations would occur within existing military training airspace. The 173 FW utilizes Military Operations Areas (MOAs), Air Traffic Control Assigned Airspace (ATCAA), Warning Areas (W-), and Restricted Areas (R-) for training. No modifications to the military training airspace are proposed under the Proposed Action; however, utilization of the existing airspace could increase to support F-35A training requirements.

F-35A training is expected to follow a similar general altitude profile to F-15C/D training; however, the majority of F-35A training would occur above 20,000 feet mean sea level (MSL). Utilization at the 5,000 to 10,000 feet MSL altitudes is expected to increase slightly, while overall training activity is anticipated to shift to higher altitudes (Table 2.1-6). This shift reflects training objectives emphasizing survivability against surface-to-air threats, which drive greater use of high-altitude airspace and increased standoff distances.

Table 2.1-6 F-35A and F-15C/D Training Altitude Distribution

<i>Altitude (feet)</i>	<i>Percent Use – F-15C/D</i>	<i>Percent Use – F-35A</i>
500–5,000 AGL	2	2
5,000 AGL–10,000 MSL	3	4
10,000–20,000 MSL	50	33
20,000–30,000 MSL	26	39
30,000–40,000 MSL	17	21
>40,000 MSL	2	1

Legend: > = greater than; AGL = above ground level; MSL = mean sea level.

Existing military training airspace used by the 173 FW, includes both overland and overwater military training airspace (Figure 2.1-3). ATCAAs overlie the Juniper/Hart, Dolphin, and Goose MOAs with altitudes spanning from 18,000 feet MSL up to 51,000 feet MSL.

Range Operations

The 173 FW does not perform operations at any air-to-ground range given that they do not have an air-to-ground mission under Existing Conditions (2023). However, with the F-35A aircraft, they

would train in target delivery at the Saylor Creek Bombing Range, Idaho, which is associated with Mountain Home AFB, Idaho. Though the majority of this training is conducted in the simulator or with simulated ordnance during flights in the existing military training airspace, each pilot would have to train at the Saylor Creek Bombing Range for one sortie per syllabus rotation. This would result in 100 sorties at Saylor Creek, which would be well within the level of transient activity that has been evaluated at the range.

Supersonic Operations

The F-15C/D uses supersonic flight regularly, capable of brief bursts up to 10 minutes. The air-to-air mission is enhanced by the ability to use higher speeds for a number of reasons. To train with the full capabilities of the aircraft, F-35A pilots would employ supersonic flight (i.e., flying at or greater than the speed of sound). All supersonic flights would occur within airspace and at altitudes approved for such activities. NGB anticipates that time spent in air-to-air combat training would involve supersonic flight for shorter durations compared to the F-15C/D, approximately 2 to 3 minutes at a time, due to the F-35's design for internal carriage and fuel efficiency at high-subsonic speeds. Supersonic speeds enable the aircraft to employ weapons at greater distances than an adversary aircraft with less supersonic capability. After simulated weapon employment, the aircraft uses its speed to evade adversary missiles and aircraft.

The F-35A would also use supersonic flight regularly for their air-to-air training and for some of their air-to-ground training. It is expected that completion of multi-role fighter training syllabi would result in the same percentage (or less) of supersonic flight than a purely air-to-air mission, and the flight conditions would be subject to the same policy and regulations adhered to by the F-15C/D under Existing Conditions (2023) in these same military training airspace blocks.

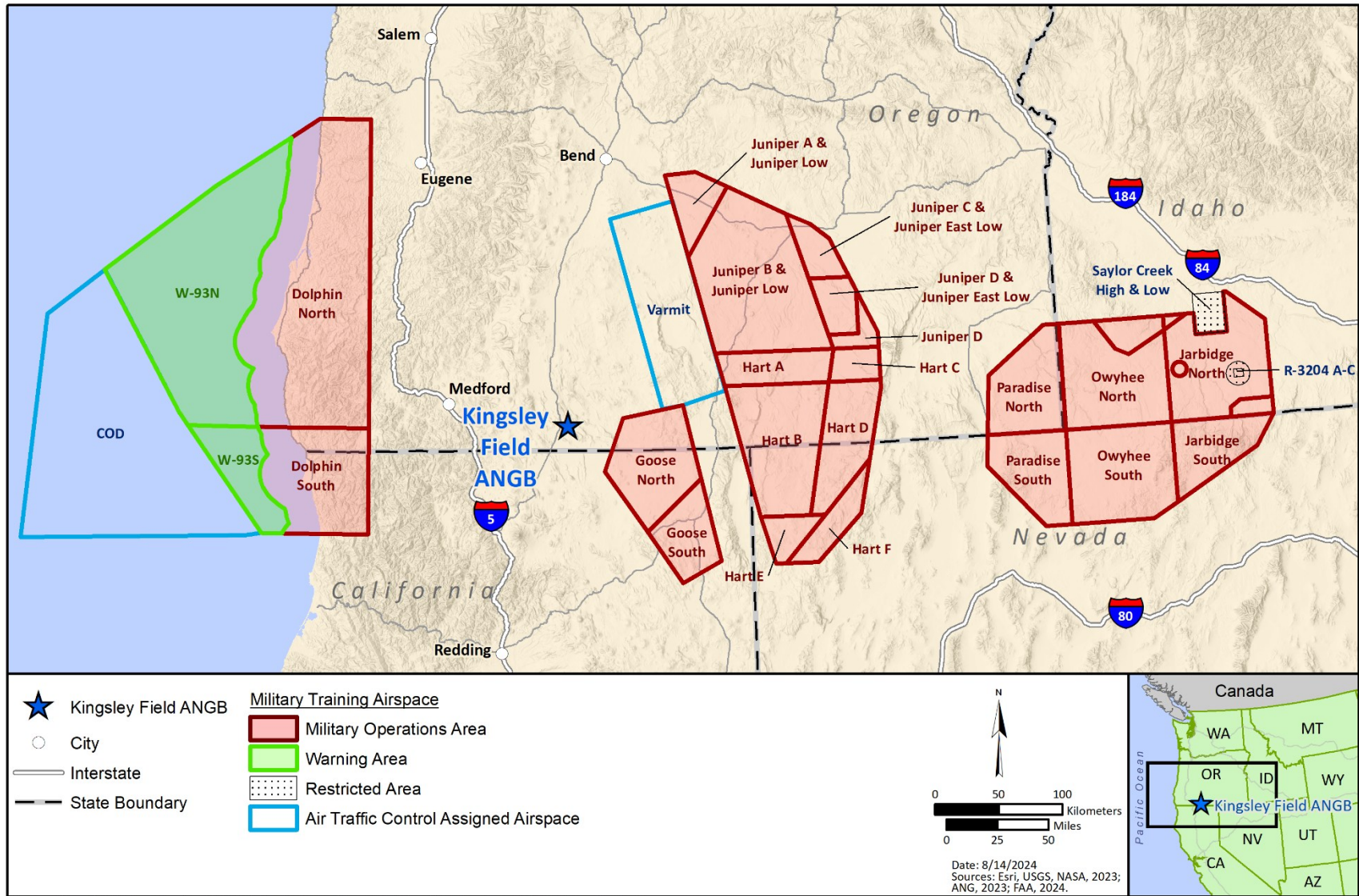
Specific use of supersonic speeds are listed by syllabus training event in the *Final Noise Study* (DAF 2026).

Defensive Countermeasure Use

Chaff and flares are the principal defensive countermeasures dispensed by military aircraft to evade attack by enemy air defense systems. Although the F-35A's stealth features substantially reduce its detectability, pilots must train to employ defensive countermeasures.

A bundle of chaff consists of approximately 5.0 to 5.6 million aluminum- or zinc-coated silica fibers that are cut to reflect radar signals. When dispensed, chaff forms an electronic "cloud" that produces a radar return and can temporarily obscure the aircraft from radar detection. RR-180 and RR-188 chaff are approved by the FAA for training in military training airspace.

Flares provide a high-temperature heat source intended to mislead heat-seeking targeting systems. Flares burn at temperatures exceeding 2,000°F and are designed to burn out within approximately 500 feet of release (generally 3 to 5 seconds) (DAF 2023b). The Oregon ANG would continue to implement a minimum flare release altitude of 5,000 feet above ground level (AGL) just for flares deployed in ANG-managed Oregon military training airspace (NGB 2017).



Document Path: G:\C_ProjectLibrary\011102-F-352_Kingsley Field EIS\mxd\EIS\Figure 2.1-4 Kingsley Field ANGB Military Training Airspace.mxd

Figure 2.1-3 Military Training Airspace Used by the 173 FW

Chaff and flare use is authorized in ANG-managed military training airspace in Oregon (NGB 2017). The 173 FW would continue to adhere to applicable local operating procedures for chaff and flare employment, including procedures for the Mountain Home Military Training Airspace and restricted airspace associated with the Saylor Creek Range (DAF 2023a, p. 2-3). The allocation and use of defensive countermeasures are not expected to change under the Proposed Action. The 173 FW would continue to receive the same chaff and flare allocation, and these countermeasures would be used at the same rates, in the same locations, and under the same operating parameters that apply under Existing Conditions (2023).

Ordnance Use

Air-to-air ordnance is used to destroy other aircraft and includes air-to-air missiles (AIM-120 and AIM-9) and the cannon. The F-15C/D is equipped with a 20-millimeter (mm) cannon, while the F-35A is equipped with a 25-mm cannon; both aircraft employ the same air-to-air missile. Air-to-ground ordnance is used for ground-based targets. The F-15C/D does not carry any air-to-ground ordnance because it does not have an air-to-ground mission. For air-to-air training, the F-15C/D carries non-releasable training missiles and instrument pods that record flight data; these training aids do not separate from the aircraft.

No live air-to-ground munitions would be assembled, stored, or loaded at Kingsley Field ANGB. Inert air-to-ground munitions would be used for munitions assembly and load training. Under the Proposed Action, munitions activities for the F-35A would be similar in type and amount to those for the F-15C/D. Air-to-ground training would be conducted primarily through aircraft training modes (i.e., air-to-ground ordnance is neither physically loaded nor released), simulator training events, and deployments to approved training locations (e.g., Saylor Creek Bombing Range) that support live or inert weapons release. On rare occasions (i.e., only when required for specific training events), inert ordnance would be loaded on aircraft and released within approved local restricted areas. All existing regulations governing ordnance safety, storage, handling, and use would remain unchanged.

2.2 NO ACTION ALTERNATIVE

Analysis of the No Action Alternative provides a baseline to enable decision-makers and the public to compare the magnitude of the environmental effects of the Proposed Action. Since completion of the affected environment data collection in 2023 (referred to throughout this EIS as “Existing Conditions [2023]”), the divestment of the 173 FW’s F-15C/D aircraft occurred more rapidly than anticipated, and regular F-15C/D flying operations are no longer being conducted at Kingsley Field ANGB. Under the No Action Alternative, the DAF would not implement the Proposed Action and no regular F-15C/D flying operations would occur at Kingsley Field ANGB, although some other (e.g., transient) aircraft operations would still occur. This No Action Alternative does not meet the purpose and need for this action because leaving the 173 FW’s mission without permanently-based aircraft would negatively impact the 173 FW’s ability to meet future pilot training requirements. This would create negative impacts to the DAF enterprise’s ability to meet F-35A pilot production requirements and national security.

Under the No Action Alternative, F-35A aircraft would not be based at Kingsley Field ANGB, and no training activities involving F-35A aircraft operated by the 173 FW would occur in the military training airspace. Additionally, construction associated with the proposed F-35A beddown would

not be implemented at LMT/Kingsley Field ANGB. Existing installation and airport operations would continue, including civil operations and military activity such as Adversary Air (ADAIR) and other transient aircraft operations. Construction and repair projects necessary to support ongoing base operations would continue and reflect independent ongoing base sustainment requirements (Tables 2.1-3 and 2.1-4 and Figures 2.1-1 and 2.1-2), regardless of the aircraft platform in use.

To assess the environmental effects of the Proposed Action compared to the No Action Alternative, the DAF modeled potential effects of the F-15C/D operations under the assumption that by 2029 all F-35A aircraft would be operational at LMT/Kingsley Field ANGB. Due to the increasing maintenance requirements and resulting “down-time” of the F-15C/D fleet, F-15C/D operations were originally estimated to decrease by 29 percent relative to Existing Conditions (2023). This would result in a 4.7 percent overall decrease in total airfield operations (including military, civilian and transient activity) (Table 2.2-1).

However, as F-15C/D aircraft were divested more quickly than anticipated, the DAF’s 2029 estimates of these operational numbers are akin to those experienced by the public in the late 2024 to early 2025 timeframe. As such, the No Action Alternative discussed throughout this EIS corresponds to flight activity during this timeframe and provides a choice among options to ensure that the effects of not undertaking the Proposed Action are reasonably understood. The DAF acknowledges that because the F-15C/D aircraft at Kingsley Field ANGB have now been fully divested, the environmental effects the public are currently experiencing are significantly lower than this modeling. The DAF is providing reasonable comparisons of environmental impacts of not implementing the Proposed Action via the No Action Alternative, affording the public the opportunity to see how the F-35A aircraft’s effects would differ from the effects recently experienced from the F-15C/D aircraft.

Table 2.2-1 Existing Conditions (2023), No Action, and Estimated Proposed Annual Airfield Operations

<i>Aircraft Type</i>	<i>Total Aircraft Operations Existing Conditions (2023)</i>	<i>No Action Aircraft Operations</i>	<i>Total Proposed Aircraft Operations</i>	<i>Change from Existing Conditions (2023)</i>
F-15C/D	13,440	9,600 (0)	0	-13,440
F-35A	0	0	20,780	+20,780
Contract ADAIR	1,760	1,760	1,760	0
Civil ¹	24,197	26,102	26,102	+1,905
Transient	1,638	1,638	1,638	0
Total Airfield Operations	41,035	39,100 (29,500)	50,280	+9,245
Percent Change	N/A	-4.7% (-28.1%) Relative to Existing Conditions (2023) (Comparison between No Action Alternative and current-day operations) ²	+28.6% (+41.3%) ² Relative to No Action	+22.5%

Notes: ¹Civil operations represent the combined annual runway operations of Air Carrier, Air Transport, and General Aviation.
²The parentheticals in the No Action Aircraft Operations and Total Proposed Aircraft Operations columns are intended to show the delta between the originally planned No Action Alternative with reduced operations of the F-15C/D aircraft and the current operations after the full F-15C/D divestment.

Legend: N/A = Not Applicable.

Source: FAA 2023.

2.3 ALTERNATIVES ELIMINATED

During initial strategic planning and the broader Global Posture Review, the DAF evaluated various options for the future of the F-15 fleet, including the potential establishment of an F-15EX FTU. Kingsley Field was initially considered for this mission based on its existing F-15 training infrastructure. However, the overarching DAF strategic analysis determined a greater need for F-35 pilot production capacity to meet long-term force structure goals and replace the aging F-15C/D fleet nationwide. While the 173 FW was considered for the F-15EX FTU, it was determined that additional F-35A pilot production capacity was required beyond the capabilities of Pilot Training Centers 1 and 2 at Eglin and Luke AFBs. No other replacement mission or weapon system changes were considered for Kingsley Field ANGB due to its existing FTU infrastructure and expertise.

The decision to focus exclusively on the F-35 mission at Kingsley Field was a result of a comprehensive basing criteria analysis. Kingsley Field was uniquely identified as the sole candidate location that met the “enterprise definition” for the ANG F-35 FTU due to the availability of military training airspace and established training infrastructure. Other bases evaluated within the strategic basing process did not possess these specific critical factors, making Kingsley Field ANGB the only viable location that met the DAF’s defined purpose and need for the F-35 FTU training mission.

2.4 COMPARISON OF ENVIRONMENTAL CONSEQUENCES AND MITIGATIONS BY ALTERNATIVE

2.4.1 Comparison of Environmental Consequences by Alternative

Comparing and differentiating among alternatives are a fundamental premise of NEPA. For the alternatives identified for this Proposed Action, summaries and comparisons of consequences are presented in Table 2.4-1.

Table 2.4-1 Summary of Effects

<i>Resource</i>	<i>No Action</i>	<i>Proposed Action</i>
Noise	<p>Approximately 2,177 acres adjacent to the airport would be exposed to DNL 65 dB or greater (1,198 acres of agriculture, 62 acres of commercial, 208 acres of industrial, 12 acres of public lands, 416 acres of residential, and 281 acres of unknown), affecting about 946 households (2,348 people) and three noise sensitive POIs. At the 10 affected schools, aircraft operations would cause 1–3 speech-interfering events per hour, with 3–10 minutes per day above 50 dB under windows-open conditions. Since these exposure levels are similar to Existing Conditions (2023), noise effects under the No Action Alternative would not be significant.</p> <p>Within military training airspace, noise levels would remain between 35–47 dB, consistent with ambient rural conditions, and below thresholds for noise sensitive uses. Population exposure would stay minimal, and noise effects would not be significant.</p>	<p>Approximately 4,506 acres adjacent to airport property would be exposed to DNL 65 dB or greater (2,547 acres of agriculture, 151 acres of commercial, 521 acres of industrial, 2 acres of open space 34 acres of public lands, 688 acres of residential, and 563 acres of unknown), affecting about 1,865 households (4,629 people) and three additional POIs. This represents an increase of 2,329 acres, 919 households, and 2,281 people compared to the No Action Alternative. At the 10 affected schools, aircraft operations would result in 1–3 additional speech-interfering events per hour, increasing classroom disruption by 4–14 minutes per day, with a 1–2 percent rise in the percentage of highly annoyed individuals. Because the Proposed Action substantially increases the number of individuals exposed to DNL ≥ 65 dB, noise effects around LMT/Kingsley Field ANGB would be significant.</p> <p>Within military training airspace, DNL and L_{dnmr} would increase by approximately 2–5 dB, but would remain below 50 dB, well under thresholds for noise sensitive land uses and occurring over sparsely populated areas. Therefore, noise effects within military training airspace would not be significant.</p>
Airspace	<p>F-15C/D operations would decrease to about 9,600 annual airfield operations, a 29% reduction from Existing Conditions (2023) (approximately 13,521 operations), leading to a 4.7% decrease in total airfield operations at LMT/Kingsley Field ANGB. Operations by civil, transient military, and contractor ADAIR aircraft would remain unchanged. With no changes to flight procedures or airspace use patterns, effects on the airfield would not be significant.</p> <p>F-15C/D training in the Juniper/Hart, Goose, and Dolphin MOAs may continue at reduced sortie levels, with contractor ADAIR use remaining the same. As training activity decreases and airspace structure stays unchanged, effects on military training airspace would not be significant.</p>	<p>F-35A operations would total approximately 20,780 annual 173 FW airfield operations, replacing F-15C/D operations (13,440 existing; 9,600 No Action), an increase of about 55% over Existing Conditions (2023) and 116.5% over No Action. Overall, total airfield operations at LMT/Kingsley Field ANGB would increase 22.5% relative to Existing Conditions (2023) and 29% relative to No Action modeled scenarios. All operations would use existing airfield airspace and procedures, so effects would not be significant.</p> <p>F-35A training would occur within the existing MOAs and W-93, with no changes to boundaries, altitudes, or management. Despite increased sortie levels, activities would remain consistent with Existing Conditions (2023) fighter training, and no airspace modifications are proposed, so effects on military training airspace would not be significant.</p>
Air Quality	<p>F-15C/D emissions would remain below <i>de minimis</i> thresholds (100 tpy for PM_{2.5} precursors) and PSD thresholds (250 tpy for CO, PM₁₀). Military training airspace emissions are limited due to less than 2</p>	<p>Construction and F-35A operational emissions would remain below <i>de minimis</i> thresholds (100 tpy for PM_{2.5} precursors) and PSD thresholds (250 tpy for CO, PM₁₀). Military training airspace</p>

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<i>Resource</i>	<i>No Action</i>	<i>Proposed Action</i>
	hours per year of flight below the mixing height. No significant effects on air quality are anticipated.	emissions are limited due to less than 2 hours per year of flight below the mixing height where emissions could affect ground-level concentrations. No significant effects on air quality are anticipated.
Socioeconomics/ Protection of Children and Elderly	Reduced F-15C/D operations would result in minor decreases in employment, spending, and investment, leading to small negative socioeconomic effects. Noise exposure would also decrease, with approximately 2,348 residents remaining within the DNL 65 dB contour, 599 fewer than Existing Conditions (2023). This includes 167 fewer children and 117 fewer elderly individuals. The demographic composition would remain nearly identical, and because exposure decreases without shifting proportions, effects on children and elderly would not be significant.	Increased military aircraft operations and associated support activities (civil operations would not change relative to the No Action Alternative) would generate an estimated \$10–15 million in additional annual spending and create 30–40 indirect jobs, resulting in positive socioeconomic effects. Noise exposure around LMT/Kingsley Field ANGB would increase the population within the DNL ≥ 65 dB contour to approximately 4,629 residents, including 1,291 children (27.8%) and 916 elderly (19.8%). While the total number of exposed children and elderly would increase, their proportions remain similar to Existing Conditions (2023) and the No Action Alternative, so no disproportionate impact on these groups is expected.
Land Use/Noise Compatible Land Use	Land use patterns in the area surrounding LMT/Kingsley Field ANGB would remain generally consistent with Existing Conditions (2023), and land use compatibility conditions would not be expected to change materially. Within the DNL 65–85 dB contours, non-compatible land use acreage would include 416 acres of residential, 270 acres of commercial and industrial, and 12 acres of public land uses (approximately 698 acres total); therefore, land use effects would not be significant. Residential land uses within DNL 65 dB and greater are considered non-compatible.	Residential non-compatible acreage would increase from 416 acres to 688 acres, as residential land uses within DNL 65 dB and greater are considered non-compatible. Commercial and industrial non-compatible acreage would increase from 270 acres to 673 acres, and public non-compatible acreage would increase from 12 acres to 35 acres.
Water Resources/ Floodplains/Wild and Scenic Rivers	Potential water resource effects would be limited to short-term erosion and sedimentation during construction and minor changes in runoff volume and timing after construction. Erosion, sedimentation, and long-term runoff would be managed through project-specific erosion and sediment control measures, BMPs, and compliance with applicable Oregon requirements and NPDES permit conditions. With these measures in place, runoff and sediment would be controlled and discharges would remain regulated; therefore, potential effects on surface water, groundwater, and drainage features would be minor and localized, and effects on water resources under the No Action Alternative would not be significant.	Potential water resource effects would be limited to short-term erosion and sedimentation during construction and minor changes in runoff volume and timing after construction. These effects would be managed through project-specific erosion and sediment control measures, standard BMPs, and compliance with applicable Oregon requirements and NPDES permit conditions, along with existing and/or project-specific stormwater management practices as needed to meet state and federal requirements. With these measures in place, potential effects on surface water, groundwater, and drainage features would be minor and localized; therefore, effects on water resources under the Proposed Action would not be significant.
Geological Resources/Soils/ Farmlands	Ground-disturbing activities would occur to support ongoing base operations and would continue to follow Oregon erosion and sediment control laws, existing BMPs, and NPDES permit requirements, all of which are part of established base practices.	Ground-disturbing activities would occur under the Proposed Action and would continue to follow Oregon erosion and sediment control laws, existing BMPs, and NPDES permit requirements, all of which are part of established operations at Kingsley Field ANGB.

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Resource	No Action	Proposed Action
	These activities would take place on previously developed or industrialized areas and would not disturb prime farmland or convert farmland to non-agricultural uses. Because construction would remain within areas already altered by prior development and standard protective practices are part of the Existing Conditions (2023), potential impacts to geological resources, soils, and farmland would remain below the threshold of significance. Therefore, no significant effects are anticipated.	Construction would occur on previously developed areas and would not disturb prime farmland or convert farmland to non-agricultural uses. Because construction would be confined to areas already altered by prior development and standard protective practices are part of the Existing Conditions (2023), potential impacts to geological resources, soils, and farmland would remain below the threshold of significance. Therefore, no significant effects on these resources are anticipated.
Cultural Resources	Implementation would not result in significant effects on cultural resources (i.e., archaeological, architectural, traditional cultural places/sacred sites). There are no known historic properties within the APE at the installation; therefore, there would be no historic properties affected per 36 CFR Section 800.4(d)(1), and no adverse effects would occur to historic properties exposed to DNL 65 dB or beneath military training airspace, in accordance with 36 CFR section 800.5(b).	Implementation would not result in significant effects on known cultural resources (i.e., archaeological, architectural, traditional cultural places/sacred sites). There are no known historic properties within the APE at the installation; therefore, there would be no historic properties affected per 36 CFR Section 800.4(d)(1), and no adverse effects would occur to historic properties at Kingsley Field ANGB, exposed to DNL 65 dB, or beneath military training airspace, per 36 CFR section 800.5(b).
Safety	Safety risks associated with the aging F-15C/D fleet could increase due to rising maintenance needs and the potential for in-flight emergencies. Construction to support base operations would be designed and implemented to meet applicable safety requirements and standards, including AT/FP, explosive safety, and fire protection. BASH management and mid-air collision avoidance measures would remain unchanged. With reduced airfield operations and no changes to safety protocols, safety effects would not be significant.	Proposed construction would be designed and implemented to meet applicable fire protection and AT/FP requirements and standards. Modifications to munitions storage facilities would be carried out, but explosive safety requirements (e.g., siting/quantity-distance and operational controls) would continue to apply, and explosive safety risks would remain similar. Airfield safety procedures, the MACA program and BASH management would remain unchanged, with no substantial change in the risk of bird/wildlife strikes or mid-air collisions. Overall, safety effects under the Proposed Action would not be significant.
Hazardous Materials/Waste	Hazardous materials and wastes would continue to be managed in accordance with applicable plans and regulations. ACM, LBP, and any contaminated media encountered during limited construction activities would be handled per established procedures. No significant effects on closed ERP sites or areas of interest are anticipated.	Hazardous materials and waste would increase with higher airfield operations but would be managed through the SPCC Plan and HWMP. ACM, LBP, and any contaminated media encountered during construction would be handled per established procedures. No significant effects on closed ERP sites or areas of interest are anticipated.
Biological Resources/Coastal Resources/Wetlands	Biological resources would remain exposed to operational noise at these reduced levels. Construction activities would occur on previously developed sites with BMPs to protect aquatic species and water resources. No significant effects on biological or wetland resources are anticipated, and effects would remain consistent with Existing Conditions (2023).	LMT/Kingsley Field ANGB is primarily developed and wildlife in the area is already exposed to elevated aircraft and military noise (as established in the Existing Conditions [2023]), so additional noise effects would not be significant. Applegate’s milk-vetch, the only threatened or endangered species on base, would not be affected by construction, demolition, or renovation. BMPs would be implemented

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<i>Resource</i>	<i>No Action</i>	<i>Proposed Action</i>
	No new ground disturbance would occur, and ordnance delivery, chaff, and flare use would remain within Existing Conditions (2023) levels in authorized locations. No significant effects on biological resources are expected in the military training airspace.	to protect aquatic species, and no projects are located in or adjacent to wetlands. Overall, effects on biological and wetland resources would not be significant.
Visual Resources	Construction, renovation, and demolition activities to support ongoing base operations would be implemented. The base and surrounding visual environment would remain largely consistent with Existing Conditions (2023), and no notable changes to the overall landscape or visual character are expected. Therefore, no significant effects on visual resources would occur.	All proposed construction would occur within the leasehold of Kingsley Field ANGB and be visually consistent with existing infrastructure. No aesthetically sensitive areas or historic districts are within the viewshed, and light emissions would not appreciably increase beyond Existing Conditions (2023) levels. Effects on visual resources would not be significant.
Infrastructure/ Utilities/ Natural Resources and Energy Supply/ Transportation/ Public Transportation	Construction under the No Action Alternative would add approximately 331,600 SF of impervious surface, with temporary runoff managed via drainage controls. Brief utility interruptions and minor increases in energy demand and solid waste generation could occur, but existing systems can accommodate these. Effects on infrastructure, utilities, energy, and transportation would not be significant.	Construction would add approximately 704,900 SF of impervious surface. Slight increases in water use, wastewater, electricity, natural gas, and solid waste would occur, but regional systems can accommodate these. Standard construction practices and energy-efficient designs would minimize stormwater and utility impacts. An additional 30 personnel would not result in significant changes to traffic. Overall effects on infrastructure, utilities, energy, and transportation would not be significant.

Legend: % = percent; ≥ = greater than or equal to; 173 FW = 173d Fighter Wing; ACM = asbestos-containing material; ANGB = Air National Guard Base; APE = Area of Potential Effects; AT/FP = antiterrorism/force protection; BASH = Bird/Wildlife Aircraft Strike Hazard; BMP = Best Management Practice; CFR = Code of Federal Regulations; CO = Carbon Monoxide; dB = decibel; DNL = Day-Night Average Sound Level; ERP = Environmental Restoration Program; HWMP = Hazardous Waste Management Plan; LBP = lead-based paint; L_{dnmr} = Onset-Rate Adjusted Monthly Day-Night Average A-weighted Sound Level; LMT = Crater Lake-Klamath Regional Airport; MACA = Mid-air Collision Avoidance; MOA = Military Operations Area; NPDES = National Pollutant Discharge Elimination System; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; POI = Point of Interest; PSD = Prevention of Significant Deterioration; SF = square foot/feet; SPCC = Spill Prevention Control and Countermeasures; tpy = tons per year; W- = Warning Area.

2.4.2 Mitigations

Mitigations avoid, minimize, remediate, or compensate for environmental effects, as further described:

1. **Avoidance:** Eliminating the impact by not taking a particular action or part of an action.
2. **Minimization:** Reducing the degree or magnitude of impacts.
3. **Rectification:** Repairing, rehabilitating, or restoring the affected environment.
4. **Reduction/maintenance:** Reducing or eliminating impacts over time through preservation and maintenance during the action's lifetime.
5. **Compensation:** Replacing or providing substitute resources or environments.

Avoidance, minimization, and reduction measures informed the development of basing alternatives. Mitigation measures may be incorporated into the Proposed Action or alternatives, applied to construction, operation, or maintenance activities; or implemented as compensatory measures, as appropriate.

There are no generally applicable statutory noise limits for military aircraft operations. Civil aircraft noise standards established by the FAA do not apply to military aircraft. The DAF coordinates on aviation-noise research and policy through the Federal Interagency Committee on Aviation Noise and applies the Federal Interagency Committee on Urban Noise land use compatibility guidelines when evaluating noise exposure and land use compatibility.

The DAF implements procedures to reduce aircraft noise and will continue these best practices with all alternatives to the extent practicable and consistent with safety and mission requirements. Additional noise-reduction measures can affect operational efficiency or training effectiveness. Noise mitigation measures considered include:

- **Reduce the number of flying operations.** The modeled F-35A sortie levels reflect the program of record (i.e., the expected upper limit of annual flying hours per aircraft) needed to meet training requirements. Reducing flying hours below this level could prevent the unit from meeting training objectives. While operations can occur at other locations during off-station exercises or deployments, the noise analysis assumes operations occur at home station to avoid underestimating potential local impacts.
- **Adjust runway usage patterns.** Runway selection is driven by safety considerations and air traffic control requirements, including wind conditions, airfield configuration, nearby traffic flows, and consideration of noise-sensitive areas. No changes to existing runway use are proposed.
- **Adjust routing to increase separation from noise-sensitive areas.** Departure and arrival routes are designed to meet safety and air traffic control requirements. Proposed F-35A operations would follow procedures similar to existing F-15C/D operations, and the 173 FW has previously adjusted flight patterns where feasible to minimize community noise exposure.
- **Limiting late-night flying.** Late-night operations (10 p.m.–7 a.m.) account for approximately 2 percent of total operations. Further narrowing the late-night scheduling window would reduce flexibility for night training; no additional limits are proposed.

- **Limit afterburner usage.** Afterburner use can increase noise during certain takeoff events. 5%, 50%, and 95% afterburner scenarios were modeled for the *Final Noise Study* (DAF 2026). The results indicate that reducing afterburner use does not materially change Day-Night Average Sound Level (DNL)-based outcomes at noise-sensitive POIs. The number of POIs exposed to 70 dB DNL or greater is unchanged across all afterburner scenarios (three POIs), and the number exposed to 75 dB DNL or greater is also unchanged (two POIs). At the 65 dB DNL threshold, reducing afterburner from 95% to 5% reduces the number of POIs above the threshold by only one (from six to five), and the 65 dB contours are largely similar across scenarios. Changes in afterburner percentage affect only a subset of departure events and do not translate into proportional reductions in DNL exposure. The DAF will continue to minimize afterburner use to the extent feasible consistent with safety and mission requirements.
- **Reduced-power departures.** Departures require high thrust immediately after takeoff to meet safety and performance requirements. After reaching a safe climb airspeed (approximately 300 knots), pilots may reduce thrust consistent with operational procedures. Reduced-power departures can lower noise levels along portions of the departure corridor; however, they may increase the duration of the noise event and are not practicable in all conditions.

Given these proactive measures, additional source-based noise mitigation is not practicable because it could reduce operational flexibility and training effectiveness and may not be feasible to implement consistently under safety and performance requirements. Previously identified mitigation measures applicable to the military training airspace used by the 173 FW will continue, as described in the *2017 EIS for the Proposed Establishment and Modification of Oregon Military Training Airspace* (page 4-75) and the *2023 Airspace Optimization for Readiness EIS for Mountain Home Air Force Base* (pages 2-50 through 2-54).

At this time, no additional project-specific noise mitigation measures have been identified. In addition to operational best practices, the DAF and NGB will continue to coordinate with stakeholders regarding available noise compatibility and abatement programs (e.g., voluntary sound insulation or other measures implemented by eligible entities, as applicable). Following issuance of the Record of Decision (ROD), a mitigation plan will be prepared in accordance with DoD NEPA Implementing Procedures to document any measures identified and agreed to during this environmental process.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

The analysis in this EIS is based on Existing Conditions data collected in 2023. Since initiation of the EIS technical analyses (including noise modeling), operational conditions at Kingsley Field ANGB have changed: the divestment of the 173 FW F-15C/D aircraft occurred more rapidly than anticipated, and the 173 FW no longer conducts regular F-15C/D flying operations at LMT/Kingsley Field ANGB. Civil operations and other military activity (including ADAIR and transient aircraft operations) continue at LMT. For clarity, “Existing Conditions (2023)” refers to the modeled data used for all analyses and does not represent current-day operations.

The No Action Alternative, described in Section 2.2, is retained as the analytical “not implementing the Proposed Action” baseline to ensure a consistent comparison of effects for evaluating the Proposed Action and the No Action Alternative. As discussed in that section, the No Action Alternative discussed throughout this EIS corresponds to F-15C/D flight activity during late 2024 to early 2025 timeframe.

3.1.1 Analytical Approach

This analysis describes the affected environment and evaluates potential effects associated with implementation of the Proposed Action and the No Action Alternative. Some aspects of the Proposed Action may affect both the base and the military training airspace; however, resources located solely beneath the military training airspace, where no ground disturbance, construction, or infrastructure changes would occur, are excluded from detailed analysis because there is no causal mechanism for impacts.

Table 3.1-1 identifies resources associated with the base and military training airspace. Not all resources affected at the base are affected within the military training airspace. For example, construction and personnel changes could affect socioeconomics at the base and its environs, but no elements of the action would affect socioeconomic conditions beneath the military training airspace.

Table 3.1-1 Resources Not Carried Forward for Detailed Analysis

<i>Resource</i>	<i>Affected Environment Component</i>	<i>Summary of Rationale for No Detailed Analysis</i>
Socioeconomics/ Children’s Health and Safety	Military Training Airspace	Socioeconomic effects beneath the military training airspace were not carried forward for detailed analysis because aircraft overflight does not involve construction, ground disturbance, population changes, or development activity on the ground. The proposed use of the airspace would be consistent with ongoing activities, and no significant socioeconomic-related conditions beneath the airspace would be altered under the Proposed Action. Socioeconomic effects, including employment and spending changes, are addressed separately under the installation components, where ground-based activities and associated increases in F-35 operations would take place.
Land Use/Noise Compatible Land Use	Military Training Airspace	Land use is not applicable to the military training airspace component because aircraft overflight does not affect land

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<i>Resource</i>	<i>Affected Environment Component</i>	<i>Summary of Rationale for No Detailed Analysis</i>
		ownership, land use patterns, or development activities on the ground beneath the airspace.
Department of Transportation, Section 4(f)	Installation and Military Training Airspace	Under Section 4(f) of the DOT Act of 1966 (49 USC Section 303), a property must be a significant resource for Section 4(f) to apply and any project proponent that receives funding from or requires the approval of the DOT, must be analyzed for compliance with Section 4(f). However, there are no Section 4(f) resources on airport property or the Oregon ANG leasehold where construction projects will occur. In addition, under Public Law 105–85 (Division A, Title X, Section 1079, November 18, 1997), no military flight operation (including military training flight), or designation of airspace for such an operation, may be treated as a transportation program or project for purposes of Section 303 of Title 49 USC.
Water Resources/ Floodplains/Wild and Scenic Rivers	Military Training Airspace	This resource is not carried forward for detailed analysis for the military training airspace component because aircraft overflight does not involve ground disturbance, discharges, or other activities that could alter surface water, groundwater, floodplain function, or designated river resources beneath the airspace.
Geological Resources/Soils/ Farmlands	Military Training Airspace	This resource is not carried forward for detailed analysis for the military training airspace component because aircraft overflight does not involve ground disturbance or soil-disturbing activities beneath the airspace.
Hazardous Materials and Waste	Military Training Airspace	This resource is not carried forward for detailed analysis for the military training airspace component because aircraft overflight does not involve on-the-ground hazardous material use, storage, handling, or waste generation beneath the airspace.
Biological Resources/Coastal Resources/Wetlands	Installation (partial) and Military Training Airspace (partial)	Coastal resources are not present at the installation; therefore, coastal resources are not carried forward for detailed analysis. For the military training airspace, this resource is not carried forward for detailed analysis because no effect pathway exists. The Proposed Action would not result in new ground disturbance and activities such as chaff/flare and ordnance delivery would remain within authorized levels in existing use areas.
Visual Resources	Military Training Airspace	This resource is not carried forward for detailed analysis for the military training airspace component because the Proposed Action would not create ground-level visual modifications beneath the airspace and overflight is intermittent and transitory.

<i>Resource</i>	<i>Affected Environment Component</i>	<i>Summary of Rationale for No Detailed Analysis</i>
Infrastructure/ Utilities/Natural Resources and Energy Supply/ Transportation/ Public Transportation	Military Training Airspace	This resource is not carried forward for detailed analysis for the military training airspace component because aircraft overflight does not change utility demand, transportation networks, or public services on the ground beneath the airspace.

Legend: ANG = Air National Guard; ANGB = Air National Guard Base; DOT = Department of Transportation; LMT = Crater Lake-Klamath Regional Airport; USC = United States Code.

Sources: FAA 2025a.

3.1.2 Reasonably Foreseeable Actions and Environmental Trends

The evaluation considers the reasonably foreseeable environmental effects of the Proposed Action and the No Action Alternative. “Reasonably foreseeable” refers to effects that are sufficiently likely to occur and that are directly attributable to the Proposed Action. Other actions are identified only when they are reasonably certain to occur and have a direct relationship to understanding the potential effects of the Proposed Action (e.g., overlap in time and location with construction or operations). Table 3.1-2 identifies such reasonably foreseeable actions.

Table 3.1-2 Reasonably Foreseeable Actions

<i>Proponent</i>	<i>Project Name and Description</i>	<i>Anticipated Year for Implementation</i>
City of Klamath Falls	Taxiway Rehabilitation Projects: Includes various improvements to Taxiways B & D, Runway 7-25 and Taxiway F, and Runway 14/32.	2022–2027
City of Klamath Falls	Aircraft Viewing Area Park: Design and construct an aircraft viewing area park at the intersection of Summers Lane and Brett Way as part of the City’s Strategic Plan to expand amenities.	2025–2027
City of Klamath Falls	Airport Facility Improvements: Various facility improvements and terminal roof improvements to City-owned buildings at the airport. Pavement Maintenance: Various parking and pavement improvements, including proposed aircraft viewing lot on the northeast edge of the airport.	2023–2027

Legend: 173 FW = 173d Fighter Wing; EA = Environmental Assessment.

Resource analyses focus on effects attributable to the Proposed Action; where other actions are discussed, they are described only to the extent necessary to characterize the context in which Proposed Action effects would occur. Where feasible, the analysis uses quantifiable information; where data are not available, the analysis is qualitative. Where detailed environmental analyses for other reasonably certain future actions are not available, assumptions are based on the best available information regarding the nature, location, and timing of those actions, and are used only to the extent necessary to understand the effects of the Proposed Action.

3.1.3 Irreversible and Irretrievable Commitment of Resources

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable timeframe. Building construction material such as gravel and gasoline usage for construction equipment would constitute the consumption of nonrenewable

resources. Irretrievable resource commitments also involve the loss in value of an affected resource that cannot be restored as a result of the action.

Training operations would involve consumption of nonrenewable resources, such as gasoline used in vehicles and jet fuel used in aircraft. Use of training ordnance would involve commitment of chemicals and other materials. None of these activities would be expected to substantially affect environmental resources because the relative consumption of these materials is expected to change negligibly.

The primary irretrievable effects of implementation of any of the alternatives would involve the use of energy, labor, materials and funds, and the conversion of some lands from an undeveloped condition through the construction of buildings and facilities on the base. Irretrievable effects would occur as a result of construction, facility operation, and maintenance activities. Direct losses of biological productivity and the use of natural resources from these effects would be inconsequential.

3.2 NOISE

3.2.1 Affected Environment

This EIS evaluates aircraft noise impacts on noise-sensitive receptors and land uses in the study area. The noise analysis was conducted using applicable DAF and FAA guidance for environmental noise assessment and aviation noise compatibility analysis, including DAF Handbook 32-7084, FAA Order 1050.1G, and FAA noise compatibility planning guidance, as applicable. Modeling results and supporting analyses are documented in the *Final Noise Study*, and noise modeling methods are summarized in *Noise Modeling, Methodology, and Noise Effects* (DAF 2026; NGB 2024b).

The ROI for noise includes LMT/Kingsley Field ANGB, and surrounding areas where aircraft operations and training activity contribute to the noise environment. Aircraft operations are the predominant source of noise; other sources (e.g., construction, ground support equipment, and roadway traffic) contribute intermittently. Background noise in areas surrounding the ANG local airspace is generally associated with rural and natural settings (e.g., wind and agricultural equipment).

3.2.1.1 Installation

Historically, the 173 FW served as an FTU for F-15C/D pilots, with an annual training target of 55 pilots per year. Due to aging aircraft and associated maintenance limitations, the 173 FW generated fewer operations in recent years. For Existing Conditions (2023) noise modeling, FY 2023 airfield activity was based on a reduced training pattern of 8 aircraft for the first launch and 6 aircraft for the second launch of each day (14 sorties per day). Factoring in 260 weekdays per year and after accounting for holidays and weather, this results in 3,360 annual sorties (13,440 annual airfield operations). Each sortie generates one departure, one arrival, and an average of one closed pattern event at LMT. The day and night periods used for the DNL metric are 7 a.m.–10 p.m. (0700–2200) and 10 p.m.–7 a.m. (2200–0700), respectively. These distributions reflect the Existing Conditions (2023) dataset used for modeling and provide a reference for comparing the Proposed Action and No Action alternatives; they are not intended to describe current-day fighter operations (DAF 2026).

As discussed in the 2020 *Adversary Air (ADAIR) Environmental Assessment (EA)*, a private contractor began providing adversary training sorties in 2021 utilizing the F-5E/F aircraft. Although the ADAIR EA analyzed up to 2,000 annual sorties, the current contract provides for 800 sorties per year resulting in 1,760 annual ADAIR operations at LMT/Kingsley Field ANGB (DAF 2020a).

Transient military and USFS aircraft operations total 1,638 operations per year, based upon the 2020 *ADAIR EA* with applicable updates (DAF 2020a). Sentry Eagle is the largest multi-unit military exercise and lasts approximately 2 weeks. Visiting aircraft from multiple units nationwide participate, providing instructor pilots at LMT/Kingsley Field ANGB an opportunity to train in large-force air-to-air exercises with aircraft across the DoD inventory. Sentry Eagle and USFS operations are expected to continue at approximately the same overall rate under Existing Conditions (2023). Updates include revised aircraft-type participation ratios for Sentry Eagle (increased F-35A participation and decreased F-15 and F-16 participation compared to the 2020 *ADAIR EA*) and the addition of four annual C-17 operations not included in the 2020 operations (DAF 2026).

The FAA TAF contains historical and forecast data for enplanements, airport operations, Terminal Radar Approach Control operations, and based aircraft at FAA towered airports, FAA contract tower airports, Terminal Radar Approach Control facilities, and non-FAA airports. The FAA 2023 TAF issued in January 2024 summarizes annual operations by calendar year; calendar year 2023 corresponds to Existing Conditions for this analysis. The most common modeled civil aircraft types include the CNA208 (representing Cessna 208 Caravan and similar), DHC6 (representing DeHavill and DHC-6-300 Twin Otter and similar), and 1900D (representing Raytheon Beech 1900-C/D, BAE Jetstream 1, and BAE Jetstream 200 Series). Additional detail on the modeled civil fleet mix is provided the *Final Noise Study* (DAF 2026; FAA 2024a).

The noise analysis reviewed a year of LMT flight track data from the Performance Data Analysis and Reporting System (PDARS), which was obtained from the FAA in 2021. Upon review of the PDARS data, FAA determined that the FAA's 2022 National Noise Inventory represented a better data source from which to derive the civilian fleet mix of operations at LMT, and FAA provided this data source for use in the noise analysis. A review of the 2019 PDARS data also identified the need to model flight tracks for civilian aircraft between Runways 14/32, flight tracks to the practice area southwest of the airfield, and closed pattern operations for all runways (DAF 2026; FAA 2024b; LMT 2024).

Consistent with applicable DAF and FAA guidance for environmental noise assessment and aviation noise compatibility analysis, the installation noise analysis used standard aircraft noise modeling tools and metrics to evaluate community noise exposure and land use compatibility.

For the noise analysis, the DoD's Noisemap software suite and FAA's Aviation Environmental Design Tool (AEDT) were used to model aircraft operations, taking into account flight tracks, altitude, airspeed, power settings, and other relevant flight conditions. The analysis was refined using weather data (temperature, relative humidity, and barometric pressure) from 2018–2023, sourced from the US Geological Survey National Elevation Dataset and Hydrography data. The combination of Noisemap and AEDT modeling results was used to present noise exposure in terms of DNL contours ranging from 65 dB to 85 dB in 5-dB increments, with specific noise-sensitive

locations (e.g., schools, hospitals, and residential areas) identified as Points of Interest (POIs) (DAF 2026; NGB 2024b).

Figure 3.2-1 shows Existing Conditions (2023) DNL noise contours at LMT from 65 to 85 dB in 5-dB increments overlaid on gradient mapping of DNL by color shading (DAF 2026). Portions of the DNL 65 dB contour extend north of the airfield by 1.8 miles, to the east and to the west 0.3 mile, and to the south 1.6 miles. The gradient depicts lower DNL levels beyond the DNL 65 dB contour (plotted to DNL 55 dB) (DAF 2026).

Modeled DNL values at POIs under the Existing Conditions (2023) range from DNL 45 to 74 dB. Three residential POIs (R-02 Anderson Avenue and Altamont Drive, R-03 Highland Way and Summit Street, and R-07 Lombardy Lane and railroad tracks) are exposed to DNL 65 dB or greater, which is the DoD threshold for land use recommendations applicable to noise sensitive land uses (DAF 2026; DoD 2021).

Noise exposure acreage under Existing Conditions (2023) is summarized in Section 3.2.2. Approximately 2,789 acres adjacent to LMT are exposed to DNL 65 dB or greater (DAF 2026).

Household and population estimates were derived from census block groups data using the methodology documented in the *Final Noise Study* (DAF 2026). Under Existing Conditions (2023), an estimated 746 households/1,851 people occur in the DNL 65 to 70 dB band, 336 households/834 people within the DNL 70 to 75 dB band, and 106 households/262 people within the DNL 75 to 80 dB band. No households occur in the DNL 80 to 85 dB band; this was confirmed using aerial imagery. DNL 80 dB also serves as the potential for hearing loss screening threshold (DAF 2026).

Supplemental noise metrics were evaluated consistent with DoD policy to assess potential effects on schools, other POIs, sleep disturbance, and potential for hearing loss (DoD Noise Working Group [DNWG] 2009). For schools, the screening threshold is 60 dB 8-hour equivalent sound level ($L_{eq(8hr)}$) (equivalent to an interior noise level of 45 dB $L_{eq(8hr)}$ with windows open), which is the level at which studies have found classroom learning to be affected (DNWG 2009, 2013a). Under Existing Conditions (2023), seven schools exceed this threshold, with the highest modeled $L_{eq(8hr)}$ at S-09 Hosanna Christian School (67 dB). Speech-interfering events and time above the interior 50 dB threshold occur at multiple schools, ranging from 1 to 4 events and 3 to 13 minutes per average school day; detailed classroom interference metrics are documented in the *Final Noise Study* (DAF 2026).

Non-school speech interference was evaluated at all POIs during the DNL daytime period under windows-open and windows-closed conditions. Under Existing Conditions (2023), speech-interfering events with windows open range from 1 to 5 events per average hour. With windows closed, 7 POIs experience no interfering events per average hour, 12 POIs experience 1 event per average hour, and 7 POIs experience 2 to 3 events per average hour. The highest windows-closed rate (3 events per average hour) occurs at R-02 Anderson Avenue and Altamont Drive, R-03 Highland Way and Summit Street, and R-07 Lombardy Lane and railroad tracks (DAF 2026).

Sleep disturbance was evaluated using the probability of awakening (PA) metric, based on nighttime aircraft events and associated sound exposure levels (SELs). Under Existing Conditions (2023), PA with windows open is less than 1 percent at 5 POIs, 1 to 5 percent at 20 POIs, and 10 percent at 1 POI. With windows closed, PA with windows closed is less than 1 percent at 14 POIs, 1 to 5 percent at 11 POIs, and 6 percent at one POI (DAF 2026).

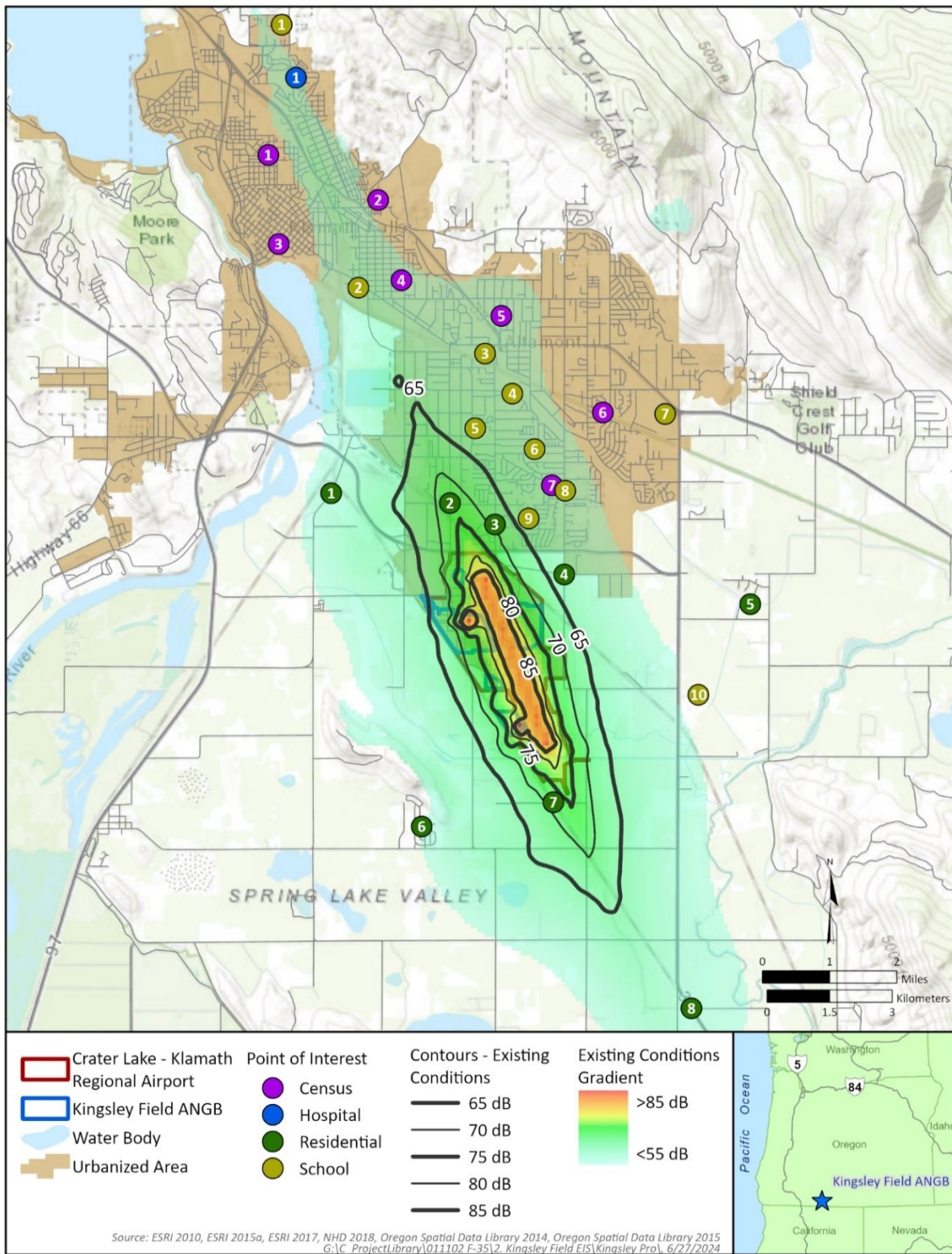


Figure 3.2-1 Existing Conditions (2023) DNL Contours and Noise Gradients on and Adjacent to LMT

A small number of nighttime operations by the 173 FW F-15C/D aircraft (approximately 25 operations per month) were included in the Existing Conditions (2023); PA results are dominated by civil aircraft operations.

DoD guidance also prescribes screening for the potential for hearing loss (PHL) due to elevated aircraft noise levels. Screening begins by identifying residential areas exposed to DNL of 80 dB or greater (DNWG 2013b). Under Existing Conditions (2023), approximately 5 acres outside of LMT are exposed to 80 dB or greater, and no households or residents occur within those areas. Because no people reside in areas exposed to DNL 80 dB or greater, no additional PHL analysis is warranted for Existing Conditions (2023) (DAF 2026; DNWG 2013b).

3.2.1.2 Military Training Airspace

As depicted in Figure 2.1-4, the 173 FW utilizes both overland and overwater military training airspace. Under Existing Conditions (2023), F-15C/D training primarily occurred in Juniper/Hart and Goose MOAs to the east of LMT/Kingsley Field ANGB, with occasional use of the Dolphin MOA along the Oregon coast.

Table 3.2-1 summarizes annual military training airspace operations used in the noise model for Existing Conditions (2023). An “operation” refers to a single flight event conducted within military training airspace and may include multiple activities (e.g., transits through multiple airspace areas, changes in altitude, holding patterns, or transitions between MOAs). Because multiple airspace-related activities may occur during one flight mission, the number of operations does not necessarily correspond one-to-one with sorties, which describe the overall flight mission.

Table 3.2-1 Existing Conditions (2023) Military Training Airspace Annual Operations

Aircraft	Juniper/Hart		Dolphin		Goose		Total Operations		
	Day	Night	Day	Night	Day	Night	Day	Night	Total
F-15C/D	1,495	46	71	3	1,531	48	3,097	97	3,194
F-5E (ADAIR)	740	23	36	1	0	0	776	24	800
Other Mil	252	0	0	0	0	0	252	0	252
Total	2,487	69	107	4	1,531	48	4,125	121	4,246

Note: Values reflect the Existing Conditions (2023) dataset used for noise modeling and are not intended to describe current-day 173 FW fighter operations.

Legend: ADAIR = Adversary Air; ANG = Air National Guard.

Data collected by the 173 FW indicate approximately 3,194 annual F-15C/D military training airspace operations under Existing Conditions (2023) (NGB 2024c). In addition, F-5E aircraft conduct adversary training within the Juniper/Hart and Dolphin MOAs, generating approximately 800 operations per year (NGB 2024c). The W-93 overwater airspace, located approximately 15 miles offshore, is used for training but does not affect noise-sensitive land receptors and was not included in the noise modeling (DAF 2026).

The DNL and Onset-Rate Adjusted Day-Night Average A-weighted Sound Level (L_{dnmr}) metrics are used to quantify noise in military training airspace. L_{dnmr} includes a rise-time correction factor to account for the increased annoyance associated with high-speed aircraft at low altitudes. Because most training occurs above 10,000 feet MSL, rise-time effects are small, and DNL and L_{dnmr} are the same for Existing Conditions (2023) when rounded to whole decibels.

Under Existing Conditions (2023), the greatest calculated noise levels occur in Juniper Low and Juniper East Low MOAs (48 dB DNL/ L_{dnmr}), reflecting the lower military training airspace floor

and lower altitudes flown in these areas. The remainder of the Juniper/Hart complex outside of the Juniper Low and Juniper East Low MOAs is 35 dB or less. Goose North and Goose South MOAs are 45 dB. Dolphin North and South MOAs are less than 35 dB, reflecting relatively few operations distributed over a large area and a minimum altitude of 11,000 feet MSL (DAF 2026).

The Juniper/Hart MOA complex is authorized for supersonic operations above 30,000 feet MSL to minimize the potential for supersonic noise effects at ground level where human receptors could be affected. Air Combat Maneuvering involves offensive and defensive maneuvering that may involve reaching supersonic speeds. Under Existing Conditions (2023), approximately 75 percent of military training airspace sorties include some supersonic flight; however, supersonic duration is short and ranges from 2 to 10 minutes for F-15C/D aircraft (DAF 2026).

Supersonic noise was evaluated using BOOMAP2021, which allows modeling of supersonic activity using aircraft type, altitude bands, Mach number, duration, and ground elevation inputs (DAF 2026). For analysis purposes, Air Combat Maneuvering events within the Juniper/Hart MOA complex were assumed to include supersonic flight for a portion of the training event, including both F-15C/D and F-5E adversary operations. Results indicate a maximum C-weighted Day-Night Average Sound Level (CDNL) of approximately 39 C-weighted decibels (dBC), occurring near the center of the Juniper/Hart MOA complex. The relatively low CDNL value is primarily attributable to the 30,000-foot MSL minimum altitude requirement for supersonic operations within the Juniper Hart MOA Complex (DAF 2026).

3.2.2 Environmental Consequences

Noise modeling methods, assumptions, metrics, and significance frameworks used for this analysis are documented in *Noise Modeling, Methodology, and Noise Effects* and the *Final Noise Study* (DAF 2026; NGB 2024b). This analysis applies applicable DAF and FAA guidance for environmental noise assessment and aviation noise compatibility analysis, including DAF Handbook 32-7084, FAA Order 1050.1G, and FAA noise compatibility planning guidance, as applicable.

3.2.2.1 No Action Alternative

Installation

Under the No Action Alternative, 173 FW F-15C/D operations are modeled as a reduced training pattern of 6 aircraft for the first launch and 4 aircraft for the second launch of each day (10 sorties per day). This equates to approximately 2,400 annual sorties or 9,600 annual operations, representing an approximate 29 percent reduction from Existing Conditions (2023) (DAF 2026). Contract ADAIR operations, military transient operations, and other agency transient operations are assumed to remain consistent with Existing Conditions (2023) (DAF 2026).

Civil aircraft operations at LMT are based on the FAA 2023 TAF and are estimated at approximately 26,102 annual operations, representing an increase of approximately 8 percent from Existing Conditions (2023). The analysis assumes that the civil fleet mix for 2029 would not change from the Existing Conditions (2023).

Maintenance and ground run-up operations by F-15C/D were scaled proportional to the modeled reduction in F-15C/D flight operations, while all other military or other agency ground operations would remain consistent with Existing Conditions (2023) (DAF 2026).

Figure 3.2-2 depicts DNL contours (65 to 85 dB in 5-dB increments) for the No Action Alternative at LMT, overlaid on a color gradient representation of DNL. Under the No Action Alternative, portions of the DNL 65 dB contour extend approximately 1.7 miles north of the airfield, approximately 0.2 mile to the east and west, and approximately 1.5 miles to the south (DAF 2026).

As shown in Figure 3.2-3, compared to Existing Conditions (2023), the No Action Alternative results in an overall reduction in the extent of the DNL contours (approximately a 1 to 2 dB reduction) driven by the modeled reduction in 173 FW fighter operations under the No Action Alternative assumptions (DAF 2026).

Modeled DNL values at POIs under the No Action Alternative range from DNL 46 to 73 dB (DAF 2026). Three residential POIs (R-02 Anderson Avenue and Altamont Drive, R-03 Highland Way and Summit Street, and R-07 Lombardy Lane and railroad tracks) would experience DNL 65 dB or greater, consistent with the Existing Conditions (2023) (Table 3.2-2). Compared to Existing Conditions (2023), DNL would remain unchanged at 2 POIs, decrease by 1 dB at 20 POIs, and decrease by 2 dB at 4 POIs.

Table 3.2-2 POI’s Experiencing > DNL 65 dB Under Existing Conditions (2023) and the No Action Alternative

<i>POI ID</i>	<i>Location Description</i>	<i>Existing Conditions (2023) DNL (dB)</i>	<i>No Action DNL (dB)</i>	<i>Change in DNL (dB)</i>
R-02	Anderson Avenue and Altamont Drive	74	73	-1
R-03	Highland Way and Summit Street	69	68	-1
R-07	Lombardy Lane and Railroad Tracks	72	71	-1

Legend: > = greater than; dB = decibel; DNL = Day-Night Average Sound Level; ID = Identification; POI = Point of Interest.

Noise exposure acreage (excluding water bodies) under the No Action Alternative is summarized in Table 3.2-3, including the change relative to Existing Conditions (2023). Acreage values reflect the datasets used for comparative analysis and are not intended to describe current-day operational conditions. Under the No Action Alternative, approximately 2,177 acres adjacent to LMT would be exposed to DNL 65 dB or greater (DAF 2026).

Table 3.2-3 No Action Alternative – Noise Exposure Acreage

<i>DNL Band (dB)</i>	<i>No Action Acreage</i>			<i>Change Relative to Existing Conditions (2023)</i>		
	<i>On LMT</i>	<i>Adjacent to LMT</i>	<i>Total</i>	<i>On LMT</i>	<i>Adjacent to LMT</i>	<i>Total</i>
65–70	133	1,558	1,691	49	-392	-343
70–75	284	529	813	18	-150	-132
75–80	335	89	423	-1	-66	-66
80–85	204	2	205	-33	-4	-37
85+	279	-	279	-42	0	-42
Total >65dB	1,234	2,177	3,412	-9	-612	-621

Note: Totals may not add due to rounding.

Legend: > = greater than; dB = decibel; DNL = Day-Night Average Sound Level; LMT = Crater Lake-Klamath Regional Airport.

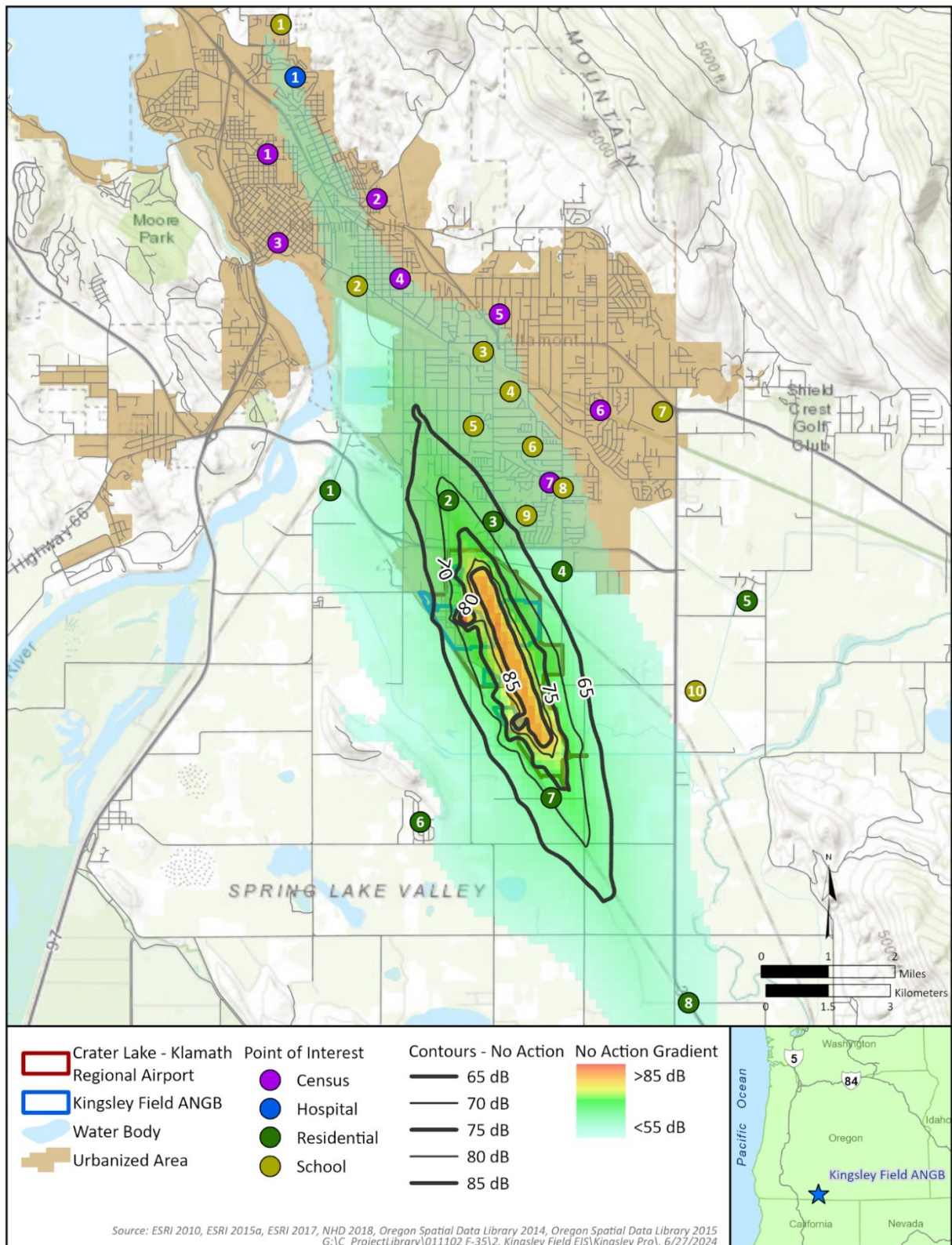


Figure 3.2-2 No Action Alternative DNL Contours and Noise Gradients on and Adjacent to LMT

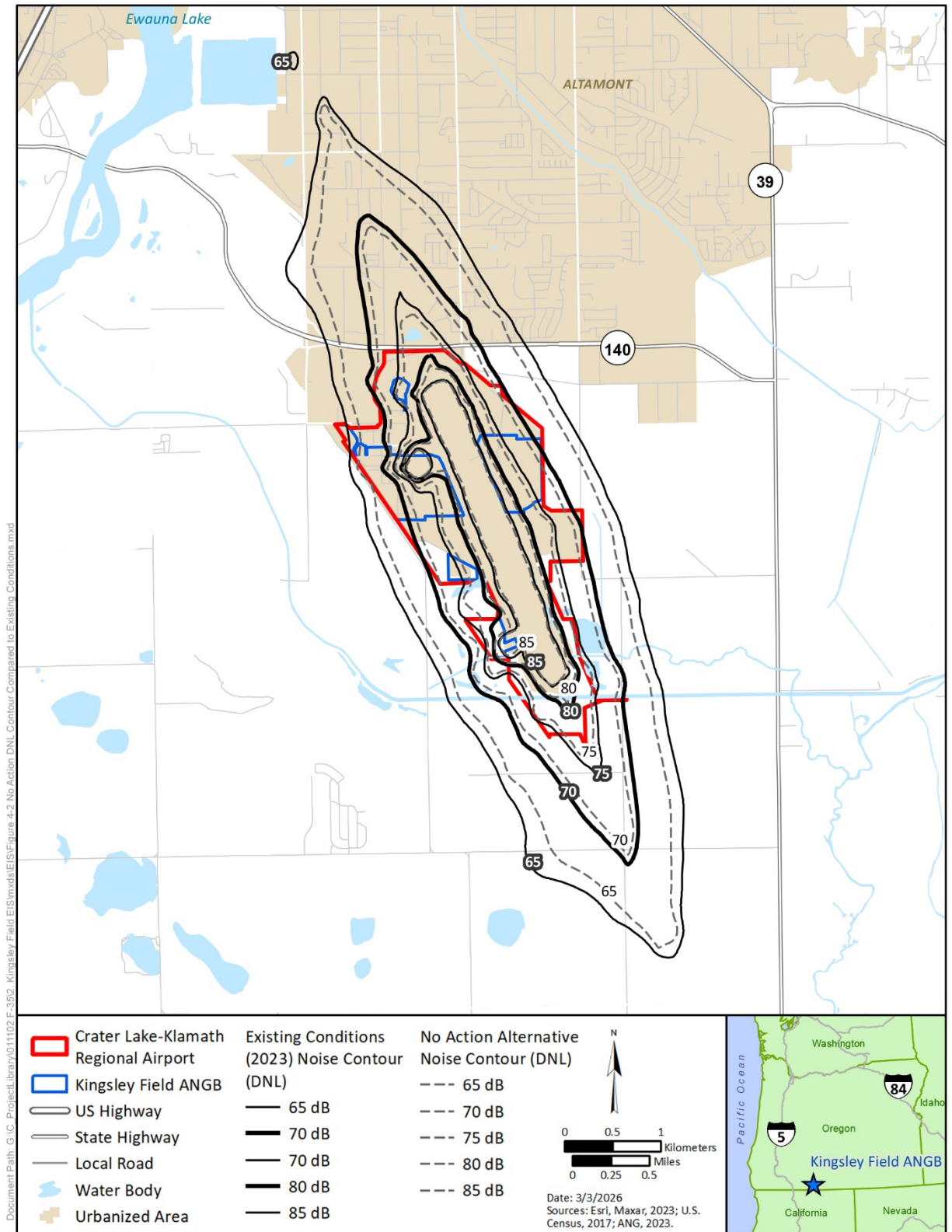


Figure 3.2-3 No Action Alternative DNL Contour Comparison to Existing Conditions (2023) at LMT

Estimated household and population exposure was calculated using the methodology documented in the *Final Noise Study* (DAF 2026). Under the No Action Alternative, an estimated 588 households/1,459 people would be exposed within the DNL 65–70 dB band, 300 households/744 people within the DNL 70–75 dB band, and 58 households/145 people within the DNL 75–80 dB band. Aerial imagery confirmed no households or residents occur within the DNL 80–85 dB band; therefore, no individuals would be affected within that band (DAF 2026).

Classroom learning interference results for schools S-01 through S-10 under the No Action Alternative are summarized in Table 3.2-4. Seven schools exceed the 60 dB $L_{eq(8hr)}$ screening threshold, and the highest modeled $L_{eq(8hr)}$ is 65 dB at S-05 Stearns Elementary School and S-09 Hosanna Christian School (DAF 2026).

Table 3.2-4 LMT No Action Alternative – Classroom Learning Interference

<i>ID</i>	<i>Location¹</i>	<i>Outdoor $L_{eq(8hr)}$ (dB)²</i>	<i>Change Outdoor $L_{eq(8hr)}$ dB Relative to Existing</i>	<i>Number of Speech Interfering Events per School Day Hour³</i>	<i>Change Events per School Day Hour Relative to Existing</i>	<i>TA interior 50 dB per 8- hour school day (minutes)³</i>	<i>Change TA Relative to Existing</i>
S01	Oregon Institute of Tech	57	0	1	0	3	0
S02	Klamath Family Head Start	62²	-1	2	0	4	0
S03	Triad School	61²	-1	2	0	3	-1
S04	Mazama High School	60²	-2	2	0	3	-1
S05	Stearns Elementary School	65²	-1	2	-1	4	-1
S06	Peterson Elementary	62²	-1	2	-1	5	-2
S07	Klamath Community College	51	-1	1	-1	5	-1
S08	Brixner Junior High School	61²	-1	2	-1	7	-2
S09	Hosanna Christian School	65²	-2	3	-1	10	-3
S10	Henley High School	56	-1	2	0	6	-2

Notes: ¹Table presents the analysis for the school POIs.

²Bold text represents schools exposed to exterior $L_{eq(8hr)}$ of greater than 60 dB, equivalent to the recommended interior threshold of 45 dB with windows open.

³Assumes 90 percent of ANG daytime operations occur during the school day; windows open condition with Noise Level Reduction of 15 dB due to building attenuation.

Legend: LMT = Crater Lake-Klamath Regional Airport; dB = decibel; ID = Identification; $L_{eq(8hr)}$ = 8-hour Equivalent Sound Level; POI = Point of Interest; TA= Time above.

In addition to classroom metrics, non-school speech interference was evaluated at all POIs during the DNL daytime period under windows-open and windows-closed conditions. With windows open, speech-interfering events range from 1 to 5 events per average hour, and 12 POIs experience a reduction of one event per hour under the No Action Alternative. With windows closed, 13 POIs experience zero events per average hour, 10 POIs experience 1 event per average hour, and 3 POIs experience 2 events per average hour (DAF 2026).

Sleep disturbance was evaluated using the PA metric. With windows open, PA is less than 1 percent at 11 POIs and ranges from 1 to 10 percent at 15 POIs. With windows closed, PA is less than 1 percent at 20 POIs and ranges from 1 to 6 percent at 6 POIs. Nighttime 173 FW F-15C operations are limited under No Action assumptions (approximately 18 operations per month), and PA results are dominated by civil aircraft activity (DAF 2026).

The Potential for hearing loss screening indicates that only 2 acres outside LMT are exposed to DNL 80 dB or greater under the No Action Alternative, and no households or residents occur

within those areas. Because these areas are unoccupied, no additional hearing loss analysis is warranted for the No Action Alternative (DAF 2026).

Military Training Airspace

Under Existing Conditions (2023), F-15C/D training primarily utilized Juniper/Hart and Goose MOAs, with occasional use of the Dolphin MOA. Under the No Action Alternative, this utilization pattern would continue with an overall reduction of approximately 26 percent in military training airspace activity.

DNL and L_{dnmr} were used to characterize noise exposure within the military training airspace. Because most training occurs above 10,000 feet MSL, the rise-time adjustment applied to L_{dnmr} does not produce a measurable difference from DNL when rounded to whole decibels (DAF 2026). Under the No Action Alternative, the highest DNL/ L_{dnmr} values occur in the Juniper Low and Juniper East Low MOAs (47 dB) due to the lower floor and lower altitudes flown in these areas. Goose North and Goose South are 44 dB, and Dolphin North and South remain less than 35 dB, reflecting relatively few operations distributed over a large area and a minimum altitude of 11,000 feet MSL. Overall, DNL/ L_{dnmr} across the military training airspace decreases by approximately 1 dB compared to Existing Conditions (2023) (DAF 2026).

Supersonic operations remain confined to the Juniper/Hart MOA complex above 30,000 feet MSL to minimize potential supersonic noise effects at ground level, but would occur at a reduced number of annual events under No Action assumptions. Supersonic noise modeling indicates a maximum CDNL of 36 dBC near the center of the Juniper/Hart MOA complex. The CDNL remains relatively low primarily due to the 30,000-foot MSL minimum altitude requirement for supersonic operations (DAF 2026).

3.2.2.2 Proposed Action Alternative

Under the Proposed Action, one F-35A FTU squadron would replace the F-15C/D aircraft previously assigned to the 173 FW at Kingsley Field ANGB and would conduct training operations in associated military training airspace. This alternative would also include construction to support F-35A operations at LMT/Kingsley Field ANGB, which would generate temporary construction noise. Construction would occur on installation near the LMT runways within areas already exposed to DNL 65 dB or greater under Existing Conditions (2023), and adjacent land uses are primarily commercial or agricultural. Construction noise would be temporary and localized and would not be expected to affect noise-sensitive receptors; therefore, additional construction noise analysis is not warranted (DAF 2026).

Installation

Modeled annual airfield operations at LMT/Kingsley Field ANGB under the Proposed Action are summarized in Table 2.2-1. Under the Proposed Action, F-35A operations would total 20,780 annual operations, and total airfield operations at LMT/Kingsley Field ANGB would be 50,280 annually, compared to 39,100 under the No Action Alternative. Departures were modeled with afterburner use for 95 percent of F-35A departure operations, consistent with the FTU training profile (DAF 2026).

F-35A arrivals were modeled using the same arrival types at similar rates proportional to Existing Conditions (2023) F-15C/D operations, with closed patterns conducted only as required. Nighttime

operations would remain low (approximately 2 percent of modeled operations). Runway use proportions would be consistent with Existing Conditions (2023) and the No Action Alternative: approximately 90 percent of departures on Runway 14 and approximately 90 percent of non-break arrivals, overhead break arrivals, and VFR closed patterns on Runway 32. Additional modeling assumptions (including maintenance and ground operations) are documented in the *Final Noise Study* (DAF 2026).

DNL contours for the Proposed Action (Figure 3.2-4) are presented from 65 to 85 dB in 5 dB increments. The DNL 65 dB contour extends approximately 2.2 miles north, 0.4 mile east, 0.5 mile west, and 2.0 miles south of the airfield. Compared to the No Action Alternative (Figure 3.2-5), the Proposed Action expands the contours in all directions due to the increased number of operations and higher modeled noise levels for the F-35A.

Afterburner provides additional thrust that allows the aircraft to accelerate quicker to begin to climb in a shorter distance after takeoff. For off-base areas near the airfield, the duration of noise exposure is strongly influenced by how long the aircraft remains at lower altitudes and close lateral distances to surrounding communities. An earlier climb reduces the time the aircraft spends in this low-altitude portion of the departure, which shortens the period during which off-base receptors are exposed to the highest departure noise levels. While afterburner can increase instantaneous sound levels during the initial takeoff segment, it can reduce the duration of off-base exposure by accelerating the aircraft’s transition to higher altitudes where sound levels decrease with distance.

Table 3.2-5 summarizes POIs with DNL 65 dB or greater under the Proposed Action (F-35A 95% afterburner) and compares those results to the No Action Alternative. Under the Proposed Action, six POIs would be exposed to DNL 65 dB or greater, an increase of three POIs relative to the No Action Alternative. The highest modeled DNL is 77 dB at R-02 Anderson Avenue and Altamont Drive, followed by 76 dB at R-07 Lombardy Lane and railroad tracks. Overall, POI DNL increases by approximately 1 to 5 dB relative to the No Action Alternative. Detailed POI results for all afterburner scenarios are provided in the *Final Noise Study* (DAF 2026).

**Table 3.2-5 POIs at or above DNL 65 dB under the Proposed Action
(F-35A 95% Afterburner)**

<i>POI ID</i>	<i>Location</i>	<i>No Action DNL (dB)</i>	<i>Proposed Action DNL (dB) (F-35A 95% AB)</i>	<i>DNL (dB)</i>
R-02	Anderson Avenue and Altamont Drive	73	77	+4
R-03	Highland Way and Summit Street	68	73	+5
R-04	Airway Drive and Homedale Road	61	65	+4
R-07	Lombardy Lane and railroad tracks	71	76	+5
S-05	Stearns Elementary School	61	65	+4
S-09	Hosanna Christian School	62	66	+4

Legend: % = percent; AB = Afterburner; dB = decibel; DNL = Day-Night Average Sound Level; ID = Identification; POI = Point of Interest.

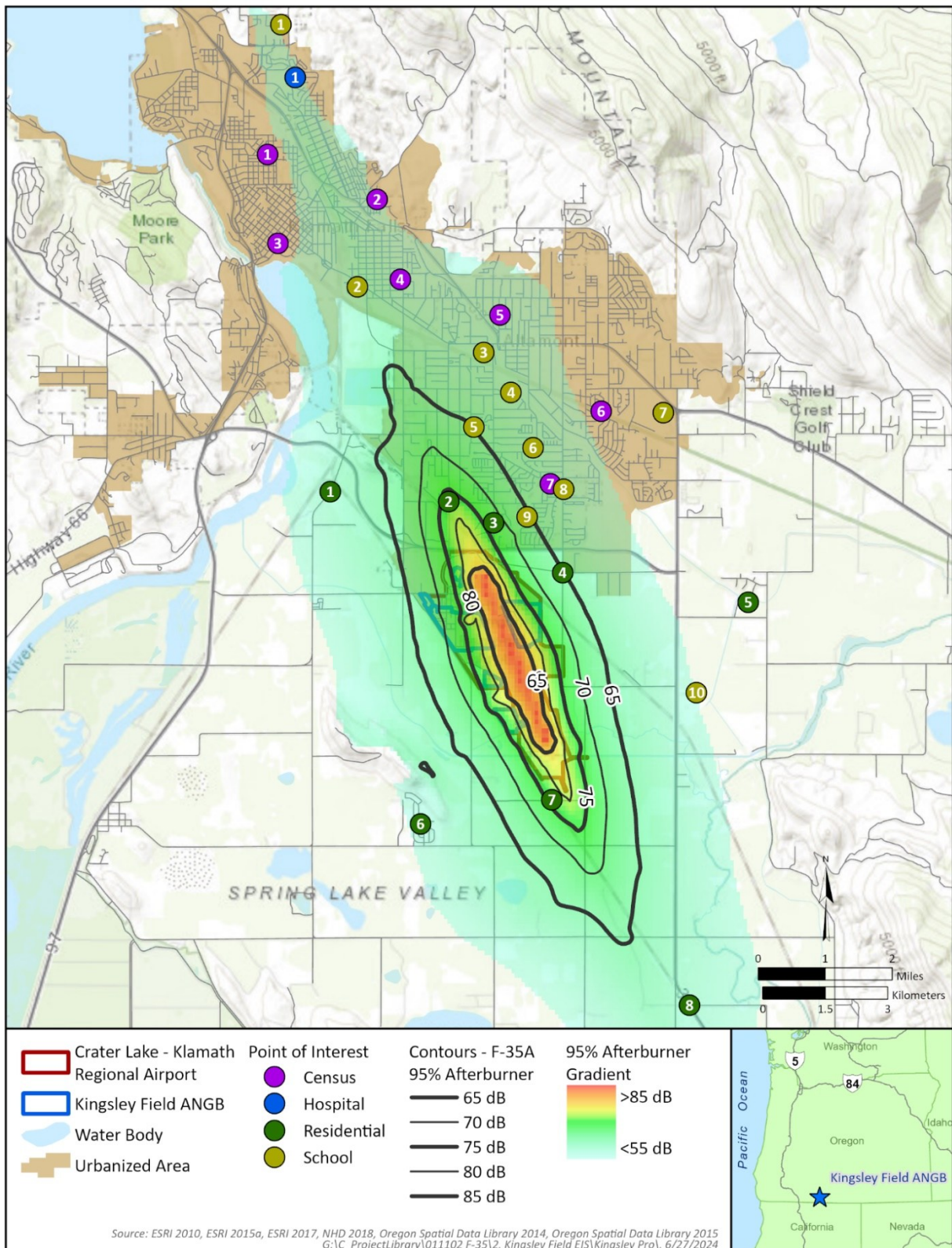


Figure 3.2-4 Proposed Action F-35A DNL Contours and Gradient (95% Afterburner)

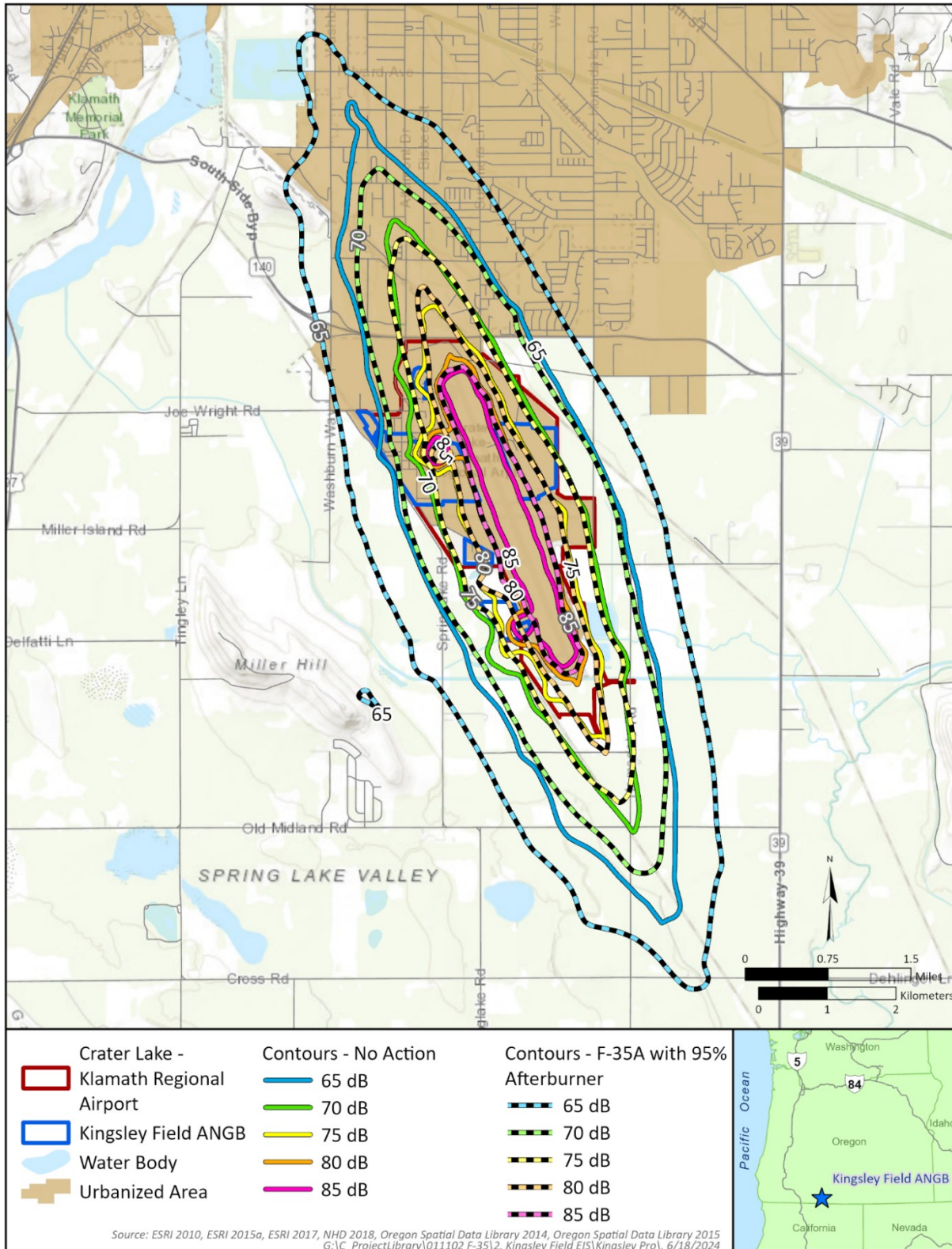


Figure 3.2-5 Proposed Action F-35A Comparison to No Action DNL Contours (95% Afterburner Departure Assumption)

The number of POIs exposed to DNL 70 dB or greater would increase from two to three, and the number of POIs exposed to DNL 75 dB or greater would increase by two. Across all modeled POIs, DNL would increase by 1 dB at 2 POIs, by 2 to 4 dB at 21 POIs, and by 5 dB or more at 3 POIs.

Table 3.2-6 summarizes off-installation noise exposure adjacent to LMT by DNL band under the Proposed Action (F-35A 95% afterburner departures) and the change relative to the No Action Alternative. Under the Proposed Action, approximately 4,506 acres, 1,865 households, and 4,629 people adjacent to LMT would be exposed to DNL 65 dB or greater, increases of approximately 2,329 acres, 919 households, and 2,281 people relative to No Action. Because one household would occur within the DNL 80–85 dB band, PHL screening results are provided below.

**Table 3.2-6 Acreage, Households, and Estimated Population by DNL Contour
Adjacent to LMT (Proposed Action and No Action Alternative)**

Scenario	DNL (dB)	Acreage Adjacent to LMT	Households	Estimated Population	Change from No Action Alternative		
					Acreage	Households	Estimated Population
F-35A 95% AB	65–70	2,788	1,190	2,953	+1,229	+602	+1,494
	70–75	1,192	415	1,030	+663	+115	+286
	75–80	435	259	643	+346	+201	+498
	80–85	90	1	3	+88	+1	+3
	85+	2	0	0	+2	0	0
	Total	4,506	1,865	4,629	+2,329	+919	+2,281

Note: Totals may not add due to rounding.

Households and population within the DNL 80 dB and greater determined through review of aerial imagery.

Legend: % = percent; AB = afterburner; dB = decibel; DNL = Day-Night Average Sound Level; LMT = Crater Lake-Klamath Regional Airport.

For school POIs, $L_{eq(8hr)}$ would increase by approximately 1 to 5 dB under the Proposed Action; however, the number of school POIs above the 60 dB $L_{eq(8hr)}$ screening threshold would remain seven, consistent with the No Action Alternative. Speech-interfering events per school day hour and time above the interior 50 dB threshold would increase at several school POIs under the Proposed Action. Daytime (7 a.m.–10 p.m. [0700–2200]) non-school speech interference varies by window condition, and PA would change only slightly under the Proposed Action; these limited changes are attributable to the low proportion of nighttime (10 p.m.–7 a.m. [2200–0700]) 173 FW flights relative to civil aircraft activity (DAF 2026). Under the Proposed Action, the DNL 80 dB screening area would extend beyond LMT property in multiple directions by up to approximately 2,000 feet; the area south of LMT would include one household. As described in DNWG (2013b), PHL screening relies on $L_{eq(24hr)}$, which is similar to DNL but without the nighttime adjustment. Review of $L_{eq(24hr)}$ contours found no households exposed to 80 dB $L_{eq(24hr)}$ or greater (average Noise-Induced Permanent Threshold Shift [NIPTS] of 3 dB). One household would be within the 78 to 79 dB $L_{eq(24hr)}$ band (average NIPTS of 2 dB; most sensitive NIPTS of 5.5 dB) (DAF 2026; DNWG 2013b). For reference, changes in hearing level of less than 5 dB are generally not considered noticeable, and audiometric testing variability is commonly assumed to be ± 5 dB (U.S. Environmental Protection Agency [EPA] 1974).

FAA Order 1050.1G defines a significant noise effect as a DNL increase of 1.5 dB or more for a noise sensitive area exposed at or above DNL 65 dB, or newly exposed at or above DNL 65 dB level due to a DNL 1.5 dB or greater increase, relative to the No Action Alternative for the same

timeframe. FAA Order 1050.1G also requires disclosure of noise sensitive areas exposed to DNL 60 dB but below DNL 65 dB that would experience a DNL increase of 3 dB or more, only when DNL 1.5 dB increases are documented within the DNL 65 dB contour (DAF 2026; FAA 2025a).

Figure 3.2-6 depicts modeled change in DNL under the Proposed Action relative to the No Action Alternative and the Proposed Action DNL 60 and 65 dB contours used for FAA Order 1050.1G reporting. FAA Order 1050.1G reporting results for the Proposed Action relative to the No Action Alternative are summarized in Table 3.2-7. Under FAA Order 1050.1G, noise effects for the Proposed Action at LMT would be significant because noise-sensitive areas exposed to DNL 65 dB or greater would experience a DNL increase of 1.5 dB or more relative to No Action (DAF 2026; FAA 2025a).

Table 3.2-7 FAA DNL Exposure Thresholds Affecting Acreage, Population, and Households Under the Three Afterburner Scenarios

<i>Scenario</i>	<i>FAA Classification¹</i>	<i>Description</i>	<i>Acreage</i>	<i>Households</i>	<i>Population</i>
F-35A 95% AB	Significant	+1.5 dB (or higher) Change within DNL 65+ dB	4,486	1,948	4,834
	Reportable	+3 dB (or higher) Change within DNL 60–65 dB	3,466	1,430	3,549

Note: ¹FAA 1050.1G, FAA National Environmental Policy Act Implementing Procedures. 30 June 2025.

Legend: % = percent; A/B = afterburner; dB = decibel; DNL = Day-Night Average Sound Level; FAA = Federal Aviation Administration.

Military Training Airspace

Due to differences in the F-35A training syllabus, military training airspace utilization under the Proposed Action would differ from F-15C/D utilization under Existing Conditions (2023) and the No Action Alternative. The noise analysis documents change by training event and the altitude distribution for F-35A military training airspace operations, including a portion of sorties flown as “red air” (adversary emulation). Consistent with Existing Conditions (2023) and the No Action Alternative, the average sortie duration is approximately 1.3 hours, resulting in roughly 1 hour of flight time within military training airspace per sortie.

Table 3.2-8 summarizes annual military training airspace operations under Existing Conditions (2023), the No Action Alternative, and the Proposed Action. The Proposed Action shifts training operations from the F-15C/D to the F-35A while maintaining ADAIR and other military activity at levels consistent with Existing Conditions (2023). Overall utilization increases under the Proposed Action due to the F-35A training profile, with operations distributed across the Juniper/Hart, Goose, and Dolphin MOAs.

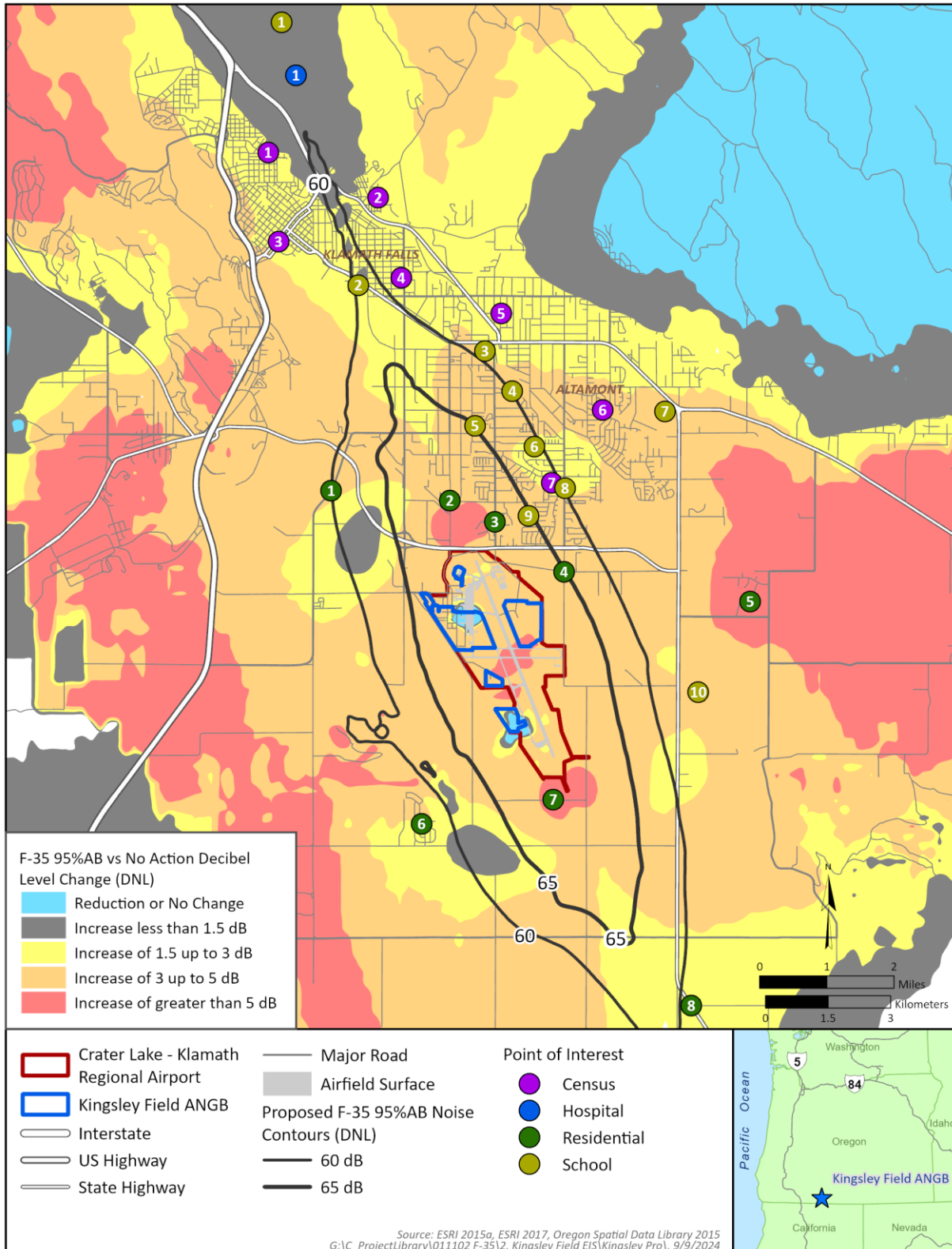


Figure 3.2-6 Modeled DNL (Proposed Action F-35A; 95% Afterburner Departures) Relative to No Action for FAA Analysis

Table 3.2-8 Annual Military Training Airspace Operations (Existing Conditions [2023]; No Action, and Proposed Action)

<i>Aircraft</i>	<i>Airspace</i>	<i>Existing Conditions (2023) (Ops/yr)</i>	<i>No Action (Ops/yr)</i>	<i>Proposed Action (Ops/yr)</i>	<i>Key Change/Driver (Proposed vs Existing)</i>
F-15C/D	Juniper/Hart	1,541	1,133	0	F-15C/D divestment / replaced by F-35A under Proposed Action
	Dolphin	74	54	0	
	Goose	1,579	1,161	0	
F-35A	Juniper/Hart	0	0	3,145	Proposed F-35A beddown
	Dolphin	0	0	159	
	Goose	0	0	1,281	
F-5E (ADAIR)	Total	800	800	800	No change
Other Military	Total	252	252	252	No change
Total All Operations	Total	4,246	3,400	5,637	+1,391 operations (+32.7%)

Legend: % = percent; ADAIR = Adversary Air; Ops = operations; yr = year.

Single-event noise metrics were evaluated to compare typical military training airspace profiles for the F-15C/D and F-35A. SEL represents the total sound energy of a single event, while L_{max} represents the peak level during that event. As shown in Table 3.2-9, the F-35A produces higher single-event levels than the F-15C/D at each modeled altitude under comparable conditions (military power at 400 knots). The difference is greatest at lower altitudes and decreases with increasing altitude, consistent with sound attenuation over distance (DAF 2026).

Table 3.2-9 SEL and L_{max} Comparison for Typical Military Training Airspace Profiles

<i>Altitude (feet AGL)</i>	<i>F-15C/D (PW-220)</i>		<i>F-35A (PW-100)</i>	
	<i>SEL</i>	<i>L_{max}</i>	<i>SEL</i>	<i>L_{max}</i>
500	116	111	121	119
1,000	111	104	115	111
2,000	105	97	108	103
5,000	95	85	99	91
10,000	86	75	89	81

Note: All aircraft modeled at military power and 400 knots for comparison.

Legend: AGL = above ground level; L_{max} = Maximum Sound Level; PW = Pratt & Whitney; SEL = Sound Exposure Level.

Source: NOISEMAP version 7.3.

DNL and L_{dnmr} metrics were used to characterize noise exposure within the military training airspace under the Proposed Action. Because most training occurs above 10,000 feet MSL, the rise-time adjustment applied to L_{dnmr} remains small and does not produce a measurable difference from DNL when values are rounded to whole decibels. Under the Proposed Action, the greatest modeled DNL/ L_{dnmr} values (approximately 49 dB) would occur in Juniper Low, Juniper East Low, Goose North, and Goose South due to a combination of increased operations in Goose and the lower floor/lower altitudes in the Juniper Low and Juniper East Low MOAs. The remainder of the Juniper/Hart complex outside Juniper Low and Juniper East Low would be approximately 40 dB, and Dolphin North and South would remain less than 35 dB, reflecting relatively few operations distributed over a large area with a minimum altitude of 11,000 feet MSL. Overall, DNL/ L_{dnmr} within the military training airspace would increase by approximately 2 to 5 dB compared to the No Action Alternative (DAF 2026).

Supersonic flight is primarily associated with air combat training and involves brief periods above Mach 1.0, which can generate a shock wave (“sonic boom”) that may reach the ground depending on altitude and atmospheric conditions. Higher altitudes reduce the likelihood of sonic booms reaching the ground, while lower altitudes and higher Mach numbers increase the likelihood and intensity of sonic booms. Under the Proposed Action, supersonic operations would occur within the Juniper/Hart MOA complex and would be conducted above 30,000 feet MSL over land, consistent with Existing Conditions (2023). Because the proportion of sorties involving supersonic flight is assumed to remain generally consistent (approximately 75 percent), the number of supersonic events would increase in proportion to the overall increase in training activity. Supersonic modeling indicates a maximum CDNL of approximately 40 dBC near the center of the Juniper/Hart MOA complex, representing an increase of approximately 4 dBC relative to No Action Alternative, driven primarily by increased operations. The CDNL remains relatively low primarily due to the 30,000-foot MSL minimum altitude requirement for supersonic operations (DAF 2026).

Overall, the Proposed Action increases modeled community noise exposure near LMT relative to the No Action Alternative, including expansion of the DNL 65 dB contour and additional noise-sensitive receptors exposed at or above DNL 65 dB. Under FAA Order 1050.1G, the Proposed Action meets the criteria for a significant noise effect because noise-sensitive areas exposed to DNL 65 dB or greater would experience a DNL increase of 1.5 dB or more relative to No Action (DAF 2026; FAA 2025a).

3.2.3 Reasonably Foreseeable Actions and Environmental Trends

Noise associated with reasonably foreseeable construction projects would be temporary and localized and would not be expected to drive long-term changes in DNL contours. The significance determination for the acoustic environment is based on modeled operational noise under the Proposed Action and the No Action Alternative; reasonably foreseeable construction provides context for short-term implementation conditions and does not change the operational noise significance conclusions.

3.3 AIRSPACE

3.3.1 Affected Environment

Airspace Management involves the designation, use, and administration of airspace to balance the needs of military, commercial, general aviation, and other users. The DAF airspace management program is established under Air Force Policy Directive 13-2, *Air Traffic, Airfield, Airspace, and Range Management*, and implemented in accordance with Department of the Air Force Manual (DAFMAN) 13-201, Airspace Management. At the local level, installation flying instructions and Letters of Agreement with the FAA establish installation-specific procedures

LMT has two operational runways, Runway 14/32 and Runway 08/26. According to the City of Klamath Falls’ 2021 Crater Lake–Klamath Regional Airport Master Plan, Runway 14/32—the designated calm wind runway end—is used for nearly 85 percent of aircraft operations, including military operations associated with the Existing Conditions (2023), while Runway 08/26 is used primarily for civilian traffic and to help deconflict operations with Runway 14/32 (City of Klamath Falls 2021).

3.3.1.1 Air Traffic Operations

Existing Conditions (2023) airfield operations at LMT totaled 41,035 annual operations, including civil and military activity (DAF 2026; FAA 2024b). Military operations accounted for 16,838 operations (approximately 41 percent) of total airfield operations, and the 173 FW's F-15C/D aircraft represented approximately 80 percent of modeled military operations under Existing Conditions (2023) (DAF 2026; FAA 2024b). The modeled aircraft operations breakdown is provided in Table 2.1-2.

3.3.1.2 Military Training Airspace

The 173 FW conducts training within existing military training airspace in the region, including the Juniper/Hart MOA complex and Goose MOAs east of LMT/Kingsley Field ANGB and the Dolphin MOA along the Oregon coast (see Figure 2.1-4). The Wing also uses W-93 occasionally. Several Military Training Routes (MTRs) exist beneath these MOAs and may be used occasionally by various military units; these are existing routes and are not a driver of the affected environment for this action. Existing Conditions (2023) military training airspace utilization is documented in the *Final Noise Study* and summarized in Section 3.2, *Noise* (DAF 2026).

3.3.2 Environmental Consequences

The airspace assessment evaluates how the alternatives would affect airspace use, including changes in context (e.g., where and when activities occur) and intensity (e.g., frequency, tempo, and airspace utilization). The analysis considers whether projected changes in airfield operations or military training airspace use could measurably affect other airspace users or airspace management within the existing system.

3.3.2.1 No Action Alternative

Installation

Under the No Action Alternative, 173 FW F-15C/D operations are modeled as a reduced training pattern of 6 aircraft for the first launch and 4 aircraft for the second launch each day (10 sorties per day), resulting in an estimated 2,400 annual sorties (9,600 annual operations). Contract ADAIR operations, transient military operations, and other agency operations are assumed to remain consistent with Existing Conditions (2023). Civil aircraft operations are forecasted to total 26,102 annual operations in 2029 (DAF 2026).

Overall, total airfield operations under the No Action Alternative are 39,100 annually, representing an approximate 4.7 percent reduction relative to Existing Conditions (2023), driven primarily by the reduction in 173 FW F-15C/D operations. Because the No Action Alternative reflects a modest decrease in airfield operations and does not involve changes to runway configurations, flight procedures, or airspace designations, airspace effects under the No Action Alternative would not be significant.

Military Training Airspace

Under the No Action Alternative, 173 FW F-15C/D use of existing military training airspace would continue at a reduced level consistent with the modeled reduction in F-15C/D activity (DAF 2026). Current-day operations may be lower due to accelerated divestment and are not necessarily

represented by the Existing Conditions (2023) dataset used for modeling (DAF 2026). Because the No Action Alternative reduces training airspace utilization and does not modify existing airspace designations or procedures, airspace effects would not be significant.

3.3.2.2 Proposed Action Alternative

Installation

LMT supports approximately 41,035 airport operations under Existing Conditions (2023), approximately 41 percent of which are military operations (DAF 2026; FAA 2024b). Under the Proposed Action, F-35A airfield operations would total 20,780 annually compared to 9,600 annual F-15C/D operations under the No Action Alternative (and 13,440 airfield operations under Existing Conditions [2023]). Overall, total airfield operations would increase from 39,100 annually under the No Action Alternative to 50,280 annually under the Proposed Action (approximately 29 percent) (DAF 2026). Operations would continue within existing runway configurations and established arrival/departure and pattern procedures and would be managed through existing FAA/installation air traffic management processes. Because the Proposed Action increases airfield activity but does not change runway configurations, flight procedures, or airspace designations, airspace effects at the installation level would not be significant.

Military Training Airspace

Flight operations under the Proposed Action would be conducted within existing military training airspace. The F-35A is expected to use an altitude distribution generally similar to the F-15C/D, with a small increase in low-altitude training (500 feet AGL to 10,000 feet MSL) from 5 percent to 6 percent and an increase in training at Flight Level 200 and above from 45 percent to 61 percent (see Table 2.1-6). Published times of use for the military training airspace would remain consistent with Existing Conditions (2023) (DAF 2026).

Table 3.3-1 summarizes military training airspace usage and reflects an overall increase in operations in military training airspace under the Proposed Action, relative to the No Action Alternative. The Juniper/Hart MOA complex would experience the greatest increase in operations, while the Goose MOAs would experience the smallest increase (approximately 10 percent). The 2020 ADAIR EA evaluated a total of 1,301 annual sorties within the Goose South MOA, including baseline 173 FW F-15C/D training sorties and contractor ADAIR sorties; while that analysis did not evaluate F-35A training, it provides context for existing levels of airspace utilization in the region (DAF 2020a, 2026).

**Table 3.3-1 Military Training Airspace Usage
(Existing Conditions [2023] and Proposed Action)**

Aircraft	Juniper/Hart		Dolphin		Goose		Total Operations ¹		
	Day	Night	Day	Night	Day	Night	Day	Night	Total
F-15C/D	1,099	34	52	2	1,126	35	2,277	71	2,348
F-5E (ADAIR)	740	23	36	1	0	0	776	24	800
Other Military	252	0	0	0	0	0	252	0	252
Total	2,091	57	88	3	1,126	35	3,305	95	3,400
F-35A	3,051	94	154	5	1,243	38	4,448	137	4,585
F-5E (ADAIR)	740	23	36	1	0	0	776	24	800
Other Military	252	0	0	0	0	0	252	0	252
Total	4,043	117	190	6	1,243	38	5,476	161	5,637

Note: ¹W-93 would continue to be used by 173 FW, but less often due to distance and is not included in the table.

Legend: ADAIR = Adversary Air.

The 173 FW does not have an air-to-ground mission under Existing Conditions (2023). Under the Proposed Action, the F-35A training syllabus includes target delivery training for one sortie per syllabus rotation. This training would occur at R-3202 High/Low (Saylor Creek Bombing Range) within the Mountain Home Range Complex and the Jarbidge North MOA. These operations fall within existing transient aircraft activity levels previously analyzed for the Jarbidge North MOA as detailed in the *Airspace Optimization for Readiness at Mountain Home Air Force Base, Idaho EIS* (DAF 2023a).

Several MTRs exist beneath the MOAs and may be used occasionally by various military units. With regional MOAs that include lower floors (e.g., Goose North MOA), the Proposed Action is not expected to require increased reliance on MTRs for the 173 FW training profile; therefore, MTRs are not carried forward for further analysis.

Although utilization would increase, the Proposed Action does not establish new airspace, modify existing boundaries, or change operating procedures; therefore, effects are limited to increased activity within existing managed airspace. Based on the continued use of existing airspace and existing management processes, airspace effects under the Proposed Action would not be significant.

3.3.3 Reasonably Foreseeable Actions and Environmental Trends

Airspace conditions analyzed in this EIS reflect Existing Conditions (2023) and ongoing military training operations, including those previously evaluated under the 2020 ADAIR EA, which are incorporated into the affected environment. The Proposed Action and the No Action Alternative, as analyzed in this EIS, would continue to use existing military training airspace and do not include establishing new airspace, modifying airspace boundaries, or implementing new flight procedures. Reasonably foreseeable airport projects are ground-based and would not alter the existing airspace structure; therefore, airspace conditions are expected to remain consistent with Existing Conditions (2023) for the purposes of this analysis.

3.4 AIR QUALITY

Air quality refers to the concentration of various pollutants in the atmosphere at a given location. Under the Clean Air Act, criteria pollutants include carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide, ozone (O₃), lead, particulate matter less than or equal to 10 microns (PM₁₀) and

particulate matter less than or equal to 2.5 microns (PM_{2.5}). The EPA has established National Ambient Air Quality Standards (NAAQS) for criteria pollutants (40 Code of Federal Regulations [CFR] part 50). The General Conformity Rule (40 CFR part 93, Subpart B) applies to federal actions in nonattainment or maintenance areas when total direct and indirect emissions of a relevant pollutant (or precursors) exceed applicable thresholds.

The Oregon Department of Environmental Quality (DEQ) is the regulatory agency that oversees programs to restore, maintain, and enhance the state’s air quality through implementation of pollution controls (Oregon DEQ 2024a). Oregon DEQ issues permits for air contamination sources classified by air contaminant type, source category, or geographic area under Oregon Revised Statutes 468A.040. The state is divided into three air quality regions: Eastern (18 counties), Western (12 counties), and Northwest (six counties) (Oregon DEQ 2024b).

Hazardous air pollutants are pollutants for which no NAAQS have been established but that are regulated under the Clean Air Act because of their potential adverse effects on human health and the environment. Also known as “air toxics,” hazardous air pollutants include a wide array of organic and inorganic compounds (e.g., formaldehyde, 1-acetaldehyde, benzene, toluene, acrolein, 1,3-butadiene, xylene, lead, naphthalene, propionaldehyde). For aviation-related sources, these emissions may be present in exhaust from aircraft, auxiliary power units, aerospace ground equipment (AGE), and motor vehicle and, to a lesser extent, from boilers, fuel facilities, and other stationary sources (FAA 2024c).

The ROI for criteria pollutants includes LMT/Kingsley Field ANGB located in Klamath County, Oregon, within the Central Oregon Intrastate Air Quality Control Region (40 CFR section 81.219), and, to a limited extent, the military training airspace as described below. The ROI for greenhouse gas (GHG) emissions is global.

3.4.1 Affected Environment

3.4.1.1 Installation

A portion of Klamath County is designated a moderate nonattainment area for the 24-hour PM_{2.5} (2006) NAAQS, and LMT/Kingsley Field ANGB is located within this nonattainment area. Klamath County is in attainment for all other criteria pollutants (EPA 2024a). Because of the PM_{2.5} moderate nonattainment area designation for Klamath County, the General Conformity Rule applies, and a General Conformity Applicability Analysis has been included in this air quality analysis.

Kingsley Field ANGB operates under a Simple Air Contaminant Discharge Permit (ACDP) issued by Oregon DEQ (permit number 18-0097-SI-01) for aircraft engine testing; painting aircraft parts and support equipment; emergency generator use; and operation of aboveground storage tanks (ASTs). In accordance with Oregon Administrative Rule 340-240-0530, *Klamath Falls Nonattainment Area: Requirement for Operation and Maintenance Plans*, the 173 FW has developed an Air Quality Management Plan to maintain compliance with applicable air quality requirements (Oregon ANG 2023a).

Mobile-source emissions are generated by aircraft, vehicles, equipment, and other sources that move or have the potential to move from place to place. Equipment emissions include forklifts, backhoes, tractors, and other onsite construction equipment. AGE used to service aircraft includes

generators, light carts, compressors, bomb lifts, hydraulic test stands, and other portable equipment required for aircraft operations.

The 2022 Stationary Source Air Emissions Inventory (the most recent data available) for Kingsley Field ANGB is summarized in Table 3.4-1. This inventory reflects permitted stationary sources and is provided for affected environment context. Although the Existing Conditions (2023) comparative analysis includes modeled F-15C/D mobile-source emissions that have since ceased, the Existing Conditions (2023) dataset is retained to provide consistent baseline for comparison of the No Action Alternative and Proposed Action. Current-day emissions at the installation are likely lower than the Existing Conditions (2023) levels presented here.

Table 3.4-1 Calendar Year 2022 Stationary Source Air Emissions Inventory for Kingsley Field ANGB (tons per year)

<i>Year</i>	<i>VOCs</i>	<i>NO_x</i>	<i>CO</i>	<i>SO₂</i>	<i>PM₁₀</i>	<i>PM_{2.5}</i>	<i>CO_{2e}</i>
2022	0.11	0.67	0.36	0.04	0.06	0.06	ND

Legend: CO = carbon monoxide; CO_{2e} = carbon dioxide equivalent; ND = no data available in the 2022 report, as CO_{2e} is not required to be reported under the ANG Installation’s permit; NO_x = nitrogen oxides; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; SO₂ = sulfur dioxide; VOCs = volatile organic compounds.

Source: Oregon ANG 2023b.

3.4.1.2 Military Training Airspace

For air quality analysis, the military training airspace affected environment is limited to areas where 173 FW flight operations occur below the average mixing height of 3,000 feet AGL. Aircraft operations at or above this height are not expected to substantially affect ground-level pollutant concentrations or cause local NAAQS violations (FAA 2000).

Low-altitude operations under Existing Conditions (2023) occur in the Juniper Low MOA (covering portions of Crook, Deschutes, Harney, and Lake Counties in Oregon); Juniper East Low MOA (covering a portion of Harney County, Oregon); and the Boardman Low MOA (Morrow and Umatilla Counties in Oregon). The town of Lakeview (Lake County), is a PM₁₀ maintenance area, but lies outside the Juniper Low MOA; Lake County is otherwise in attainment for all other criteria pollutants. Crook, Deschutes, Harney, Morrow, and Umatilla Counties are in attainment for all criteria pollutants.

Unlike regular airfield activity, operations within MOAs are infrequent and sporadic. Annual use of the Juniper Low MOA, between 500 and 11,000 feet AGL, totals up to 90 flight hours, with less than 2 percent of that flight time occurring below 3,000 feet AGL (NGB 2017).

3.4.2 Environmental Consequences

Detailed air emissions calculations, threshold screening, and supporting records are provided in the Air Conformity Applicability Model (ACAM) Report (DAF 2024).

For attainment area criteria pollutants, this analysis applied the EPA General Conformity *de minimis* threshold of 100 tons per year as an initial indicator of the potential local significance. This comparative threshold is used as a screening tool and does not represent a regulatory limit.

Emissions for construction, renovation, demolition, and worker commutes under Existing Conditions (2023), the Proposed Action and the No Action Alternative were estimated using the

ACAM version 5.0.23a. ACAM estimates criteria pollutant and precursor emissions as defined for NAAQS applicability. Aircraft emissions were estimated by operational mode, including taxi/idle (in and out), takeoff, climb out, and approach. Military training airspace operations were excluded because annual flight time below the 3,000-foot AGL mixing height for both F-15C/D and F-35A would not be expected to generate emissions sufficient to cause a significant effect. Detailed assumptions and results are provided in the *ACAM Report* (DAF 2024).

To minimize air quality effects, both the Proposed Action and No Action Alternative would implement standard best management practices (BMPs), where feasible. Examples include minimizing trips, maintaining engine performance, using electric tools where practicable, carpooling, optimizing trip routes, and strategically locating staging areas to reduce travel distances.

3.4.2.1 No Action Alternative

Emission estimates for the No Action Alternative were developed in ACAM (version 5.0.23a) using modeled F-15C/D operations (two Pratt and Whitney F100-PW-220 engines), base-specific operational inputs (landings/takeoffs, closed patterns, and engine testing), and associated support activities. Although F-15C/D aircraft have since been divested, the No Action Alternative retains modeled F-15C/D operations as the analytical reference scenario for comparison to the Proposed Action (DAF 2024).

The No Action Alternative emissions associated with the modeled 9,600 annual F-15C/D operations at Kingsley Field ANGB are presented in Table 3.4-2. Other modeled aircraft activities and non-aircraft sources are assumed to remain consistent with Existing Conditions (2023) for comparative purposes. Additional emissions associated with aircraft operations include AGE and engine testing.

**Table 3.4-2 No Action Alternative Annual Airfield Emissions Estimates for the 173 FW
(tons per year)**

<i>Activity</i>	<i>VOCs</i>	<i>NO_x</i>	<i>CO</i>	<i>SO₂</i>	<i>PM₁₀</i>	<i>PM_{2.5}</i>	<i>CO_{2e} (mtons)</i>
Existing Conditions (2023) F-15C/D Aircraft Operations	46.70	64.34	182.66	8.11	8.69	4.44	22,100
No Action Alternative F-15C/D Aircraft Operations (29% operational decrease)	33.27	45.91	130.07	5.78	3.52	3.17	15,754
Total Decrease in Tons	-13.43	-18.43	-52.59	-2.33	-5.17	-1.27	-6,346

Note: Values reflect the Existing Conditions (2023) data used for analysis and are not intended to describe current-day 173 FW fighter operations.

Legend: % = percent; 173 FW = 173d Fighter Wing; CO = carbon monoxide; CO_{2e} = carbon dioxide equivalent; mtons = metric tons; NO_x = nitrogen oxides; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; SO₂ = sulfur dioxide; VOC = volatile organic compound.

Under the No Action Alternative, modeled 173 FW airfield operations decrease by approximately 29 percent relative to the Existing Conditions (2023), and operational emissions decrease for all criteria pollutants and carbon dioxide equivalent (CO_{2e}) (see Table 3.4-2). For comparison with construction activity, a modeled ramp-down profile (approximately 6 percent annual reduction beginning in 2024) was used to evaluate year-by-year emissions. This analytical ramp-down does not reflect the actual accelerated divestment timeline (which actually occurred in the late

2024/early 2025 timeframe, but it provides a consistent and conservative framework for comparative threshold screening.

Total annual emissions for construction and modeled No Action F-15C/D airfield operations are presented in the *ACAM Report* (DAF 2024). No construction projects with a ground disturbance footprint are planned to begin before 2026, and no projects are planned to begin after 2040. Based on the ACAM calculations, combined construction and modeled F-15C/D operational emissions associated with the No Action Alternative would not exceed the *de minimis* threshold of 100 tons per year for PM_{2.5} and its precursors (volatile organic compounds [VOCs], nitrogen oxides [NO_x], and SO₂) or the 100 tons per year comparative threshold for CO and PM₁₀. Because PM_{2.5} and its precursors do not exceed applicable thresholds, General Conformity does not apply to these activities. The change in criteria pollutant emissions under the No Action Alternative would not have a significant effect on air quality, as detailed in the Record of Conformity Applicability and Record of Air Analysis in the *ACAM Report* (DAF 2024).

3.4.2.2 Proposed Action Alternative

Construction projects to support the F-35A beddown would occur between 2026 and 2040, with all critical infrastructure anticipated to be completed prior to aircraft arrival. Any new stationary sources (e.g., emergency generators, boilers, industrial process equipment) would be subject to applicable new source review and permitting requirements under the ACDP. Any new or modified stationary sources required under the Proposed Action would undergo permit technical review to determine whether the existing permit must be updated. If emissions from new sources increase annual totals beyond the Simple ACDP thresholds, a Standard ACDP could be required.

Airfield operations under the Proposed Action are modeled to increase relative to the No Action Alternative (which reflects a 29 percent reduction from Existing Conditions [2023]). The net change in operational emissions at Kingsley Field ANGB is presented in Table 3.4-3 and assume that 100 percent of the F-35A aircraft would be on-site and operational in 2029. The net change reflects differences in engine type, annual operations, commuter emissions associated with additional personnel assigned to support the F-35A mission. As shown in Table 3.4-3, operational emissions would decrease for VOCs, CO, SO₂, and increase for NO_x, PM₁₀, PM_{2.5}, and CO_{2e}.

**Table 3.4-3 Proposed Action Annual Airfield Emissions Estimates for the 173 FW
(tons per year)**

<i>Activity</i>	<i>VOCs</i>	<i>NO_x</i>	<i>CO</i>	<i>SO₂</i>	<i>PM₁₀</i>	<i>PM_{2.5}</i>	<i>CO_{2e}</i>
F-15C/D No Action Airfield Operations	33.27	45.91	130.07	5.78	3.52	3.17	15,754
F-35A Aircraft Operations Added	0.09	60.61	35.90	5.45	7.86	7.07	16,372
F-35A Additional Commuter Emissions	0.04	0.02	0.55	0.00	0.00	0.00	62
Total for F-35 Addition	0.13	60.64	36.45	5.45	7.86	7.07	16,434
Net Change in Airfield Emissions – F-35A	-33.14	14.72	-93.62	-0.33	4.34	3.90	680
<i>De Minimis</i> Thresholds	100	100	NA	100	NA	100	NA
Comparative Thresholds	NA	NA	100	NA	100	NA	NA
Exceed Thresholds?	No	No	No	No	No	No	NA

Legend: 173 FW = 173d Fighter Wing; CO = carbon monoxide; CO_{2e} = carbon dioxide equivalent; NA = Not Applicable; NO_x = nitrogen oxides; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; SO₂ = sulfur dioxide; VOC = volatile organic compound.

The total annual emissions for both construction and F-35A operations are presented in the *ACAM Report* (DAF 2024). Emissions were evaluated against the applicable *de minimis* and comparative

screening thresholds. For 2027 and 2028, the analysis assumes 50 percent of the F-35A fleet is operational, with a corresponding 50 percent reduction in modeled F-15C/D operations for comparison. This approach provides a conservative estimate because F-15C/D operations have already ceased and the modeled F-15C/D activity is retained only for comparative analysis.

Based on these calculations, combined construction and Proposed Action operational emissions would not exceed the *de minimis* threshold for PM_{2.5} and its precursors (VOCs, NO_x, and SO₂) or the comparative threshold for CO and PM₁₀ for any year analyzed. Therefore, General Conformity does not apply, and the net change in criteria pollutant emissions associated with the Proposed Action would not have a significant effect on air quality. A Record of Conformity Applicability for PM_{2.5} and its precursor (VOCs, NO_x, and SO₂) and a Record of Air Analysis for the remaining criteria pollutants are provided in the *ACAM Report* (DAF 2024).

3.4.3 Reasonably Foreseeable Actions and Environmental Trends

The reasonably foreseeable actions identified in Table 3.1-2 could generate temporary, localized construction emissions (e.g., equipment exhaust and fugitive dust). Where these activities could overlap with construction under the Proposed Action and No Action Alternative, emissions were evaluated using applicable *de minimis* or comparative screening thresholds. Projected emissions remain below screening thresholds and are not expected to result in short- or long-term degradation of regional air quality in the ROI. Accordingly, air quality effects associated with these reasonably foreseeable actions would not be significant.

3.4.3.1 Greenhouse Gases (GHGs)

For GHG emissions, the ROI is global. Both the Proposed Action and No Action Alternative would contribute to GHG emissions from fossil fuel combustion. Emissions were estimated based on modeled airfield emissions and anticipated annual training activity. Results are summarized in Tables 3.4-4 through 3.4-6, with detailed calculations provided in the *ACAM Report* (DAF 2024).

Table 3.4-4 GHG Emissions Estimates for No Action Alternative Compared to Existing Conditions (2023) (tons per year)

<i>Activity</i>	<i>CO₂e (mtons)</i>
F-15C/D Existing Conditions (2023) Sorties	73,500
Airfield Totals	22,100
Annual GHG total	95,600
50-year lifecycle emissions of F-15C/D Existing	4,780,000
F-15C/D No Action Sorties	52,194
Airfield Totals	15,754
Annual GHG total	67,948
Total 50-year emissions F-15C/D No Action	3,397,400
Annual GHG net change	-27,652
50-year net change lifecycle emissions	-1,382,600

Note: ¹F-15C/D operations under the No Action Alternative are reduced relative to Existing Conditions (2023). “No Action” values reflect the planning scenario used for comparison and are not intended to represent current-day operations.

Legend: CO₂e = carbon dioxide equivalent; GHG = greenhouse gas; mtons = metric tons.

**Table 3.4-5 GHG Emissions Estimates for Proposed Action
Compared to the No Action Alternative (tons per year)**

<i>Activity</i>	<i>CO₂e (mtons)</i>
F-15C/D No Action Sorties	52,194
Airfield Totals	15,754
Annual GHG total	67,948
50-year lifecycle emissions of F-15C/D Existing	3,397,400
F-35A Sorties	140,564
Airfield Totals	16,372
Annual GHG total	156,936
Total 50-year emissions F-35A	7,846,800
Annual GHG net change	88,988
50-year net change lifecycle emissions	4,449,400

Note: “No Action” values reflect the modeled No Action scenario used for comparison and are not intended to represent current-day operations.

Legend: CO₂e = carbon dioxide equivalent; GHG = greenhouse gas; mtons = metric tons.

**Table 3.4-6 GHG Emissions Estimates for Proposed Action
Compared to Existing Conditions (2023) (tons per year)**

<i>Activity</i>	<i>CO₂e (mtons)</i>
F-15C/D Existing Conditions (2023) Sorties	73,500
Airfield Totals	22,100
Annual GHG total	95,600
50-year lifecycle emissions of F-15C/D Existing	4,780,000
F-35A Sorties	140,564
Airfield Totals	16,372
Annual GHG total	156,936
Total 50-year emissions F-35A	7,846,800
Annual GHG net change	61,339
50-year net change lifecycle emissions	3,066,950

Note: Existing Conditions (2023) data provides a consistent basis for calculating the 50-year lifecycle net change. They are not intended to describe current-day 173 FW fighter operations.

Legend: CO₂e = carbon dioxide equivalent; GHG = greenhouse gas; mtons = metric tons.

Operational energy (aviation fuel and energy to power aircraft) comprises more than 80 percent of DAF energy use. For analytical purposes, lifecycle emissions for the Proposed Action assume a constant level of annual operations over the 50-year analysis period (2029 to 2079) based on the planning assumptions used in this EIS; actual future operations may vary.

Reducing fuel use presents the most substantial opportunity to improve operational efficiency while reducing GHG emissions. Potential measures include aerodynamic improvements, streamlined flight planning, drag reduction technologies, enhanced engine sustainment practices, use of electric AGE where practicable, and increased use of simulation and augmented reality systems. Facility and infrastructure measures may also incorporate heat mitigation strategies, such as cool surfaces and pavements, shading (trees or built structures), and climate-responsive building orientation to improve ventilation, reduce solar heat gain, and decrease energy usage.

3.5 SOCIOECONOMICS/PROTECTION OF CHILDREN AND ELDERLY

3.5.1 Affected Environment

3.5.1.1 Socioeconomics

Socioeconomics encompasses the attributes and resources of the human environment, including community infrastructure and economic activity. Socioeconomic effects may be considered significant if the Proposed Action directly or indirectly alters patterns of land use, population density, or growth rate in the ROI. For this analysis, the ROI is defined as Klamath County, Oregon, which includes primary access points and built infrastructure influencing where Kingsley Field personnel live, spend earnings, and contribute to tax revenues.

3.5.1.2 Population

In 2022, Klamath County had a total population of 70,200 people, which is forecast to increase by about 1,500 people by 2040 (Table 3.5-1). Klamath County is predicted to have slower population growth (3 percent) than the state of Oregon (5.5 percent) during the 25-year period of 2022–2047 (Cellarius et al. 2022). Predictions are that this growth will be concentrated in urban areas, with the Klamath Falls Urban Growth Boundary growing at approximately 1.5 times the rate of the county overall (Cellarius et al. 2022).

Table 3.5-1 Population in the ROI

<i>Area</i>	<i>2010</i>	<i>2020</i>	<i>Percent Change</i>	<i>2022</i>	<i>2040 (estimated)</i>
United States	308,745,538	331,449,281	7.4	331,097,593	373,500,000
Oregon	3,831,074	4,237,256	10.6	4,229,374	4,700,000
Klamath County	66,380	69,413	4.6	70,212	71,600
Klamath Falls Urban Growth Boundary	42,771	44,349	3.7	45,585	47,000

Legend: ROI = region of influence.

Sources: Cellarius et al. 2022; USCB 2021, 2023a, 2024a; Vespa et al. 2020.

Employment and Earnings

Table 3.5-2 shows employment and income data for the ROI as reported for April 2024.

Table 3.5-2 Employment and Income in the ROI

<i>Area</i>	<i>Civilian Labor Force</i>	<i>Unemployment Rate (percent) April 2024</i>	<i>Number of Households 2017–2022</i>	<i>Persons per Household 2017–2022</i>	<i>Median Household Income 2017–2022</i>
United States	266,801,000	4.1	125,136,353	2.65	\$75,149
Oregon	2,157,280	4.2	1,680,800	2.52	\$76,632
Klamath County	29,952	5.4	28,166	2.49	\$57,219

Legend: ROI = region of influence.

Sources: Bureau of Labor Statistics 2024; State of Oregon 2024; USCB 2024b, 2024c.

The number of persons per household in Klamath County and Oregon is about 2.5; slightly lower than the U.S. of 2.65 persons per household (Table 3.5-2) (U.S. Census Bureau [USCB] 2024a). Median household income for workers in Klamath County in 2023 was about \$57,200; which is approximately 25 percent lower than state and national levels.

According to the Klamath County Economic Development Office, Kingsley Field ANGB is a “foundation” of the Klamath County economy, contributing more than \$100 million annually (Klamath County 2019). In FY 2021 (October 1, 2021 to September 30, 2022), 1,144 people were employed at Kingsley Field ANGB (173 FW n.d.). Consistent with the Chapter 3 analytical approach, these figures are provided to characterize the Existing Conditions (2023) used for comparative analysis; they are not intended to represent current-day 173 FW fighter operations. With a total annual payroll of almost \$75 million, the estimated average annual income for these employees amounted to more than \$66,000 (15 percent higher than the county median household income). Construction and maintenance spending at Kingsley Field ANGB was about \$28 million and supported an additional 130 jobs (Klamath County 2019).

Housing

Between 2017–2022, Klamath County had about 34,000 housing units and a total vacancy rate of about 14 percent, as shown in Table 3.5-3 (USCB 2024d). However, the rental vacancy rate in Klamath County (about 2 percent), is approximately half that of Oregon (3.7 percent). The median value of owner-occupied housing units in Klamath County was about \$234,000, which is approximately half the median value of homes in Oregon overall. Klamath County also had gross rent values about two-thirds of those of the state of Oregon (\$920 per month compared to \$1,400 per month) (USCB 2024d).

Table 3.5-3 Housing in the ROI (2017–2022)

<i>Area</i>	<i>Total Housing Units</i>	<i>Total Vacancy Rate (percent)</i>	<i>Rental Vacancy Rate (percent)</i>	<i>Median Value of Owner-Occupied Housing Units</i>	<i>Median Monthly Gross Rent</i>
United States	140,943,613	11	5.5	\$281,900	\$1,268
Oregon	1,818,599	8	3.7	\$423,100	\$1,373
Klamath County	33,864	14	2.0	\$234,200	\$921

Legend: ROI = region of influence.

Source: USCB 2024d.

A recent Housing Needs Assessment for Klamath County reports that more than 800 housing units are needed over the next 20 years to meet anticipated housing needs, with half of those units going to households earning less than 50 percent of median family income in Klamath County (Cellarius et al. 2022).

Economic Characteristics

One of the major factors cited by Klamath County leaders that would enhance economic development in the ROI would be to re-establish commercial air service to LMT (Klamath County 2019). In 2017, Peninsula Airway, Inc. stopped service to Klamath Falls making Rogue Valley International-Medford Airport located 70 miles from Klamath Falls the closest commercial airport. While it is unlikely that commercial service will return to Klamath Falls in the near term, Kingsley Field is recognized as an important asset driving economic growth.

The travel industry is one of the top three export-oriented industries in rural Oregon counties such as Klamath (Klamath County 2019). Since 2020, the leisure and hospitality sector is one of the growth employment sectors in Klamath County (State of Oregon 2024). Klamath Falls is considered to be a gateway community for Crater Lake National Park. Regional tourism is driven

by visitation to Crater Lake National Park, which was down to about one-half million people annually after the pandemic (National Park Service [NPS] 2024a).

3.5.1.3 Protection of Children and Elderly

Executive Order (EO) 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (1997), directs federal agencies to “identify and assess environmental health risks and safety risks that may disproportionately affect children,” and to “ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” Children are defined as individuals under 18 years of age, and the elderly are defined as individuals 65 years and older.

Due to their physiological and behavioral traits, children may be more susceptible and vulnerable to environmental health and safety risks than adults. Areas where children spend significant time or gather in concentrated numbers are considered areas of potential increased risk.

The ROI for the potential effects to children and the elderly includes census block groups affected by noise generated at the airfield. Demographic data for communities under military training airspace were not assessed, as changes in noise levels are not expected to significantly impact these areas.

Table 3.5-4 displays the total population and demographic data in the U.S., the state of Oregon, and in Klamath County (the ROI).

Table 3.5-4 Total Population and Demographic Data in the ROI

<i>Geographic Area</i>	<i>Total Population</i>	<i>Children Under 18</i>	<i>Percent Children Under 18</i>	<i>Elderly</i>	<i>Percent Elderly</i>
United States	331,097,593	73,213,705	22.1	54,737,648	16.5
Oregon	4,229,374	855,978	20.2	773,258	18.3
Klamath County	69,506	15,116	21.7	14,909	21.4

Legend: ROI = region of influence.
Source: USCB 2023b.

Table 3.5-5 displays the same information for populations affected by the Existing Conditions (2023) noise contours associated with the F-15C/D aircraft and the planning horizon for alternatives comparison. As shown, the percentage of the population within the DNL 65 dB noise contours that are children under the age of 18 or elderly is higher than the U.S. average and the state of Oregon.

Table 3.5-5 Total Existing Conditions (2023) Population and Demographic Data for Areas Affected by Noise Greater than DNL 65 dB

<i>Noise Contour</i>	<i>Affected Population</i>	<i>Children Under 18</i>	<i>Percent Children Under 18</i>	<i>Elderly</i>	<i>Percent Elderly</i>
65–70	1,851	516	27.9	371	20.0
70–75	834	235	28.2	176	21.1
75–80	262	74	28.2	56	21.4
80–85	0	0	0	0	0
85+	0	0	0	0	0
Total	2,947	825	28.0	603	20.5

Note: Existing Conditions (2023) data used for analysis is not intended to represent current-day 173 FW fighter operations.

Legend: dB = decibel; DNL = Day-Night Average Sound Level.

Sources: USCB 2022a, 2022b, 2023c.

Residential areas are locations where children live and would spend a large amount of their time. Schools and childcare facilities are identified as locations where children are likely to be present in concentrated numbers and may be vulnerable to effects. Similarly elderly populations are likely to be present in concentrated numbers in residential areas, elder care, and medical facilities.

3.5.2 Environmental Consequences

Socioeconomics are evaluated in the context and intensity of the Proposed Action and No Action Alternative, focusing on population and employment trends and associated demands on housing, infrastructure, and public services to the extent they inform the environmental analysis.

3.5.2.1 No Action Alternative

Socioeconomics

Under the No Action Alternative, F-35A aircraft would not be based at Kingsley Field ANGB, and associated training and construction activities would not occur. Construction and repair projects necessary to support ongoing base operations would be implemented. The No Action Alternative is retained as the modeled “not implementing the Proposed Action” scenario for comparison purposes. As discussed in Section 2.2, airfield operations were already expected to decline due to aging F-15C/D aircraft, reducing annual operations and maintenance spending over time.

These reductions could result in slight declines in employment, annual spending, and capital investment, which could slow growth in population, employment, or earnings within the ROI. These effects would be adverse but would not be expected to be significant in the near term based on the scale of the projected changes.

Protection of Children and Elderly

Under the modeled No Action Alternative, reduced 173 FW fighter operations would decrease noise exposure relative to Existing Conditions (2023), as described in Section 3.2.2. Consequently, both the acreage and number of people within the DNL 65 dB noise contour would decrease (Table 3.5-6), including approximately 599 fewer people overall, 167 fewer children under 18, and 117 fewer elderly persons. While fewer individuals would be exposed to high noise levels, the proportion of children under 18 within the contour would remain higher than in Klamath County

as a whole, meaning children would continue to be disproportionately affected by noise. The proportion of elderly residents would be lower than the county average; therefore, no disproportionate impact to the elderly population is anticipated.

Table 3.5-6 Total No Action Population and Demographic Data for Areas Affected by Noise Greater than DNL 65 dB

<i>Noise Contour</i>	<i>Affected Population</i>	<i>Children Under 18</i>	<i>Percent Children Under 18</i>	<i>Elderly</i>	<i>Percent Elderly</i>
65–70	1,459	407	27.9	296	20.3
70–75	744	210	28.2	158	21.2
75–80	145	41	28.3	31	21.4
80–85	0	0	0	0	0
85+	0	0	0	0	0
Total	2,348	658	28.0	485	20.7

Note: “No Action” values reflect the No Action scenario used for comparison (based on the Existing Conditions [2023] dataset) and are not intended to represent current-day 173 FW fighter operations.

Legend: dB = decibel; DNL = Day-Night Average Sound Level.

Sources: USCB 2022a, 2022b, 2023c.

3.5.2.2 Proposed Action Alternative

Socioeconomics

The socioeconomic effects of the Proposed Action are based on proposed personnel changes, spending patterns, and one-time capital investments for construction at LMT/Kingsley Field ANGB. Approximately 30 contract personnel would be added to support security, system administration, training, and simulator operations, representing a 2.7 percent increase relative to Existing Conditions (2023). This discussion focuses on the incremental change associated with the Proposed Action and does not rely on current-day fighter operations at Kingsley Field ANGB.

Military airfield operations would increase by 29 percent, with a proportional increase in annual operations and maintenance spending—estimated at \$10 million to \$15 million—supporting approximately 30 to 40 additional indirect jobs in the ROI (Klamath County 2019). Between 2026 and 2040, total capital investment is projected at approximately \$300 million, with most expenditures occurring from 2026 through 2035.

Direct socioeconomic effects would not be significant, as the personnel increase falls within the expected population growth. Induced effects from sales and property taxes paid by base employees and contractors would likely offset infrastructure and service costs associated with a larger population. The addition of 30 higher-paying contract positions would not be expected to strain the local housing market, as vacancy rates are sufficient to accommodate the increase in housing demand (see also Table 3.5-3). Klamath County economic development specialists have identified the F-35A beddown as a desirable source of high-tech growth (Klamath County 2019).

Indirect socioeconomic effects from increased maintenance spending and capital investment would be beneficial to the ROI by supporting additional jobs in the local economy.

Protection of Children and Elderly

Under the Proposed Action, a total projected population of 4,629 would experience noise levels greater than DNL 65 dB as shown in Table 3.5-7. Consistent with the methodology described in

Section 3.2, *Noise*, population and demographic estimates are derived from census block-group data scaled by the portion of each block group within the modeled DNL contour bands, assuming uniform distribution.

For the DNL 80 dB and greater contour bands, the block-group scaling method can overstate residential exposure where development is sparse. Therefore, the DNL 80 dB and greater area was reviewed manually using aerial imagery. This review confirmed that the area contains a single residence. Accordingly, the affected population for DNL 80 dB and greater is 3 people, rather than the 210 persons that would be estimated using block-group scaling, and the percentages of children and elderly were adjusted to reflect the verified residential occupancy. Additional information on effects associated with DNL 80 dB is provided in Section 3.2.2.2.

The percentage of this affected population that are children under the age of 18 or elderly is also shown in Table 3.5-7. Children under 18 and the elderly are mutually exclusive age categories; however, these demographic categories may overlap with other population characteristics not evaluated here.

Table 3.5-7 Total Proposed Action Population, Children, and Elderly Populations Affected by Noise Greater than DNL 65 dB

<i>Noise Contour</i>	<i>Affected Population</i>	<i>Children Under 18</i>	<i>Percent Children Under 18</i>	<i>Elderly</i>	<i>Percent Elderly</i>
65–70	2,953	823	27.9	571	19.3
70–75	1,030	286	27.8	208	20.2
75–80	643	182	28.3	137	21.3
80–85	3	0	0	0	0
85+	0	0	0	0	0
Total	4,629	1,291	27.8	916	19.8

Note: ¹The DNL 80–85 dB contour area was reviewed using aerial imagery to verify residential occupancy. The census block-group scaling method can overestimate population in sparsely developed areas; therefore, the affected population for the DNL 80–85 dB band reflects the single verified residence (3 persons).

Legend: dB = decibel; DNL = Day-Night Average Sound Level.

Sources: USCB 2022a, 2022b, 2023c.

As shown in Table 3.5-8, the percentage of children under age of 18 within the DNL 65 dB and greater noise contour area under the Proposed Action (27.8 percent) is higher than the percentage within Klamath County, which is the reference community; however, this percentage is slightly lower than under Existing Conditions (2023) and the No Action Alternative due to the demographic characteristics of the population located within the contour area. Therefore, Existing Conditions (2023), the No Action Alternative, and the Proposed Action all have disproportionate effects from noise on children under age of 18. The percentage of elderly persons within the DNL 65 dB and greater contour is lower than in the reference community (Klamath County) under Existing Conditions (2023), the No Action Alternative, and the Proposed Action; therefore, no disproportionate impact to the elderly population is anticipated.

Table 3.5-8 Portion of Klamath County Population Experiencing Noise Levels Greater than DNL 65 dB

<i>Geographic Area</i>	<i>Total Population</i>	<i>Percent Children</i>	<i>Percent Elderly</i>
Klamath County	69,506	21.7	21.4
Existing Conditions (2023) Population with noise > DNL 65 dBA	2,947	28.0	20.5
No Action Population with noise > DNL 65 dBA	2,348	28.0	20.7
Proposed Action Population with noise > DNL 65 dBA	4,629	27.8	19.8
Difference Between Proposed Action and No Action Alternative	2,281	-0.2	-0.9

Note: “Population with noise > DNL 65 dBA” values are derived by overlaying modeled DNL \geq 65 dB contours with census block-group demographic data (see Section 3.2 and Tables 3.5-5 through 3.5-7). “Difference Between Proposed Action and No Action Alternative” is calculated as Proposed Action minus No Action. Percent Children and Percent Elderly differences are percentage-point changes (not percent change).

Legend: > = greater than; dB = decibel; dBA = A-weighted decibel; DNL = Day-Night Average Sound Level.

Source: USCB 2024b.

3.5.3 Reasonably Foreseeable Actions and Environmental Trends

3.5.3.1 Socioeconomics

Socioeconomic conditions in Klamath County are influenced by population and economic trends and by reasonably foreseeable local development (Table 3.1-2). As shown in Table 3.5-1, population forecasts indicate Klamath County would increase by approximately 1,500 residents by 2040. Economic growth, as measured by county gross domestic product, was slower than national growth in 2022 (Klamath County 2024). As a rural county, economic growth is constrained by limited infrastructure, particularly broadband connectivity, and limited sources of capital. Local productivity (output per worker) increased approximately 3 percent from 2019 to 2022, which is lower than the national rate but higher than the typical Oregon county (Klamath County 2024).

The Proposed Action and the reasonably foreseeable airport improvement projects identified in Table 3.1-2 are consistent with Klamath County’s economic development objectives, including targeted growth in aviation-related services and other sectors. If implemented, these actions would support near-term employment and capital spending, and the overall socioeconomic effect would be beneficial. Under the No Action Alternative, the county would be expected to continue along the population and economic trends described above, with fewer action-related employment and spending benefits.

3.5.3.2 Protection of Children and Elderly

The reasonably foreseeable actions identified in Table 3.1-2 are not expected to result in disproportionate effects on children (under 18) or the elderly, as these actions consist primarily of airport facility and pavement improvements with short-term, localized construction activity. Disproportionate effects determinations for children and the elderly are therefore driven by the analysis of the Proposed Action and the No Action Alternative. Accordingly, the reasonably foreseeable actions are not expected to introduce or drive disproportionate effects on children;

disproportionate exposure patterns, where present, are driven by modeled operational noise under the Proposed Action and No Action Alternative. As described in Section 3.5.2.1 and Section 3.5.2.2, children within the DNL 65 dB contour remain a higher proportion than the Klamath County reference community under each alternative; therefore, operational noise would continue to disproportionately affect children relative to the reference community. No disproportionate overall effect on the elderly community is anticipated.

3.6 LAND USE/NOISE COMPATIBLE LAND USE

3.6.1 Affected Environment

The ROI for land use includes LMT/Kingsley Field ANGB, and adjacent areas. LMT/Kingsley Field ANGB lies 5 miles south of Klamath Falls in south central Oregon (see Figure 1.1-1). The 254-acre base is leased by the federal government from the City of Klamath Falls for exclusive military use and licensed to the State of Oregon for Oregon ANG operations. It occupies the western portion of LMT and the 173 FW uses the civil airfield for military aircraft training (see Figure 1.1-2).

The City of Klamath Falls LMT Master Plan Update (City of Klamath Falls 2021) includes a comprehensive plan and goals for long-term airport development, anticipated land use, and an airport layout map. Additionally, the City of Klamath Falls Urban Area Comprehensive Plan (City of Klamath Falls 2022) provides a guide for land use decision-making and incorporates relevant goals, objectives, and implementation measures. These relevant land use plans also identify zoning and other land use planning restrictions or planned lease/development at, adjacent, or near LMT. The land development code specifies permitting requirements, subdivisions, rezoning, and development standards, including permitted and conditional uses for zones surrounding LMT. Surrounding areas are primarily agricultural to the west, south, and east, with industrial, commercial, and residential uses to the north and northeast. The “unknown” land use designation includes water resources, public roadways, and other areas not assigned a specific category. Non-Resource lands are those not zoned for agricultural or forest.

Noise sensitive land uses typically include residential uses, public service facilities, and cultural or recreation spaces such as parks and open space. Ambient noise levels surrounding LMT/Kingsley Field ANGB are characteristic of airport environments, with sources including aircraft, roads, commercial activity, and residential areas. Due to the accelerated divestment of the 173 FW F-15C/D fleet, current ambient noise levels are temporarily lower than Existing Conditions (2023) levels described below.

Under the Existing Conditions (2023), aircraft noise from LMT affected approximately 2,789 acres of agricultural, industrial, commercial, public, unknown, and residential land adjacent to LMT at noise levels between DNL 65 dB and DNL 85 dB. While this acreage reflects the 2023 operational profile used for consistent modeling, it does not represent current-day noise exposure, which has decreased following the cessation of regular 173 FW F-15C/D flying operations. Section 3.2, *Noise*, describes existing noise at POIs, including schools and churches, within these contours. Noise contours extend primarily northwest and southeast of the airport. North of the airport, DNL 65 dB and higher contours overlap residential, commercial, and industrial uses; to the west, east and south, they overlap agricultural uses.

At and around commercial and military airfields, specific siting criteria address development density and safety. Accident Potential Zones (APZs) and Runway Protection Zones (RPZs) are used to reduce aircraft-related hazards. FAA Advisory Circular 150/5300-13B, *Airport Design*, Section 1.5.82 defines an RPZ as an area at ground level before a runway threshold or beyond a runway end to protect people and property. Runway 08/26 RPZs extend beyond airport property over farmland. The southeastern RPZ for Runway 14/32 extends over farmland, while the northern RPZ overlaps commercial and industrial uses.

A designated military munitions storage area (MSA) is present near the northeastern portion of ANG-leased property for the storage of hazardous materials including ordnance and explosives. The 173 FW has identified a quantity-distance (QD) arc to identify the area in which there is a potential safety risk associated with the unlikely explosion of stored munitions. The QD arc extends to an area within a 1,250-foot radius of the MSA and encompasses approximately 27 acres of agricultural area east of LMT and west of the railroad track. The City of Klamath Falls and LMT lease agreement with the Oregon ANG prohibits any construction within the QD arc located on off-base property (City of Klamath Falls 2021).

3.6.2 Environmental Consequences

The land use analysis evaluates the compatibility of the Proposed Action and No Action Alternative against Existing Conditions (2023). Because regular 173 FW F-15C/D flight operations have already ceased, the community is currently experiencing a temporary reduction in noise-incompatible land use acreage. Using the Existing Conditions (2023) ensures a conservative comparison by measuring the F-35A mission against the most recent fully operational F-15C/D profile rather than the current temporary period of reduced activity.

3.6.2.1 No Action Alternative

Under the No Action Alternative, modeled 173 FW F-15C/D operations decrease from the Existing Conditions (2023) to approximately 2,400 annual sorties (9,600 annual operations), a 29 percent reduction (DAF 2026). Contract ADAIR aircraft, military transients, and other agency transients are assumed to remain consistent with Existing Conditions (2023). Civil aircraft operations at LMT are projected to total 26,102 annual operations (approximately an 8 percent increase from Existing Conditions [2023]) (DAF 2026). Overall, total airfield operations under the No Action Alternative would decrease by approximately 4.7 percent relative to Existing Conditions (2023) (DAF 2026).

Because the No Action Alternative is the analytical scenario for comparison if the Proposed Action is not implemented, the land use analysis focuses on changes in modeled noise exposure and land use compatibility relative to Existing Conditions (2023), rather than current-day operational status (during the temporary period in which regular 173 FW flying operations have ceased). Effects on land use under the No Action Alternative would not be significant.

3.6.2.2 Proposed Action Alternative

This section evaluates the extent to which the beddown of the F-35A at Kingsley Field ANGB aligns with state, regional, and local conservation and development plans and zoning regulations. Local land use categories were consolidated or renamed for consistency. Table 3.6-1 cross-references county classifications and those used in this analysis.

Table 3.6-1 Land Use Categories

<i>Klamath County Land Use Classification</i>	<i>Land Use Classification</i>
General Commercial	Commercial
Rural Community Commercial	Commercial
Neighborhood Commercial	Commercial
Transportation Commercial	Commercial
Exclusive Farm Use	Agriculture
Exclusive Farm Use - Cropland	Agriculture
Industrial	Industrial
Heavy/Light Industrial	Industrial
Rural Community Industrial	Industrial
Non-Resource	Non-Resource
Public Facility	Public
Planned Unit Development	Public
Rural Residential	Residential
High Density Residential	Residential
Low Density Residential	Residential
Apartment Residential	Residential
Medium Density Residential	Residential
Suburban Residential	Residential
Single Family Residential	Residential
Not classified	Unknown

Note: The “not classified/unknown” land use designation includes water resources and public roadways, in addition to miscellaneous areas of land within the study area that the County of Klamath has not designated as a specific land use category.

Source: Klamath County 2020.

Construction Effects

The areas immediately surrounding LMT/Kingsley Field ANGB are primarily agricultural and industrial and would not be affected by proposed construction, renovations, or demolitions, as all work would occur within base boundaries. Construction would be short term and intermittent, with potential minor traffic and noise disruptions for local businesses and base personnel. Construction activities would occur during standard business hours (7 a.m. to 5 p.m. [0700 to 1700], Monday through Friday) and would temporarily affect operations. Upon completion, the improvements would enhance efficiency and security for the 173 FW. All facilities would be sited and designed to remain compatible with existing land uses and safety guidelines.

Operational Effects

With the F-35A, total annual operations at LMT would increase by approximately 29 percent compared to the No Action Alternative (from 39,100 to 50,280). The land use analysis compares the modeled noise contours of the Proposed Action to the No Action Alternative to assess changes in noise exposure and land use compatibility (Table 3.6-2).

Table 3.6-2 Land Use Affected (Acres) by Noise Levels DNL 65 dB and Greater: Existing Conditions (2023), No Action Alternative, Proposed Action

<i>Land Use Category</i>	<i>Existing Conditions (2023) DNL 65–70 dB (acres)</i>	<i>No Action DNL 65–70 dB (acres)</i>	<i>Change in Acres from Existing Conditions (2023)/ No Action 65–70 dB</i>	<i>Proposed DNL 65–70 dB (acres)</i>	<i>Change in Acres from Proposed/ Existing Conditions (2023) 65–70 dB</i>	<i>Change in Acres from Proposed/ No Action 65–70 dB</i>
Residential	341	306	-35	341	0	35
Commercial	51	32	-19	106	55	74
Industrial	251	180	-71	389	138	209
Agricultural	1,085	851	-234	1,595	510	744
Unknown ¹	217	186	-31	332	115	146
Public	5	4	-1	23	18	19
Total	1,950	1,558	-391	2,787	836	1,227
<i>Land Use Category</i>	<i>Existing Conditions (2023) DNL 70–75 dB (acres)</i>	<i>No Action DNL 70–75 dB (acres)</i>	<i>Change in Acres from Existing Conditions (2023)/ No Action 70–75 dB</i>	<i>Proposed DNL 70–75 dB (acres)</i>	<i>Change in Acres from Proposed/ Existing Conditions (2023) 70–75 dB</i>	<i>Change in Acres from Proposed/ No Action 70–75 dB</i>
Residential	145	110	-35	250	105	140
Commercial	9	10	+1	15	6	5
Industrial	49	28	-21	105	56	77
Agricultural	366	292	-74	663	197	371
Unknown ¹	108	87	-21	155	47	68
Public	2	3	+1	3	1	0
Total	679	529	-149	1,192	412	661
<i>Land Use Category</i>	<i>Existing Conditions (2023) DNL 75–80 dB (acres)</i>	<i>No Action DNL 75–80 dB (acres)</i>	<i>Change in Acres from Existing Conditions (2023)/ No Action 70–75 dB</i>	<i>Proposed DNL 75–80 dB (acres)</i>	<i>Change in Acres from Proposed/ Existing Conditions (2023) 75–80 dB</i>	<i>Change in Acres from Proposed/ No Action 75–80 dB</i>
Residential	7	0	-7	92	85	92
Commercial	26	21	-5	6	-20	-15
Industrial	2	0	-2	26	24	26
Agricultural	95	55	-40	240	145	185
Unknown ¹	19	9	-10	68	49	59
Public	5	4	-1	3	-2	-1
Total	154	89	-65	435	281	346

	<i>Existing Conditions (2023) DNL 80+ dB (acres)</i>	<i>No Action DNL 80+ dB (acres)</i>	<i>Change in Acres from Existing Conditions (2023)/ No Action 80+ dB</i>	<i>Proposed DNL 80+ dB (acres)</i>	<i>Change in Acres from Proposed/ Existing Conditions (2023) 80+ dB</i>	<i>Change in Acres from Proposed/ No Action 80+ dB</i>
Residential	0	0	0	5	5	5
Commercial	0	0	0	24	24	24
Industrial	0	0	0	1	1	1
Agricultural	3	1	-2	49	46	48
Unknown ¹	1	0	-1	8	7	8
Public	1	1	0	5	4	4
Total	5	2	-3	91	87	90

Notes: Numbers may not add up due to rounding.

¹The “unknown” designation includes water resources, public roadways, and miscellaneous areas not assigned to a specific category by Klamath County.

Legend: dB = decibel; DNL = Day-Night Average Sound Level.

Residential exposure would increase by 35 acres in the DNL 65 to 70 dB contour, 140 acres in the DNL 70 to 75 dB contour, 92 acres in the DNL 75 to 80 dB contour, and 5 acres in the DNL 80 to 85 dB contour, based on analytical comparison of the modeled Proposed Action to the modeled No Action Alternative. Commercial land use exposure would increase by 5 acres and industrial land use exposure by 1 acre within the 80 to 85 dB contour; both are generally compatible below DNL 80 dB but are generally considered noncompatible above that level. Agricultural uses remain compatible up to DNL 85 dB, except where residential structures are present. Public uses (parks/recreation) are compatible up to DNL 75 dB but would increase by 4 acres in the 80 to 85 dB contour. While these modeled values represent a shift from the No Action scenario, the total footprint remains consistent with the historical noise-compatible land use patterns established in the Existing Conditions (2023). Noise levels greater than DNL 65 dB are considered incompatible with noise sensitive land uses, such as residential areas, in accordance with DoD and FAA standards and guidelines.

3.6.3 Reasonably Foreseeable Actions and Environmental Trends

As shown in Table 3.1-2, reasonably foreseeable actions include several facility and pavement improvement projects within and near LMT/Kingsley Field ANGB. Construction-related noise from these activities would be temporary and localized and would occur primarily within the existing developed airport and installation area. These projects are not expected to alter land use patterns, land ownership, or land management, and they would not change land use compatibility conditions. No new flight procedures, military training airspace changes, or airspace reconfigurations are reasonably foreseeable at this time. Accordingly, land use conditions would be expected to remain consistent under both the Proposed Action and the No Action Alternative.

3.7 WATER RESOURCES/FLOODPLAINS/WILD AND SCENIC RIVERS

3.7.1 Affected Environment

Water resources evaluated in this analysis include surface water, groundwater, and floodplains. There are no wild and scenic rivers (or river segments) designated anywhere near LMT/Kingsley

Field ANGB based on Wild and Scenic Rivers designations as of 2024 (NPS 2024b). The closest wild and scenic river is the Klamath River, about 25 miles southwest of Klamath Falls. The portion of the Klamath River that is designated as wild and scenic begins at the J.C. Boyle Powerhouse and extends to the California-Oregon border (NPS 2024b).

The ROI includes water in and around LMT/Kingsley Field ANGB. Mapped designations and regulatory listings (e.g., Wild and Scenic Rivers status, Clean Water Act impairments, Federal Emergency Management Agency [FEMA] flood layers, and permit status) reflect the most current sources available at the time of analysis (2024) and may change over time. Wetlands are addressed in Section 3.12. Water resources under military training airspace used by the 173 FW would not be affected by the Proposed Action and are thus not discussed further in this analysis because the Proposed Action does not include ground disturbance or other activities within the military training airspace that could affect surface water, groundwater, or floodplains.

3.7.1.1 Surface Water

LMT/Kingsley Field ANGB lies within the Lost River drainage basin. The Lost River Diversion Channel, located just south of the primary runway, connects the Klamath and Lost Rivers approximately 3 miles south of Klamath Falls. This major hydrologic feature has little influence on surface hydrology at LMT/Kingsley Field ANGB due to extensive modifications from airfield construction and the U.S. Bureau of Reclamation's Klamath Project drainage and irrigation system. Channel flow direction varies: eastward during irrigation season, and westward toward Klamath Falls during high winter runoff (NGB 2024d). In Klamath County, the Lost River is EPA-listed as impaired for dissolved oxygen, pH, and temperature under the Clean Water Act, making it the only impaired waterbody near the base as of the 2024 listing (EPA 2024b).

Stormwater at Kingsley Field ANGB is managed through gravity sewers, surface inlets, culverts, earthen channels, and a network of drainage ditches that cross the airfield via an underground aqueduct before discharging to the Lost River (NGB 2024d). The base operates under Oregon DEQ's National Pollutant Discharge Elimination System (NPDES) general industrial stormwater permit (No. 1200-Z, File No. 106838) and a Storm Water Pollution Prevention Plan (SWPPP) that implements engineering and management strategies to improve stormwater quality (Oregon ANG 2023c).

3.7.1.2 Groundwater

Groundwater levels near LMT/Kingsley Field ANGB are high, typically ranging from 2 to 10 feet below the surface. Naturally, groundwater levels would be higher; however, the established drainage system effectively lowers the water level and controls the direction of groundwater flow. Local groundwater quality is considered "moderately good," though some wells report elevated methane and iron (NGB 2024d). One municipal well in Klamath Falls has naturally occurring arsenic below regulatory limits and meeting all health standards (City of Klamath Falls 2020). Clay and silt layers in the area limit vertical migration of potentially contaminated shallow groundwater to deeper aquifers (NGB 2024d). Kingsley Field ANGB receives potable water from the City of Klamath Falls, which draws from deep regional aquifers (City of Klamath Falls 2020). No groundwater wells are located within one-quarter mile of the base.

3.7.1.3 Floodplains

All developed portions of Kingsley Field ANGB are located outside any floodplains identified by the FEMA. Kingsley Field ANGB is located within a seclusion zone, or a floodplain exclusion zone, identified by the recent FEMA floodplain layer update for Klamath County (FEMA 2024a). Extensive modifications to natural drainage patterns at the airport and in its vicinity have been implemented to minimize flooding (FEMA 2024b).

3.7.2 Environmental Consequences

Potential effects on water resources were evaluated considering protection of surface and groundwater during ground-disturbing activities, changes in stormwater runoff and drainage infrastructure, potential disturbance within mapped 100-year floodplains, and proximity to wild and scenic rivers. Adverse effects could occur from substantial floodplain alteration, uncontrolled erosion and sedimentation, or pollutant discharges exceeding Total Maximum Daily Loads (TMDLs) in impaired waters.

3.7.2.1 No Action Alternative

Under this alternative, stormwater runoff and demand on the airfield drainage system would be expected to increase with up to 331,600 square feet (SF) of new impervious surfaces. In accordance with Unified Facilities Criteria (UFC) 3-210-10, *Low Impact Development (LID)* (as amended, 2010) and Energy Independence and Security Act Section 438, any increase in surface water runoff would be attenuated through the use of drainage management features such as use of bioretention areas, filter strips, vegetated buffers, grassed swales, infiltration trenches, water harvesting, and other applicable BMPs. The integration of LID design concepts incorporates site design and stormwater management to maintain the site's pre-development runoff rates and volumes to further minimize potential adverse effects associated with increases in impervious surface area. Overall, implementation of the No Action Alternative would not be expected to result in significant effects on surface water resources.

Additional impervious surface would slightly reduce local groundwater recharge but would not significantly affect the regional recharge. LID measures would restore predevelopment hydrology to the maximum feasible extent, avoiding adverse effects on groundwater resources.

No construction projects would occur in floodplains; therefore, no effects on floodplains are anticipated.

3.7.2.2 Proposed Action Alternative

Surface Water

The Proposed Action would include ground-disturbing activities such as new construction that would disturb up to 933,050 SF. During site preparation (e.g., grading) and construction, soils would be exposed to disturbance and potential compaction, which can impede drainage and reduce infiltration. Construction projects disturbing more than 1 acre would require coverage under the 1200C NPDES Permit pursuant to Oregon Revised Statutes Sections 468B.035 and 050. As part of permit compliance, an Erosion and Sediment Control Plan (ESCP) would be prepared, incorporating BMPs to minimize erosion, runoff, and sedimentation. Stormwater runoff is expected to increase due to up to 704,900 SF of new impervious surfaces, increasing demand on

the airfield's drainage system. As detailed in the discussion for the No Action Alternative (Section 3.7.2.1), any increase in surface water runoff would be managed through the integration of LID design concepts and applicable BMPs in accordance with UFC 3-210-10 and Energy Independence and Security Act Section 438. These measures are intended to maintain the site's pre-development runoff rates and volumes. Post-construction, stormwater would be managed under LMT's existing general NPDES permit (No. 1200-Z, File No. 106838) for industrial activities, which covers Kingsley Field ANGB and the airport's SWPPP. Overall, implementation of the Proposed Action would not be expected to result in significant effects on surface water resources.

Groundwater

The depth of excavation during construction would generally not reach the depth of groundwater. Should construction activities require trenching or digging greater than a depth of 2 feet, shallow groundwater may be encountered. Dewatering techniques may be required during construction to manage shallow groundwater intrusion and maintain safe working conditions. However, existing clay and silt layers restrict vertical movement between shallow groundwater and the deeper aquifers used for water supply.

The establishment of an additional 704,900 SF of impervious surface area from new facility construction and new areas of pavement would reduce local groundwater recharge capabilities. However, construction is not expected to significantly affect the regional groundwater recharge. LID measures would be implemented to restore predevelopment hydrology to the maximum feasible extent. The addition of 30 personnel at the base would not be expected to affect regional groundwater demand, and none of the proposed facilities or improvements would require a substantial increase in local or regional groundwater use.

Floodplains

As noted in Section 3.7.1.3, all construction associated with the Proposed Action would occur within the existing developed footprint of LMT/Kingsley Field ANGB, which is located entirely within a floodplain exclusion zone. There are no mapped floodplains within the base boundary (FEMA 2024a), and none of the proposed construction projects would be located in any floodplains. Therefore, there would be no expected effects on floodplains under the Proposed Action.

All construction would be conducted in compliance with EO 11988, *Floodplain Management*. If any future construction were to occur within an identified floodplain, a Finding of No Practicable Alternative would be required.

3.7.3 Reasonably Foreseeable Actions and Environmental Trends

The reasonably foreseeable actions identified in Table 3.1-2 would result in only minor changes to impervious surface area within the developed airport/installation area. Potential stormwater runoff and erosion effects would be temporary and would be managed through project-specific erosion and sediment control planning and implementation of best management practices. These actions are not expected to substantially alter surface water features, groundwater, mapped floodplains (if present), or designated water resources in the study area. Accordingly, water resource conditions are expected to remain consistent with existing trends under both the Proposed Action and the No Action Alternative.

3.8 GEOLOGICAL RESOURCES/SOILS/FARMLANDS

3.8.1 Affected Environment

The discussion of geological resources includes topography, geology, soils, and farmland associated with the affected environment.

The ROI for the Proposed Action includes the land area on and immediately adjacent to LMT/Kingsley Field ANGB. Geological resources under military training airspace utilized by the 173 FW would not be affected by the Proposed Action and therefore are not discussed further in this analysis.

3.8.1.1 Geology and Topography

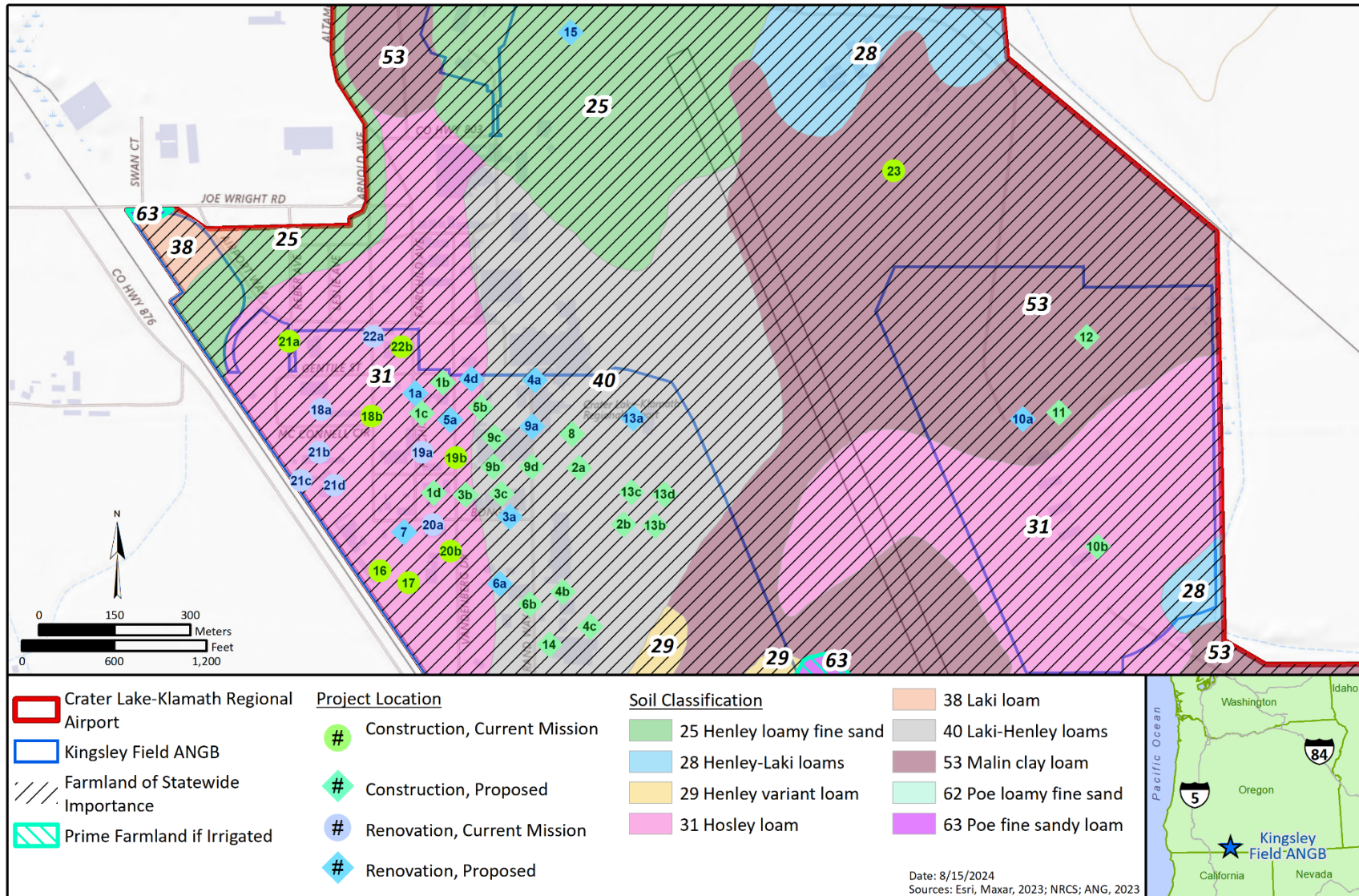
LMT/Kingsley Field ANGB is on a plain that slopes gently to the southeast and is bounded by the surrounding hills associated with northwest-southwest trending faults. The topography at LMT/Kingsley Field ANGB is low-relief terrain with elevations ranging from 4,085 feet MSL to 4,095 feet MSL (NGB 2024d). The geology of the Klamath Falls area consists of unconsolidated to semi-consolidated lacustrine clay, silt, sand, and gravel. Mudflow and fluvial deposits and discontinuous layers of peat occur in places. The Klamath Falls region is a geologically active area related to volcanic activity. Many minor surface fractures traverse within a 33-mile radius of Klamath Falls, continuing the West Klamath Lake fault zone. While no major faults are known to exist directly beneath the base, there is a fault zone and associated shallow geothermal resource located just northeast of base property (NGB 2024d).

3.8.1.2 Soils

Soils are dominated by the Henley-Poe Laki soil series, with smaller areas of Malin and Hosley soils (NGB 2024d; NRCS 2024). Figure 3.8-1 shows the soils located within Kingsley Field ANGB and proximate to the proposed projects. These soils generally exhibit limitations for certain community uses, such as home sites, small buildings, and roads, due to factors including wetness, potential frost action, slow permeability, and shallow depth to hardpan or the water table. Some areas may also be subject to flooding. Collectively, these characteristics can influence excavation, drainage, and septic system performance (where applicable).

3.8.1.3 Farmland

Most of the land is identified as farmland of statewide importance, with the exception of one small area designated as prime farmland, if irrigated (Figure 3.8-1). Although areas outside the base have been zoned for “Exclusive Farm Use,” no soil or areas within the base are being used for agricultural purposes (NRCS 2024).



Document Path: G:\C_ProjectLibrary\011102 F-35\2: Kingsley Field EIS\mxds\EIS\Figure 3.9-1 Geological Resources on Kingsley ANG Installation.mxd

Figure 3.8-1 Geological Resources on Kingsley Field ANGB

3.8.2 Environmental Consequences

3.8.2.1 No Action Alternative

Limited ground-disturbing activities, such as site preparation and construction would occur under the No Action Alternative. Most naturally occurring soils within LMT/Kingsley Field ANGB have been physically altered (e.g., cut, graded, or covered) or replaced by imported fill to support base development. In compliance with Oregon’s erosion and sediment control laws, all appropriate construction BMPs would be implemented during grading where erosion hazards exist. These may include inlet/outlet protections, straw wattles, sediment fences, and other relevant measures.

Construction projects disturbing more than 1 acre would require coverage under the 1200C NPDES Permit coverage pursuant to Oregon Revised Statutes Sections 468B.035 and 050, and adherence to the associated ESCP. With all relevant BMPs in place, construction-related soil disturbance would be limited to the project footprints. Dust would be controlled through watering and soil stockpiling as needed to reduce exposure of bare soil. Therefore, the No Action Alternative would not result in significant effects on soils. Proposed projects would occur on land designated as farmland of statewide importance (NRCS 2024). None of the proposed construction projects would occur on prime farmland, nor would any convert farmland to non-agricultural use, as lands comprising LMT/Kingsley Field ANGB have been previously disturbed and are not in agricultural production. Therefore, implementation of the No Action Alternative would not result in significant effects on farmland.

3.8.2.2 Proposed Action Alternative

Geology and Topography

The potential geologic effects associated with the Proposed Action would be limited to ground-disturbing activities such as site preparation and construction. Most construction activities would occur on previously disturbed land capable of supporting such development, and construction effects would not be significant. Proposed construction activities would be localized and would not have significant effects on sensitive or regional geologic or physiographic features.

Topography within the proposed construction areas is level and does not pose an erosion hazard or a development constraint under the proposed construction and demolition activities. Therefore, effects on topography resulting from implementation of the Proposed Action would not be significant.

LMT/Kingsley Field ANGB is located near a fault that has the potential for earthquakes of up to magnitude 9.0 to occur. The proposed buildings would be constructed in accordance with UFC 3-310-04, *Seismic Design for Buildings*, which provides DoD requirements for earthquake-resistant design for new buildings, requirements for evaluating and rehabilitating existing buildings for earthquake resistance, and guidance on applying seismic design principles to specialized structural and non-structural elements. UFC 3-310-04 adopts the seismic design provisions of the 2003 International Building Code for use in DoD building design. Therefore, implementation of the Proposed Action would not result in significant effects associated with seismicity and geologic hazards.

Soils

Implementation of the Proposed Action would include excavation and site preparation activities associated with construction. The majority of naturally occurring soils within LMT/Kingsley Field ANGB have been previously altered (e.g., cut, graded, or covered) or replaced with imported fill to support development of the base. Construction activities would be conducted in accordance with the regulatory requirements and BMPs described under the No Action Alternative (Section 3.8.2.1), including compliance with Oregon’s erosion and sediment control laws and regulations and coverage under the 1200C NPDES Permit for projects disturbing more than one acre. Dust from construction activities would continue to be minimized through watering, soil stockpiling, and other BMPs, in compliance with local regulations and the Fugitive Emission Control Plan (see Section 3.4 for further discussion). Effects on soils would be localized to the project footprints, and implementation of the Proposed Action would not result in significant effects.

Farmland

Proposed projects would be implemented on land identified as being farmland of statewide importance (NRCS 2024). None of the proposed construction projects would be constructed on prime farmland and none of the proposed projects as part of the Proposed Action would convert any farmland to non-agricultural uses, as the land comprising LMT/Kingsley Field ANGB has been previously disturbed and is already relatively developed for airport and military use. Therefore, implementation of the Proposed Action would not result in significant effects on farmland.

Once operational, the proposed facilities would have no effect on soils. Proposed projects would be designed and constructed in accordance with UFC 3-310-04, *Seismic Design for Buildings* so that potential effects related to geologic hazards (e.g., earthquakes) and erosion would be minimized. Therefore, implementation of the Proposed Action would not result in significant effects on geological resources.

3.8.3 Reasonably Foreseeable Actions and Environmental Trends

Ground-disturbing activities associated with the reasonably foreseeable projects identified in Table 3.1-2 would be temporary and localized and would occur primarily within previously developed and disturbed areas at LMT/Kingsley Field ANGB. These activities are not expected to affect sensitive or regionally significant geologic or physiographic features. Where grading or exposed soils could create erosion hazards, erosion and sediment control measures would be implemented in accordance with applicable Oregon requirements and standard construction best management practices (e.g., inlet/outlet protection, straw wattles, and sediment fencing), consistent with the Oregon Department of Transportation Erosion Control Manual (April 2005). With these measures, the potential for erosion and sediment transport would be minimized, and geology and soils conditions in the area surrounding LMT/Kingsley Field ANGB are expected to remain consistent with existing trends under both the Proposed Action and the No Action Alternative.

3.9 CULTURAL RESOURCES

3.9.1 Affected Environment

This document uses the terms ‘Pre-Contact’ and ‘Post-Contact’ instead of ‘Pre-Historic’ and ‘Historic’ to refer to the periods before and after European contact with Indigenous peoples. Cultural resources can be broadly defined as Pre-Contact and Post-Contact period sites and districts; structures; artifacts; features that display evidence of human activity; and landscapes and features that play a fundamental role in a specific community’s identity, beliefs, or value system. Cultural resources can be divided into three major categories: archaeological resources (Pre-Contact and Post-Contact), architectural resources, and traditional cultural places/sacred sites.

In accordance with the National Historic Preservation Act (NHPA), only cultural resources considered to be significant, known, or unknown, warrant consideration with regard to adverse effects resulting from a proposed action. Cultural resources that have been determined eligible for inclusion in the National Register of Historic Places (NRHP) are historic properties. Historic properties are afforded protection and consideration under the NHPA. To be determined eligible for inclusion in the NRHP, a resource must meet at least one of the following criteria:

- a) associated with events that have made a significant contribution to the broad patterns of our history; or
- b) associated with the lives of persons significant in our past; or
- c) embody the distinctive characteristics of a type, period, or method of construction; or represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) have yielded, or may be likely to yield, information important in prehistory or history.

Historic properties must also retain aspects of integrity defined in the regulations, such as location, design, setting, materials, workmanship, feeling, and association.

The NHPA, Archaeological and Historic Preservation Act, American Indian Religious Freedom Act, and other relevant federal laws and regulations govern the management of cultural resources and require consultation with Tribal Nations when federal projects may impact resources of religious or cultural significance. The DoD and DAF recognize Tribal sovereignty and are committed to government-to-government consultation with federally recognized Tribal Nations, as outlined in EO 13175 and the 2022 Presidential Memorandum on Tribal Consultation Standards.

In accordance with Section 106 of the NHPA, DAF is consulting with Tribal Nations that may be affected by the proposed undertaking, which includes the beddown, operation, and associated infrastructure construction for one FTU squadron of F-35A aircraft at Kingsley Field ANGB. Letters of invitation to consult were sent to 44 Tribal Nations with traditional ties to the land surrounding LMT/Kingsley Field ANGB and within the military training airspace beneath which the operations occur. Consultation letters were sent on June 13, 2024, and additional correspondence occurred in December 2024 and March 2025 to maintain engagement. Consultation and identification efforts account for the transition from the F-15C/D to the F-35A by comparing the Proposed Action to Existing Conditions (2023), ensuring that any changes in the ‘feeling’ or ‘setting’ of historic properties or traditional cultural places are fully disclosed.

The affected environment for cultural resources is determined by the Area of Potential Effects (APE), which includes LMT/Kingsley Field ANGB, areas with ground-disturbing activities, lands within the DNL 65 dB and greater noise contours at the airfield, and lands beneath existing military training airspace plus a 1-mile horizontal buffer. The consultation process is ongoing, and the results of the consultations will be addressed in the Environmental Consequences section.

Information on cultural resources within the affected environment was derived from conducting background research to identify NRHP historic properties (including national historic landmarks, national battlefields, national historic trails, national monuments, and national memorials) and the State Register of Historic Landmarks beneath the affected military training airspace, American Indian Reservations, sacred areas, or traditional use areas.

3.9.1.1 Installation

Archaeological Resources

Kingsley ANGB maintains an Integrated Cultural Resources Management Plan (ICRMP) to aid in management of cultural resources on the base in accordance with appropriate federal laws and other applicable ANG regulations (Oregon ANG 2012). The ICRMP is a 5-year planning and management tool that outlines base policies and procedures for the protection, management, and preservation of cultural resources including historic properties, and for integrating cultural resources management into the overall base planning process.

A comprehensive cultural resources survey of the base was undertaken between 2000 and 2002. This survey resulted in the identification of an archaeological site (35KL2893); however, the site is not within the current boundaries of Kingsley Field ANGB. The site, a Post-Contact artifact scatter dating to the late 1930s or early 1940s, was recommended not eligible for listing in the NRHP. A cultural resource inventory conducted in 2007 identified one Post-Contact-period archaeological site (35KL2909) and one Post-Contact-period isolate (IF-1). The site and the isolate were recommended not eligible for the NRHP (Oregon ANG 2012).

Due to the significant number of new construction projects associated with the proposed undertaking that require ground disturbance and given that the last archaeological investigation for the base occurred in 2002, NGB conducted an archaeological survey for the undertaking in consultation with the Oregon State Historic Preservation Office (SHPO). A total of 122 shovel test pits (STPs) were excavated to identify intact archaeological resources and document evidence of disturbances within areas of non-impervious surfaces within the proposed construction footprints (including a 15-meter buffer) that would be impacted by ground disturbance associated with new construction, building renovations and modifications, and where building demolitions would occur. Of the 122 STPs, one was positive for cultural materials and consisted of a single non-diagnostic metal artifact. The item appears to be part of a pin or chain link and was identified between 20–30 centimeters below surface within disturbed soil associated with the old runway. The deteriorating runway was recorded as a site feature, Kingsley-SITE-001. Based on the lack of integrity of the resource and the disturbances to the site as well as the lack of distinctive design or craftsmanship and historical integrity, the site is recommended not eligible for the NRHP. The recorded artifact found in the positive STP is non-diagnostic and does not provide additional information about the nature or use of Kingsley-SITE-001, therefore it is recommended not eligible for the NRHP (Stantec GS Inc. 2025). While the noise-based APE relies on the Existing

Conditions (2023), the archaeological identification effort reflects current (2025) ground conditions and site integrity. This comprehensive approach ensures that both direct (construction) and indirect (noise/vibration) effects are evaluated using the most appropriate data for each resource type.

The NGB is consulting with the Oregon SHPO regarding the NRHP eligibility determinations for Kingsley-SITE-001 and the 39 architectural resources evaluated in 2025. This consultation, along with the ongoing government-to-government engagement with Tribal Nations described above, will be finalized prior to the issuance of the Final EIS.

Architectural Resources

The cultural resources survey conducted between 2000 and 2002 resulted in the recordation and evaluation of eligibility of 71 built resources constructed between 1941 and 1999. Building 400 was the only building that was recommended as potentially eligible for listing in the NRHP. The remaining resources were recommended not eligible for the NRHP. Eleven buildings (Buildings 534, 536, 537, 538, 539, 540, 541, 4065, 4067, 4068, and 4069) are eligible for listing in the NRHP through the Advisory Council on Historic Preservation's *Program Comment for World War II and Cold War Era (1939–1974) Ammunition Storage Facilities* signed in 2006. Buildings 130 and 208 are eligible through the Advisory Council on Historic Preservation's *Program Comment for Cold War Era Unaccompanied Personnel Housing (1946–1974)* signed in 2006. Under these Program Comments, the DoD, in coordination with the Advisory Council on Historic Preservation, has mitigated these eligible facilities as part of a nationwide mitigation for eligible ammunition storage facilities and unaccompanied personnel housing. The Program Comments cover such activities as ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities and transfer, sale, lease, and closure of such facilities. Section 106 consultation has been completed through these mitigations; therefore, no further management actions are required. There are no historic districts or historic landscapes present at Kingsley Field ANGB (Oregon ANG 2012).

In the preliminary Section 106 correspondence with the Oregon SHPO, the NGB and 173 FW identified 30 buildings at Kingsley Field ANGB that required evaluation for NRHP eligibility because they have reached historic age since the last evaluation. Of the 30 buildings requiring evaluation, 9 are proposed for demolition. An intensive level architectural field survey of 39 previously unevaluated resources was conducted in June 2025. Preliminary results of the survey recommend that Building 400 is individually eligible for listing in the NRHP under Criterion C as a representative example of a Cold-War era alert hangar; however, this building is not part of the Proposed Action. The remaining 38 resources are recommended not eligible for listing in the NRHP under Criteria A–D. While dating to the Cold War period, they are not associated with significant events (Criterion A) or important persons (Criterion B), do not display architectural distinction (Criterion C), and lack the potential to provide new or important information on Cold War history (Criterion D) (Stantec GS Inc. 2025). In addition, the survey did not identify a historic district; no grouping of resources was found to possess the collective significance or integrity necessary to support a district-level NRHP recommendation. NGB will be consulting with the Oregon SHPO on these determinations of eligibility.

Traditional Cultural Places and Sacred Sites

No known traditional cultural places or Native American sacred places have been identified at Kingsley Field ANGB (Oregon ANG 2012). The Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of Warm Springs Reservation of Oregon, Cow Creek Band of Umpqua Tribe of Indians, Klamath Tribes, and Modoc Nation have been identified as federally recognized Tribal Nations with historical, cultural, or linguistic affiliations to LMT/Kingsley Field ANGB. Appendix B contains Section 106 and government-to-government correspondence for this undertaking.

3.9.1.2 Off-Installation

There is one NRHP-listed or NRHP-eligible historic property, Summers School, located within the DNL 70 to 75 dB noise contour surrounding the airfield (NPS 2024c, 2024d; Oregon SHPO 2024a, 2024b). The Existing Conditions (2023) noise environment is used to characterize the acoustic setting of this property, providing a conservative basis for evaluating potential indirect effects.

3.9.1.3 Military Training Airspace

Table 3.9-1 presents the 196 NRHP-listed sites on lands beneath the military training airspace used by the 173 FW (NPS 2024c, 2024d). Of the 196 listed sites, 24 are located in California, three in Idaho, four in Nevada, and 166 in Oregon. Twenty-two state historic landmarks are located on land beneath the military training airspace used by 173 FW (Table 3.9-1).

Table 3.9-1 NRHP Historic Properties and State Historic Land Under the Military Training Airspace

<i>Military Training Airspace</i>	<i>Number of Listed NRHP Properties Under Military Training Airspace</i>	<i>Number of State Historic Landmarks Under Military Training Airspace</i>
California		
Dolphin South MOA	8	7
Goose North MOA	3 ¹	1
Goose South MOA	13	4
Idaho		
Jarbidge North MOA	1	0
Owyhee North MOA	1	0
Paradise North MOA	1	0
Nevada		
Hart B MOA	1 ²	0
Hart D MOA	0	0
Hart E MOA	1 ²	0
Hart F MOA	1 ²	1
Jarbidge South MOA	1	2
Owyhee South MOA	0	0
Paradise South MOA	1	1
Oregon		
Dolphin North MOA	129	6
Dolphin South MOA	29	0
Juniper A & Juniper Low	0	0
Juniper B & Juniper Low	0	0

<i>Military Training Airspace</i>	<i>Number of Listed NRHP Properties Under Military Training Airspace</i>	<i>Number of State Historic Landmarks Under Military Training Airspace</i>
Juniper C & Juniper East Low	0	0
Juniper D & East Low MOA	3	0
Hart A MOA	0	0
Hart B MOA	3	0
Hart D MOA	0	0
Varmit ATCAA	2	0

Notes: ¹Two of these sites are archaeological sites and the exact location is not available to the public; therefore, they may or may not be located under the military training airspace.

²The NRHP listed historic property is the same site (Applegate-Lassen Trail) which is located within the three MOAs.

Legend: MOA = Military Operations Area; NRHP = National Register of Historic Places.

Sources: NPS 2024c, 2024d; NoeHill 2024.

The historic properties in California include 15 archaeological sites and a range of other resource types, including a shipwreck; a light station and lighthouse; the Gasquet Ranger Station Historic District; a schoolhouse; a Catholic church; a carpenter and paint shop associated with the Tule Lake Segregation Center; and Nevada–California–Oregon Railway resources (a depot and a general office building) (NPS 2024c, 2024d). Twelve California State Historic Landmarks occur beneath the military training airspace: Applegate–Lassen Trail, Battery Point Lighthouse, Battle of Land’s Ranch (1872), Brother Jonathan Cemetery, Camp Lincoln, Evans and Baily Fight, Fort Ter-Wer Site, Fremont’s Camp, Indian Village Site, Infernal Caverns Battleground, Pioneer Stage Road to Oregon, and S.S. Emidio (NoeHill 2024).

In Idaho, the three historic properties include the Wickahoney Post Office and Stage Station, Camp Three Forks, and the Camas and Pole Creeks Archaeological District (NPS 2024c, 2024d). Idaho does not have a State Register of Historic Places.

The three historic properties located in Nevada include Gold Creek Ranger Station, Silver State 13 Flour Mill, and the Applegate-Lassen Trail. The Applegate-Lassen Trail is located beneath three 14 military training airspace units (Hart B MOA, Hart E MOA, and Hart F MOA) (NPS 2024c, 2024d). Four Nevada State Historic Landmarks are located beneath the military training airspace. 16 These historic landmarks are titled: Camp McGarry, Town of Jarbidge, Jarbidge Community Hall, 17 and Fort McDermitt (NoeHill 2024).

The 166 historic properties in Oregon include 68 archaeological sites, 9 mines, 4 lighthouses, 17 houses, 6 ranger or coast guard stations, 5 hotels, 4 cemetery’s, 13 bridges, 6 ditches, 3 ranch/ranch complexes, 2 theatre’s, 2 historic districts, 2 banks, 1 library, 2 city hall’s, 2 churches, 1 cabin, 8 general buildings, the Siskiyou Smokejumper Base, a life boat station, a river light, an Elks Temple, a printing plant, Tribal Hall of the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, a shipwreck, Cape Perpetua shelter and parapet, the Allen Gulch townsite, the Wheeler Ridge Japanese Bombing Site, and the Stone Bridge and the Oregon Central Military Wagon Road (NPS 2024c, 2024d). Six Oregon State Historic Landmarks are located beneath the Dolphin North MOA. These historic landmarks are titled: Empire City, Spruce Soldiers, Cape San Sebastian, Conflict of Pistol River, Gold Beach, and the location of the Japanese Attack on Oregon (NoeHill 2024).

3.9.2 Environmental Consequences

Effects analysis for cultural resources focuses on assessing whether the Proposed Action or No Action Alternative have the potential to affect cultural resources that are eligible for listing in the NRHP (known as historic properties) including traditional cultural places or resources with traditional significance for Native American groups. Under Section 106 of the NHPA, the lead agency is responsible for determining whether any historic properties are located in the area; assessing whether the proposed undertaking would adversely affect the resources and notifying the SHPO or Tribal Historic Preservation Officer of any adverse effects.

An adverse effect is any action that may directly or indirectly change the characteristics that make the historic property eligible for listing in the NRHP. If an adverse effect is identified, the federal agency consults with the SHPO/Tribal Historic Preservation Officer, federally recognized Tribal Nations, and if applicable, the Secretary of the Interior to develop measures to avoid, minimize, or mitigate the adverse effects of the undertaking.

Analysis of potential adverse effects on historic properties, including traditional cultural resources/sacred sites, is based on the following considerations: (1) physically altering, damaging, or destroying all or part of a resource; (2) altering characteristics of the surrounding environment that contribute to resource significance; (3) introducing visual, audible, or atmospheric elements that are out of character with the property or alter its setting; or (4) neglecting the resource to the extent that it deteriorates or is destroyed. The potential to directly disturb historic properties can be assessed by identifying the type and location of the Proposed Action. Effects that are farther removed from the immediate project area, including visual, audible (noise), or atmospheric changes due to project implementation are harder to quantify.

Aircraft operations are most likely to affect historic structures and districts where setting is an important criterion for significance and where noise could adversely affect those types of resources. The DAF conducted research for NRHP-listed, NRHP-eligible, and unevaluated architectural sites within the DNL 65 dB contour and greater at the airfield. While the cessation of regular 173 FW F-15C/D operations has temporarily reduced the ambient noise levels at historic properties within the APE, the Existing Conditions (2023) is used to represent the established acoustic setting for the purposes of Section 106 analysis. This analytical approach ensures that the effects of the Proposed Action are disclosed relative to the mission's documented long-term footprint, preventing a misleading 'quiet' reference point from skewing the evaluation of project-related impacts on the feeling and setting of historic properties.

Historic properties that would reasonably be affected by visual and noise intrusions, including traditional cultural resources/sacred sites, are evaluated for lands located beneath the existing military training airspace from surface level to the ceiling of each plus a 1-mile horizontal buffer. The DAF recognizes that hundreds of other cultural resources and historic properties, some documented and some not yet discovered, exist under the military training airspace.

Aircraft operations have the potential to affect historic structures and districts where setting is an important criterion for significance and where noise vibrations from sonic booms or low-level overflights could affect those types of resources. These resources are typically found in the NRHP or State Register. Conversely, if NRHP-listed properties are not adversely affected or significantly affected by the project elements, then non-listed resources are unlikely to be affected.

In general, archaeological sites would not be expected to incur effects from aircraft noise or overflight activities associated with the Proposed Action. However, archaeological sites listed in the NRHP were included in the analysis, as some are standing structures and rock art sites. Potential effects on these areas would be the same as potential effects on architectural sites from sonic boom overpressures.

Some prehistoric archaeological sites could contain natural structures such as rock shelters or caves, and petroglyphs or pictographs, which are etched or painted onto the rock surfaces. However, studies have found that these types of natural formations are not affected by noise vibrations, such as sonic booms, any more than by natural erosion, wind, or seismic activity (Battis 1983).

Visual and noise intrusions could include low-level overflights, sonic booms, and distribution of chaff and flare residual materials. Historic properties potentially affected include significant historic sites such as National Historic Landmarks or properties listed in, or eligible for listing in, the NRHP that qualify because of setting or feeling, historic architectural resources or archaeological resources with standing structures (such as historic ranches or forts that could be affected by vibrations), national historic trails, and traditional cultural places that are associated with places that require isolation or quiet. Noise, including infrequent sonic booms and startle effects on traditional cultural resources, may be related to interference with ceremonies and other traditional activities at sacred sites. Undisturbed habitats, resources, and settings are considered to be critical to religious practices (NPS 1994).

The release of chaff and flares could have a visual effect from residual materials which remain on the ground or land, on structures, or at sacred sites. Studies have shown that chaff and its debris do not pose a significant threat to the visual integrity of archaeological and architectural resources (Government Accounting Office 1998). Chaff does not accumulate to any great degree and the fibers, if found, were often mistaken for natural elements such as animal fur or plant material. The fibers generally dissipate within a few days due to mechanical breakdown from wind, sediment erosion, and rain or snow. Chaff residual plastic materials are typically 1 inch by 1 inch. Flare residual plastic materials, usually red or blue in color, can be 1 inch by 2 inches or larger. Overall, chaff and flares are unlikely to adversely affect cultural resources. The residual materials from chaff and flares fall to the ground in a dispersed fashion and do not collect in quantities great enough to adversely affect the integrity and subsequent NRHP status of archaeological or architectural resources. Effects to traditional cultural places are more difficult to assess, and no studies have been conducted on traditional cultural places with regard to chaff and flare residual materials.

Experimental data and models (Battis 1988; King 1985; King et al. 1988; Sutherland 1990) show that damage to architectural resources, including adobe buildings, is unlikely to be caused by subsonic noise and vibrations from aircraft overflights. Subsonic, noise-related vibration damage to structures requires high dB levels generated at close proximity to the structures and in a low frequency range (cf. Battis 1983, 1988; USFS 1992). Aircraft must generate an L_{max} of at least 120 dB to potentially result in structural damage (Battis 1988) and, even at 130 dB, structural damage is unlikely. Sutherland (1990) found that the probability of damage to a poorly constructed or poorly maintained wood frame building is less than 0.3 percent even when the building is directly under a large, high-speed aircraft flying only a few hundred feet AGL.

Sonic booms can be associated with structural damage. Overpressure values are used to provide a general picture of pounds per square foot (psf) resulting from sonic booms associated with supersonic flight. Actual overpressure varies based on maneuvers (climb/descent, turns, acceleration/deceleration) and specific weather conditions (winds, vertical temperature/pressure profile). Most damage claims are for fragile or brittle objects, such as glass and plaster. There is a large degree of variability in damage experience, and much damage depends on the pre-existing condition of a structure.

Tests by the DAF on sonic booms have found that most structures in good condition are not affected by sonic booms with a peak overpressure of less than 16 psf. Tests by the National Aeronautics and Space Administration have shown that structures in good condition are undamaged by overpressures of up to 11 psf. Damage to plaster is in a comparable range of glass but depends on the condition of the plaster. Adobe faces risks similar to plaster, but assessment is complicated by adobe structures being exposed to weather, where they can deteriorate in the absence of any specific loads. In general, structural damage from sonic booms should be expected only for overpressures over 10 psf (Plotkin and Sutherland 1990).

Typical outdoor structures such as buildings, windmills, radio towers, etc., are resilient and routinely subject to wind loads far in excess of sonic boom pressures. Damage to plaster occurs at similar ranges to glass damage. Plaster has a compounding issue in that it will often crack due to shrinkage while curing, or from stresses as a structure settles, even in the absence of outside loads. Sonic boom damage to plaster often occurs when internal stresses are high from these factors. Some degree of damage to glass and plaster should thus be expected whenever there are sonic booms, but usually at a low rate.

3.9.2.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented; therefore, no F-35A beddown, associated operational changes, or beddown-related infrastructure construction would occur at LMT/Kingsley Field ANGB. The No Action Alternative is retained as the analytical “not implementing the Proposed Action” scenario for comparison (see Section 3.1). Construction projects to support continued base operations, as identified in Tables 2.1-3 and 2.1-4 and Figures 2.1-1 and 2.1-2, would be implemented. This would include interior renovation of Buildings 130 and 302, and interior renovation of Buildings 220, 221, and 234 if alternate options are selected (see Table 2.1-3).

The No Action Alternative operational assumptions used for this analysis are described in Section 3.2 and the *Final Noise Study* (DAF 2026). Implementation of the No Action Alternative would not result in significant effects on cultural resources and no adverse effects per 36 CFR section 800.5(b) with respect to historic properties within the APE (including those within the DNL 65 dB and greater contour and beneath the military training airspace).

3.9.2.2 Proposed Action Alternative

Installation

Archaeological Resources

Implementation of the Proposed Action would result in approximately 933,050 SF of ground disturbance during construction activities. There are no NRHP-eligible or listed archaeological resources in the areas of non-impervious surfaces within the proposed construction footprints (including a 15-meter buffer). It is not expected that undiscovered archaeological resources would be found during implementation of the Proposed Action. However, in the event of an inadvertent discovery during ground-disturbing operations, the following specific actions would occur. The Project Manager would cease work immediately and the discovery would be reported to the Kingsley Field ANGB Environmental Manager. The Environmental Manager would secure the location and ensure that all cultural items are left in place and that no further disturbance is permitted to occur. The Environmental Manager would continue to follow Standard Operating Procedure No. 6, *Inadvertent Discovery of Cultural Materials*, as outlined in the Kingsley Field ANGB ICRMP (Oregon ANG 2012). Based on the results of the recent archaeological resources survey, the Proposed Action would not impact archaeological resources.

Architectural Resources

The Proposed Action would involve the interior modification of four buildings (Buildings 130, 216, 302, and 331). Interior modifications include demolition and reconstruction of interior walls; upgrading electrical systems; upgrading heating, ventilation, and air conditioning systems; and plumbing upgrades. An additional eight buildings involve interior modification under the alternate options (Buildings 209, 213, 219, 220, 221, 234, 243, and 500). Implementation of the Proposed Action includes exterior renovations and/or additions for Buildings 332 and 333. Building 209 would undergo exterior additions if the alternate option is chosen. Twelve buildings would be demolished under the implementation of the Proposed Action (refer to Table 2.1-4). All architectural resources identified within the installation APE have been evaluated and determined not eligible for listing in the NRHP; therefore, the Proposed Action would not affect historic properties as defined under Section 106. Accordingly, the determination of effect for installation architectural resources is no historic properties affected per 36 CFR section 800.4(d)(1).

Traditional Cultural Places and Sacred Sites

No known traditional cultural places or Native American sacred sites have been identified at Kingsley Field ANGB. Therefore, implementation of the Proposed Action would not affect traditional cultural places or sacred sites.

Off-Installation

Based on the projected noise contours for the aircraft operations under the Proposed Action, one historic building is located within the modeled DNL 75 to 80 dB contour (Summers School) (Oregon SHPO 2024b).

Under the Proposed Action, the full fleet of F-15C/D model aircraft would be replaced with up to 24 PAA F-35A, with the total number of sorties increasing by 2,215 sorties. Despite a slight increase in noise from aircraft operations under the Proposed Action, it would not be expected to

affect the potential eligibility of the buildings, as noise from aircraft operations at LMT/Kingsley Field ANGB has been part of the setting of the airfield and surrounding area for decades. Therefore, there would be no adverse effect to these two buildings per 36 CFR section 800.5(b).

Military Training Airspace

Under the Proposed Action, the F-35A would use a similar altitude profile as the F-15C/D in training; however, a greater proportion of F-35A training (61 percent) would occur above 20,000 feet MSL, compared to 45 percent for F-15C/D training under Existing Conditions (2023). The use of low altitudes (between 500 feet AGL and 10,000 feet MSL) would slightly increase from 5 percent to 6 percent, as training would place greater emphasis on survivability against surface-to-air threats, including increased use of high-altitude military training airspace and standoff distances.

Section 3.2.2.2 and the *Final Noise Study* (2026) describe the modeled increases in single-event and cumulative military training airspace noise under the Proposed Action. These modeled changes do not alter the cultural resources effects determination for historic properties within the APE beneath the military training airspace, including traditional cultural places. Supersonic operations for the F-35A would occur above 30,000 feet MSL, and although the frequency of supersonic events would increase, altitude and atmospheric conditions would reduce sonic boom effects at the ground. At these altitudes, sonic boom overpressures at the ground would be expected to remain low; therefore, supersonic operations would not be expected to result in damage to historic structures or adverse effects to historic properties. Based on modeled noise conditions and the altitude of supersonic operations, the Proposed Action would not result in significant effects on archaeological resources, historic structures, or traditional cultural places.

Visual intrusions would not result in significant effects on the settings of cultural resources. Due to the high altitude of overflights, small aircraft size at viewing distance, and high speeds, aircraft would not be readily visible to observers on the ground.

No ground disturbance would occur under the military training airspace and use of ordnance and defensive countermeasures would occur in areas already used for these activities. The Oregon ANG would continue to implement a minimum release altitude of 5,000 feet AGL for flares deployed in ANG-managed Oregon military training airspace (NGB 2017). The 173 FW would adhere to local operating procedures for chaff and flare release to include the Mountain Home military training airspace and restricted airspace associated with the Saylor Creek Range (DAF 2023a). Overall, flares are unlikely to adversely affect cultural resources; therefore, the introduction of material to archaeological sites or standing structures from flare use would not result in an adverse effect.

Historic properties are present within the APE under the military training airspace; however, they would not be adversely affected per 36 CFR section 800.5(b).

Overall, the Proposed Action would result in (1) no historic properties affected within the installation APE, and (2) no adverse effect to historic properties identified off-installation within the noise APE and beneath the military training airspace.

Tribal and SHPO Consultation Efforts

The DAF has engaged in government-to-government consultation with federally recognized Tribal Nations to address any potential cultural resources or concerns related to the Proposed Action. Letters were initially sent in June 2024 to 44 federally recognized Tribal Nations with traditional ties to the land at LMT/Kingsley Field ANGB and the areas beneath the affected military training airspace. The Modoc Nation accepted the invitation, and a consultation meeting was held in August 2024. Follow-up communications confirmed the primary concern raised was chaff/flare and wildfire risk, and no additional cultural resource concerns were identified at that time.

Further outreach occurred in December 2024 to Tribal Nations that had not yet responded. Three Tribal Nations (Grande Ronde, Pit River, and Coquille Tribe) declined further consultation. Coordination efforts with the Shoshone-Paiute Tribes of the Duck Valley Reservation were initiated, with an invitation extended for government-to-government consultation; however, no further response has been received as of February 2025.

Additional letters were sent in March 2025 to ensure continued communication. All correspondence is documented in Appendix B, and any concerns raised during these consultations will be incorporated into the evaluation of potential impacts.

Consultation with the SHPOs of Oregon, Idaho, California, and Nevada is ongoing. A cultural resources survey conducted in June 2025 investigated the installation for the presence of historic districts, archaeological sites, and architectural resources. The survey report will be provided to the Oregon SHPO and interested federally recognized Tribal Nations for review and concurrence with the findings presented in the Draft EIS. The Draft EIS will also be provided to federally recognized Tribal Nations with cultural or historic ties to the land within the airspace, as well as the California, Idaho, and Nevada SHPOs, for their review and concurrence on the determination of effects. Appendix B contains Section 106 and government-to-government correspondence for this undertaking.

3.9.3 Reasonably Foreseeable Actions and Environmental Trends

Effects on cultural resources are not expected to result from the reasonably foreseeable actions identified in Table 3.1-2. These projects would occur within the developed airport/installation area and would be implemented in accordance with established avoidance and protection measures; therefore, no adverse effects on NRHP-listed or NRHP-eligible archaeological or architectural resources are anticipated. In addition, ongoing use of existing military training airspace would continue, and overflight activity would be intermittent and transitory; therefore, visual intrusion is not expected to adversely affect the setting of cultural resources beneath the military training airspace. No known traditional cultural properties or sacred sites have been identified within the APE at LMT/Kingsley Field ANGB or beneath the military training airspace; consultation is ongoing, and any newly identified resources or concerns will be addressed consistent with Section 106. Overall, cultural resources conditions are expected to remain consistent with current trends under both the Proposed Action and the No Action Alternative.

3.10 SAFETY

3.10.1 Affected Environment

Safety addresses ground safety, explosive safety, and flight safety at LMT/Kingsley Field ANGB. Ground safety considers issues associated with emergency response including fire risk and management, RPZs, and antiterrorism/force protection (AT/FP). Explosive safety discusses the management and use of ordnance or munitions associated with base operations and training activities. Flight safety includes mishaps and hazards associated with aviation safety and Bird/Wildlife Aircraft Strike Hazard (BASH). The ROI for ground and aircraft safety effect analysis includes LMT, areas immediately adjacent to LMT, and the military training airspace utilized by aircraft based at LMT/Kingsley Field ANGB and the land beneath it. Although ground and flight safety are addressed independently, risks in the immediate vicinity of the runway are interrelated, and runway-area safety-of-flight considerations can directly affect ground safety (and vice versa).

3.10.1.1 Ground Safety

Fire/Crash Response

The 173 FW operates the Airport Rescue and Firefighting Facility and responds to all ANG and civilian-related fire and emergency incidents at the airport. The Airport Rescue and Firefighting Facility provides 24-hour emergency response for the ANG and the airport and has sufficient operating capacity for military and civilian traffic. There are no current formal agreements between the 173 FW and local emergency response entities. In the unlikely event of a civilian aircraft crash at LMT, the 173 FW would respond and provide support as requested by the City of Klamath Falls, FAA, or National Transportation Safety Board (City of Klamath Falls 2021).

Chaff and flare use is authorized in ANG-managed military training airspace in Oregon (DAF 2020a; NGB 2002, 2017). The Oregon ANG would continue to implement a minimum release altitude of 5,000 feet AGL for flares deployed in ANG-managed Oregon military training airspace (NGB 2017). Flares are only used in approved military training airspace at designated altitudes. Wildfire risk is directly related to release altitude. The use of chaff and flares would not increase under the Proposed Action.

Runway Protection Zones

LMT is owned and operated by the City of Klamath Falls and the 173 FW shares runway use with the airport. RPZs have been established at end of both runways. RPZs established at the eastern and western end of runway 08/26 and the southern end of Runway 14/32 occur both on and off of LMT property on lands zoned for agricultural land uses. The RPZ at the northern end of Runway 14/32 is also located primarily within the airport boundaries; however, the RPZ extends into areas outside of the airport that are zoned for commercial and industrial land uses.

Explosive Safety

The 173 FW stores, maintains, and uses a small range of munitions required for executing their mission. QD arcs were established for these areas, including the munitions shop (Building 536) in

the MSA, just east of Runway 14/32. Additional buildings in the MSA within the established QD arc include the munitions administration (Building 535), five storage buildings (Buildings 537–541), and three storage igloos (Buildings 4067–4069) (Oregon ANG 2023d).

The MSA QD arc occurs over a road on the airport which is required to be closed while munitions are being moved. Additionally, the QD arc extends into areas off LMT property; however, these areas are primarily zoned for agricultural land uses (City of Klamath Falls 2016). DAF has had a perpetual easement in place since July 26, 1956, as contained in Deed Volume 285, page 253 of Klamath County Records, that restricts the construction of structures adjacent to LMT within the QD arc.

Antiterrorism/Force Protection

The majority of the 173 FW's infrastructure consists of legacy facilities that predate the establishment of current UFC for AT/FP. Due to the number of airport and general aviation users that have access to the airport and airfield, there are continuing AT/FP concerns relating to runway, taxiway, and apron security (City of Klamath Falls 2016). As new construction occurs and as facilities are modified, the DAF incorporates these standards to the maximum extent practical during project planning and design phases to ensure AT/FP compliance.

3.10.1.2 Flight Safety and Airspace

Flight Safety Procedures

Aircraft flight operations conducted by the 173 FW are governed by standard flight rules set forth under Air Force Manual (AFMAN) 11-202 Volume 3 and the Kingsley Field Instruction 13-204. The 173 FW Operations Group Commander delegates a Supervisor of Flying during wing flying to ensure flight safety and to streamline communication between pilots, ATC, and commanders (173 FW 2021). The Supervisor of Flying is primarily concerned with the conduct of flight operations and not ATC functions.

Aircraft Mishaps

Safety conditions at LMT/Kingsley Field ANGB are characterized by established flight procedures, airfield operations, and historical mishap/accident data for military and civil aviation activity. The 173 FW experienced one nonfatal Class A mishap in 2023 involving a destroyed F-15 (DAF 2023c). At LMT, 14 nonfatal general aviation aircraft accidents have been recorded, with the most recent occurring on May 17, 2006 (National Transportation Safety Board 2024). Air Force Safety Center data indicate that the F-15 fleet (all variants) accumulated 7,114,603 flight hours from 1972 to 2023, with a lifetime average annual Class A mishap rate of 3.12 per 100,000 flight hours and a lifetime average destroyed aircraft rate of 2.44 per 100,000 flight hours (Air Force Safety Center 2024).

Bird/Wildlife Airstrike Hazards

BASH and the hazards they present form another safety concern for aircraft operations. BASH constitutes a safety concern because of the potential for injury to aircrews or local populations and/or damage to aircraft. The 173 FW actively implements the *173 FW Bird-Aircraft Strike Hazard Plan 91-212*, thereby reducing the potential for a bird strike to occur. Key elements of the plan include monitoring the airfield for bird and other wildlife activity, issuing bird hazard

warnings, initiating bird/wildlife avoidance procedures when potentially hazardous bird/wildlife activities are reported, and submitting BASH reports for all incidents (Oregon ANG 2020a).

Over a 15-year period (2005–2019), the 173 FW reported 96 strikes resulting in damage totals of \$348,545. Two wildlife strike peaks occur with one period appearing in March and April, and the other between September and October. The most common species struck by aircraft include small perching birds (Oregon ANG 2020a).

Mid-Air Collision Avoidance

The 173 FW utilizes various military training airspace as described in Section 2.1.2.2. Flight operations are conducted in accordance with FAA and DAF regulations. To minimize the potential for a mid-air collision, Kingsley Field ANGB is mandated by DAF Instruction (DAFI) 91-202 to ensure all flying units establish, document, and maintain a Mid-air Collision Avoidance (MACA) program (DAF 2020b).

3.10.2 Environmental Consequences

3.10.2.1 No Action Alternative

Under the No Action Alternative, the 173 FW would not implement the Proposed Action. 173 FW airfield operations are projected to decrease relative to Existing Conditions (2023), consistent with the No Action Alternative assumptions described in Section 3.2 and the *Final Noise Study* (DAF 2026). As aircraft availability declined and maintenance demands for legacy airframes increased, this scenario also predicted a potential rise in maintenance-related cancellations, in-flight emergencies, and training constraints for the F-15C/D aircraft. Overall, the safety effects of the No Action Alternative are defined by the modeled reduction in F-15C/D flying activity and do not reflect current-day operations.

3.10.2.2 Proposed Action Alternative

Fire/Crash Response Safety

The 173 FW fire department would continue to respond to all ANG-related fire and emergency incidents, and response demand is not expected to increase in frequency under the Proposed Action. Any increase in incident response due to construction-related activities would be temporary and within the current capacity of the 173 FW fire department. Some proposed projects would improve fire protection systems, resulting in beneficial effects on fire safety. Therefore, no significant effects on fire/crash safety would be expected from the Proposed Action.

As described in Section 2.1.2, the 173 FW would adhere to local operating procedures for chaff and flare release in the Mountain Home military training airspace and restricted airspace associated with the Saylor Creek Range (DAF 2023a). No changes to chaff and flare use are proposed that would alter fire/crash response requirements under the Proposed Action.

Runway Protection Zones

There would be no construction or renovation projects that would occur within the designated RPZs under the Proposed Action. RPZ dimensions are aircraft-specific; the replacement F-35A would not require changes to RPZ layouts at LMT. Therefore, no significant effects would be expected from the Proposed Action.

Explosive Safety

Under the Proposed Action, the F-35A would introduce air-to-ground munitions, a capability not available with the F-15C/D fighter mission analyzed in Existing Conditions (2023). However, no live air-to-ground munitions would be assembled, stored, or loaded at Kingsley Field ANGB. Inert munitions would continue to be used for munitions assembly and loading training. The F-35A's air-to-ground training would primarily involve simulated training modes, with air-to-ground ordnance not physically loaded or released from the aircraft. Some live ordnance training would occur at other facilities, such as Mountain Home AFB, which is better equipped for live ordnance events.

Although four construction projects (Projects 10a, 10b, 11, and 12) are proposed within the footprint of the existing MSA QD arc, these projects would not result in the storage of live munitions at Kingsley Field ANGB. The QD arc would need to be modified or established to accommodate the proposed facilities in accordance with the DAF's safety requirements, but no increase in live munitions storage is proposed. Therefore, no significant effects are anticipated regarding explosive safety, and the extent of the QD arc would remain consistent with Existing Conditions (2023).

Antiterrorism/Force Protection

Under the Proposed Action, proposed construction would be designed and implemented to meet applicable fire protection and AT/FP requirements and standards. Therefore, there would be a beneficial effect on AT/FP compliance.

Flight Safety Procedures

Under the Proposed Action, 173 FW airfield operations are evaluated at approximately 20,780 annual operations, which represents an increase relative to both Existing Conditions (2023) and the No Action Alternative, consistent with the operational assumptions described in Section 3.2 and the *Final Noise Study* (DAF 2026). Assuming civil, ADAIR, and transient operations remain unchanged, total airfield operations at LMT would also increase under the Proposed Action (Section 3.2; DAF 2026). Flight procedures for the 173 FW would remain unchanged and would continue to follow the standard flight rules set forth in AFMAN 11-202, Volume 3, and 173 Kingsley Field Instruction 13-204, and all aircraft would operate in compliance with FAA regulations and local flight rules. With continued adherence to established safety procedures, no adverse effects on flight safety are expected under the Proposed Action.

Aircraft Mishaps

Air Force Safety Center mishap data provides context for evaluating aircraft mishap risk under the Proposed Action. Across all F-35 models, the aircraft has flown 225,449 hours in DAF inventory from 2000 to 2021, during which five Class A mishaps and one destroyed aircraft were reported, resulting in a lifetime average annual Class A mishap rate of 0.23 per 100,000 flight hours and a lifetime average destroyed aircraft rate of 0.44 per 100,000 flight hours (Air Force Safety Center 2022). In comparison, the F-15 fleet (all variants) accumulated 7,114,603 flight hours from 1972 to 2023, with a lifetime average annual Class A mishap rate of 3.12 per 100,000 flight hours and a lifetime average destroyed aircraft rate of 2.44 per 100,000 flight hours (Air Force Safety Center 2024). Although these fleet-wide data indicate a lower mishap rate per flight hour for the F-35 than for the F-15, the Proposed Action would increase 173 FW flight operations relative to the No

Action Alternative; therefore, overall mishap exposure would increase with the greater number of operations and accumulated flight hours over time.

The Proposed Action would maintain the same safety procedures in place under Existing Conditions (2023). The increase in 173 FW operations associated with F-35A beddown (approximately 7,340 additional annual operations relative to Existing Conditions [2023]) would increase opportunities for incidents; however, the F-35A's advanced avionics, automation, and safety systems are expected to reduce mishap potential on a per-flight-hour basis. With continued adherence to established safety procedures, no significant adverse effects on aircraft mishap risk are expected under the Proposed Action.

Bird/Wildlife Airstrike Hazards

Under the Proposed Action, the F-35A would operate in the same military training airspace environment as the F-15C/D aircraft. Most of the F-35A training would occur above heights of 20,000 feet. However, the overall potential for BASH would not be anticipated to be statistically different following the beddown of the F-35A. The 173 FW BASH program would remain in effect under the Proposed Action, and the rate of BASH incidents would not be expected to increase.

Mid-Air Collision Avoidance

Under the Proposed Action, the F-35A would operate under the same ATC procedures and local flight rules applicable to operations at LMT. Established ATC procedures and enforcement of the MACA program reduce the possibilities of a MACA event. Additionally, Class D airspace is controlled airspace where ATC is in communication with every pilot operating within the confines of the controlled airspace. ATC is governed under the FAA Order 7110.65, *Air Traffic Control*. Section 2-1-2 states ATC's duty priority gives first priority to separating aircraft and issuing safety alerts (FAA 2025b). Therefore, no increased risk of mid-air collisions would be expected as a result of implementation of the Proposed Action.

3.10.3 Reasonably Foreseeable Actions and Environmental Trends

The reasonably foreseeable projects identified in Table 3.1-2 would be planned, designed, and implemented in accordance with applicable AT/FP requirements. Where work occurs within established QD arcs, projects would comply with applicable explosives safety standards (DESR 6055.09 and DAFMAN 91-201). Construction and demolition activities would not involve handling explosives. Projects would be designed to avoid creating obstructions within RPZs or the airfield environment and would be coordinated with the 173 FW fire department as appropriate. Accordingly, these reasonably foreseeable actions are not expected to adversely affect fire/crash response capability, RPZs, explosives safety, or aircraft safety, and safety conditions are expected to remain consistent with existing trends under both the Proposed Action and the No Action Alternative.

3.11 HAZARDOUS MATERIALS/WASTE

3.11.1 Affected Environment

49 CFR section 171.8 defines hazardous materials as hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (49 CFR section 172.101), and materials that meet the defining criteria

for hazard classes and divisions in 49 CFR part 173. Hazardous wastes are defined by the Resource Conservation and Recovery Act at 42 USC section 6903(5), as amended by the Hazardous and Solid Waste Amendments, as “a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed, or otherwise managed.”

Petroleum products include crude oil or any derivative thereof. The ROI for hazardous materials and wastes includes Kingsley Field ANGB, where hazardous materials are used, stored, and potentially generated during operations. This ROI encompasses areas impacted by base activities, including the airfield and any associated infrastructure, as well as surrounding land areas where hazardous materials and waste could be transported or affect environmental quality. The ROI does not include areas under military training airspace, as no ground disturbance or construction activities would occur in those regions.

3.11.1.1 Hazardous Materials

Hazardous materials and petroleum products are used at Kingsley Field ANGB for many functions, including fueling operations; vehicle, airplane, and helicopter maintenance; and training operations. Types of hazardous materials found at Kingsley Field ANGB include batteries; petroleum, oils, and lubricants (POLs); paints; thinners; sealants; solvents; pesticides; and fuels (i.e., Jet-A, diesel fuel, motor gasoline). Prior to on-site distribution and use, hazardous materials are stored at the base-wide Hazardous Materials Pharmacy (Building 226) (Oregon ANG 2006a). ASTs and other containers are used for bulk fluid storage (i.e., 55-gallon drums) on the base including Jet-A, gasoline, diesel fuel, lubricating oil, hydraulic fluid, used oils, transformer dielectric fluid, and hazardous waste (petroleum products), fire-fighting agents (aqueous film-forming foam [AFFF] and high-expansion foam), deicing fluid, antifreeze, liquid oxygen, boiler chemicals, and detergents. Individual storage tanks/containers equal to or greater than 55 gallons and their location, contents, capacity, tank materials, and installation date are described in detail in the 173 FW *Final Spill Prevention, Control, and Countermeasure Plan* updated November 2023 (Oregon ANG 2023e). The 173 FW *Final Spill Prevention, Control, and Countermeasure Plan* also contains the governing regulations for spill prevention and describes specific protocols for preventing and responding to releases, accidents, and spills involving oils and hazardous materials (Oregon ANG 2023e).

3.11.1.2 Hazardous Waste Management

The *Hazardous Waste Management Plan* updated in September 2014 (Oregon ANG 2014) outlines procedures for controlling and managing hazardous wastes from the point of generation until final disposal. It also includes guidance for compliance with all federal, state, and local regulations pertaining to hazardous waste. Waste minimization and pollution prevention programs are in place at Kingsley Field ANGB and are managed by the Environmental Management Office. In addition, the Environmental Management Office coordinates with the Hazardous Materials Pharmacy to evaluate hazardous substance use by maintenance activities at the 173 FW. As a result of these efforts, the 173 FW has reduced or eliminated the use of toxic or hazardous substances and the

generation of hazardous wastes wherever possible through source reduction and environmentally sound recycling (Oregon ANG 2014).

The 173 FW is regulated as a small quantity generator of hazardous waste and maintains EPA Identification Number OR3572800040. A Satellite Accumulation Point (SAP) is an area where hazardous waste is initially accumulated at the point of generation and there are 23 SAPs on the base. Hazardous wastes initially accumulated at a SAP are stored in appropriate containers before being transferred to the base Central Accumulation Point (CAP). As a small quantity generator, the 173 FW is allowed to accumulate hazardous waste in containers for a period up to 180 days, or 270 days if the receiving treatment, storage, and disposal facility(ies) is/are at a distance greater than 200 miles. There is one CAP for hazardous waste at the base (Oregon ANG 2014).

The 173 FW does not maintain any petroleum underground storage tanks (USTs) regulated under 40 CFR part 280 on the base. There are USTs used as wastewater holding tanks and oil/water separators (OWSs) (for more details, see Section 3.11.1.2) (Oregon ANG 2023e).

Kingsley Field ANGB uses OWSs to remove oils and greases from industrial wastewater prior to discharge. All OWSs discharge to the sanitary sewer collection system. Stormwater drains at the POL Storage Area discharge to OWSs and then to the stormwater system (Oregon ANG 2023e). There are 10 identified OWSs on Kingsley Field ANGB. The OWSs range in capacity from 500 to 5,000 gallons (Oregon ANG 2023e).

3.11.1.3 Toxic Substances

Regulated toxic substances typically associated with buildings and facilities include asbestos-containing materials (ACMs), lead-based paint (LBP), and polychlorinated biphenyls (PCBs). According to the most up-to-date Environmental Baseline Survey (Oregon ANG 2006a), an asbestos survey conducted on Kingsley Field ANGB in 1992 verified the presence of ACM in 35 buildings including 13 that would potentially be affected by construction (Buildings 130, 208, 219, 220, 221, 229, 231, 234, 242, 302, 331, 400, and 500). Much of the ACM was discovered to be non-friable and/or could be maintained in place. In 2006, another asbestos survey was conducted and the presence of ACM was identified in 26 buildings, including the same 13 listed above (Oregon ANG 2006b). The general recommendation included in the 2006 Asbestos Management Plan was that if the ACM was found "...to be in good condition and does not pose a threat, no immediate action is required...Removal must be considered if the areas are ever included in a repair or construction project." DAFI 32-1001, *Civil Engineer Operations, Chapter 16 Facility Asbestos Management*, assigns responsibilities and establishes requirements to incorporate facility asbestos management principles and practices and DAFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, specifically addresses asbestos-contaminated and LBP-contaminated construction and demolition debris management. Asbestos-contaminated construction and demolition debris must be treated as asbestos-containing waste, labeled in accordance with 29 CFR section 1926.1101(k), and disposed of in accordance with 40 CFR section 61.50, *Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations*, as well as any state or local requirements.

A LBP survey has not been conducted at Kingsley Field ANGB. Due to the age of buildings at the base, the potential for LBP hazards exists. However, there are no permanent housing units or habitable structures that would require disclosure of LBP, and no potential LBP hazards were

identified during the 2006 Environmental Baseline Survey site visit. In addition, buildings are tested for LBP prior to demolition or renovation (Oregon ANG 2006a). If LBP is identified in a building to be demolished or renovated, DAFMAN 32-7002 would be followed.

A PCB survey was conducted at Kingsley Field ANGB in 1998. Since that time, all sources containing 50 parts per million or more have been removed, and no evidence of leakage or other causes of concern were noted (Oregon ANG 2006a).

3.11.1.4 Contaminated Sites

Defense Environmental Restoration Program

The DoD conducts environmental restoration activities in accordance with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund. In 1986, through adoption of the Superfund Amendments and Reauthorization Act, Congress established the Defense Environmental Restoration Program (DERP) that provides for the environmental restoration of sites under the jurisdiction of the Secretary of Defense. The DAF and ANG conduct their DERP activities under their Environmental Restoration Program (ERP).

A total of 14 sites have been identified under the NGB's ERP at Kingsley Field ANGB. Six of the sites (Sites 2, 3, 4, 7, 8, and 12) are the responsibility of the U.S. Army Corps of Engineers (USACE) because these sites are located on non-federal property but were formerly used by the DAF. These sites are now referred to as Formerly Used Defense (FUD) sites, which are similar in nature and comprise virtually identical remediation challenges, but they are managed separately and are not the responsibility of the ANG. The remaining eight sites (Sites 1, 5, 6, 9, 10, 11, 13, and 14) are the responsibility of the ANG (Oregon ANG 2006a).

In 2017, a Contaminated Media Management Plan was developed for the eight ERP sites as required by the Oregon DEQ to provide guidelines and instructions on actions for any subsurface work at the base where contamination is likely to be encountered. In addition, the plan included two more contaminated sites (the Floor Drain Discharge to Ditch at the Vehicle Maintenance Building [DD018] and the Former Wash Rack Discharge to Ditch [RW004] identified by Building 573) and the two FUD cleanup sites (Sites 2 and 4) as they appeared to be located within the current base boundaries (Oregon ANG 2017).

Additionally, there is one Munitions Response Area that is a former skeet range and shotgun firing platform. Munitions debris was not observed; however, clay pigeon debris was present indicating the site was used and that the soil has not been significantly reworked or disturbed in these areas. Contaminants of concern, lead, and polycyclic aromatic hydrocarbons may have been present. This site was granted No Further Action status by Oregon DEQ in 2013 (Oregon DEQ 2013). Table 3.11-1 provides details for the ERP sites and Figure 3.11-1 shows the location of the sites.

Per- and Poly-Fluoroalkyl Substances

Aqueous Film Forming Foam

AFFF is a fire-fighting agent used commercially and by the DoD, including the DAF and ANG. According to Kingsley Field ANGB personnel, AFFF was replaced with Fluorine-Free Foam in September 2024 (Forney, personal communication, 2024).

Table 3.11-1 Environmental Restoration Program Sites at Kingsley Field ANGB

<i>ERP Site ID</i>	<i>Site Name and Location</i>	<i>Materials of Concern</i>	<i>Status</i>	<i>Land Use Controls</i>
1	Base Landfill 1 (MSA)	Arsenic was found to be the only COC exceeding the Oregon DEQ risk-based concentrations for residential receptors which was considered not to be applicable for the base.	Closed, NFA – 8 August 2007	None. No unacceptable risk identified to either human or ecological receptors.
2	Base Landfill 2 (FUD Site 2)	The results of the RI/FS indicated that no COCs were identified in soil, and that arsenic, benzene, and 1,2-dichloroethane were the only COCs identified in groundwater.	Responsibility of USACE. The final ROD recommended no action as the preferred remedial alternative.	No unacceptable risks were identified for human receptors from contaminants in groundwater, and no ecologically important species or habitat were present.
4	Coal Ash Disposal (FUD Site 4)	The results of the RI/FS indicated no COCs were identified in soil or groundwater.	Responsibility of USACE. The final ROD recommended that NFA was necessary.	No COCs discovered.
5	Coal Ash Disposal	Low levels of TPH, PAHs, and arsenic were detected in soil. GRO and arsenic were detected in groundwater.	Closed, NFA – 8 August 2007	No unacceptable risk identified to either human or ecological receptors. LUCs governing future use as a military and airport facility preclude future residential use.
6	Wood Ash Disposal	Petroleum-impacted soils encountered in this area during construction were attributed to accidental releases that occurred near the vehicle maintenance facility. Metals and PAHs were detected in soil. Lead, VOCs, and PAHs were detected in groundwater. These contaminants were below DEQ RBCs or published background concentrations (metals only) for both soil and groundwater.	Closed, NFA – 4 January 2008	None. No unacceptable risk identified to either human or ecological receptors.
9	Engine Test Cell Facility	Jet fuel and engine oil were stored at the site. DRO, PAHs, and VOCs were detected in soil at 6 to 7 feet bgs. Benzene, toluene, xylenes, and naphthalene were detected in groundwater at concentrations that were lower than the applicable DEQ RBCs.	Closed, NFA – 4 January 2008	None. No unacceptable risk identified to either human or ecological receptors.

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ERP Site ID	Site Name and Location	Materials of Concern	Status	Land Use Controls
10	Fuel Loading Facility (Renamed IRP Site 16 or PL016)	Site PL016 is used as a jet fuel storage and distribution facility. Four leaking USTs (removed in 1994 and 1995) resulted in petroleum-contaminated soil and groundwater. Remedial actions were completed at this site and a determination of NFA was requested in 1997. However, the site remained open and was reevaluated for possible pockets of contamination. BTEX and GRO were detected in soil and groundwater. Benzene and ethylbenzene concentrations in soil exceeded the indoor vapor intrusion RBC, but buildings are not located in this area and are not reasonably likely to be constructed here in the future.	Closed, NFA with restrictions – 4 August 2014. Any future intrusive work performed at the site must be performed in accordance with the July 2014 Contaminated Media Management Plan and with Oregon DEQ regulations and policies.	The LUCs/ICs include restrictions on groundwater use (other than for monitoring), confirmation that no residential construction has occurred at the site, and a land transfer notification to notify potential future property owners that closure was to industrial standards.
11	Diesel Oil Spill Site (Renamed IRP Site SS011)	In 1977, as much as 10,000 gallons of diesel was released from a ruptured underground fuel line. During 2001 and 2002, Oxygen Release Compound (ORC®) was injected near one monitoring well located northwest of Building 400. Remaining VOCs and DROs in soil and groundwater were below the applicable RBCs and ecological screening levels.	Closed, NFA with restrictions (no residential use) – 8 August 2007. In March 2014, a Final ROD that selected a NFA remedy was signed and approved by the Oregon DEQ. NFA recommendation was based on the determination that contaminants at the site do not pose an unacceptable threat to human health or the environment and is based on the assumption of continued non-residential land use.	LUCs/ICs include restrictions on groundwater use (other than for monitoring), confirmation that no residential construction has occurred at the site, and a land transfer notification to notify potential future property owners that closure was to industrial standards
13	Petroleum Release Site (Renamed IRP Site 15 or TU015)	Petroleum-impacted soil and groundwater within five possible AOCs were discovered at TU015 associated with floor drains, a UST, and an OWS. In October 2012, the area was treated with a chemical oxidant (EHC-O™) to remediate groundwater. The chemicals of concern in groundwater included BTEXN and GRO. Although not documented in the NFA Decision Document, these same compounds may be present in soil. After the chemical oxidant injection in 2012, benzene and naphthalene in groundwater did not exceed the occupational ingestion RBCs.	Closed, NFA with restrictions – 6 September 2013. The NFA recommendation was based on the presumption of continued industrial land use.	The LUCs/ICs include restrictions on groundwater use (other than for monitoring) and a land transfer notification to notify potential future property owners that closure was to industrial standards.

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ERP Site ID	Site Name and Location	Materials of Concern	Status	Land Use Controls
14	Underground Fuel Leak at Heating Plant (Building 300) (Renamed IRP Site 14 or SS014)	Approximately 3,500 cubic yards of diesel-impacted soil was removed in 1993. A pocket of soil contamination of approximately 466 cubic yards was left in-place beneath utility lines near the excavation. Benzene concentrations exceeded Oregon DEQ residential drinking water RBCs in groundwater in one monitoring well in Site 14. However, Oregon DEQ concluded that the pocket of contamination did not pose an unacceptable risk to human health and the environment, and the petroleum-impacted soil cleanup was completed according to the UST Soil Matrix Level 2 cleanup levels (Oregon Administrative Rules 304-122-320).	An NFA with restrictions concurrence letter was signed by the Oregon DEQ on 25 March 1996. In March 2014, a Final ROD that selected a NFA remedy for the site was signed and approved by the Oregon DEQ. NFA recommendation was based on the assumption of continued non-residential land use, that the area of remaining residual soil contamination remains inaccessible, and the notification of future purchasers of the property of the remaining pocket of contamination.	The LUCs/ICs include confirmation that no residential construction has occurred at the site, and a land transfer notification to notify potential future property owners that closure was to industrial standards.
19	140-Gallon Gasoline UST at Building 570 (now 571) (IRP Site 19 or TU019)	UST was removed and olfactory evidence of contaminated soil was reported in the excavation. A dark-stained area of apparently contaminated soil was observed below the former location of the vent pipe. The presence of TPH-DRO was detected in the soil samples.	Closed, NFA with restrictions – 19 March 2014. The NFA recommendation was based on the presumption of continued industrial land use.	The LUCs/ICs include confirmation that no residential construction has occurred at the site, and a land transfer notification to notify potential future property owners that closure was to industrial standards.
	Newly Identified Contamination at Building 573 (DD018 and RW004)	These two sites are for discharges from the floor drain at the vehicle maintenance building (DD018) and from the former wash rack (RW004) that drained to a ditch near Building 573. A 2017 RI/FS Report indicates that soils in the ditch are affected by PAHs.	Investigated in 2017.	LUCs might be forthcoming following investigation.

Legend: ANG = Air National Guard; AOC = area of concern; bgs = below ground surface; BTEX = Benzene, toluene, ethylbenzene, and total xylenes; BTEXN = benzene, toluene, ethylbenzene, total xylenes, and naphthalene; COC = contaminants of concern; DAF = Department of the Air Force; DEQ = Department of Environmental Quality; DRO = Diesel Range Organics; ERP = Environmental Restoration Program; FUD = Formerly Used Defense; GRO = Gasoline Range Organics; IC = Institutional Control; ID = Identification; IRP = Installation Restoration Program; LUC = Land Use Control; MSA = Munitions Storage Area; NFA = No Further Action; OWS = Oil/Water Separator; PAH = polycyclic aromatic hydrocarbons; POL = petroleum, oil, and lubricant; RBC = risk-based concentration; RI/FS = Remedial Investigation & Feasibility Study; ROD = Record of Decision; TPH = Total Petroleum Hydrocarbon; U.S. = United States; USACE = United States Army Corps of Engineers; UST = underground storage tank; VOC = volatile organic compound.

Sources: Oregon ANG 2006a, 2016, 2017, 2020b; Oregon DEQ 2022.

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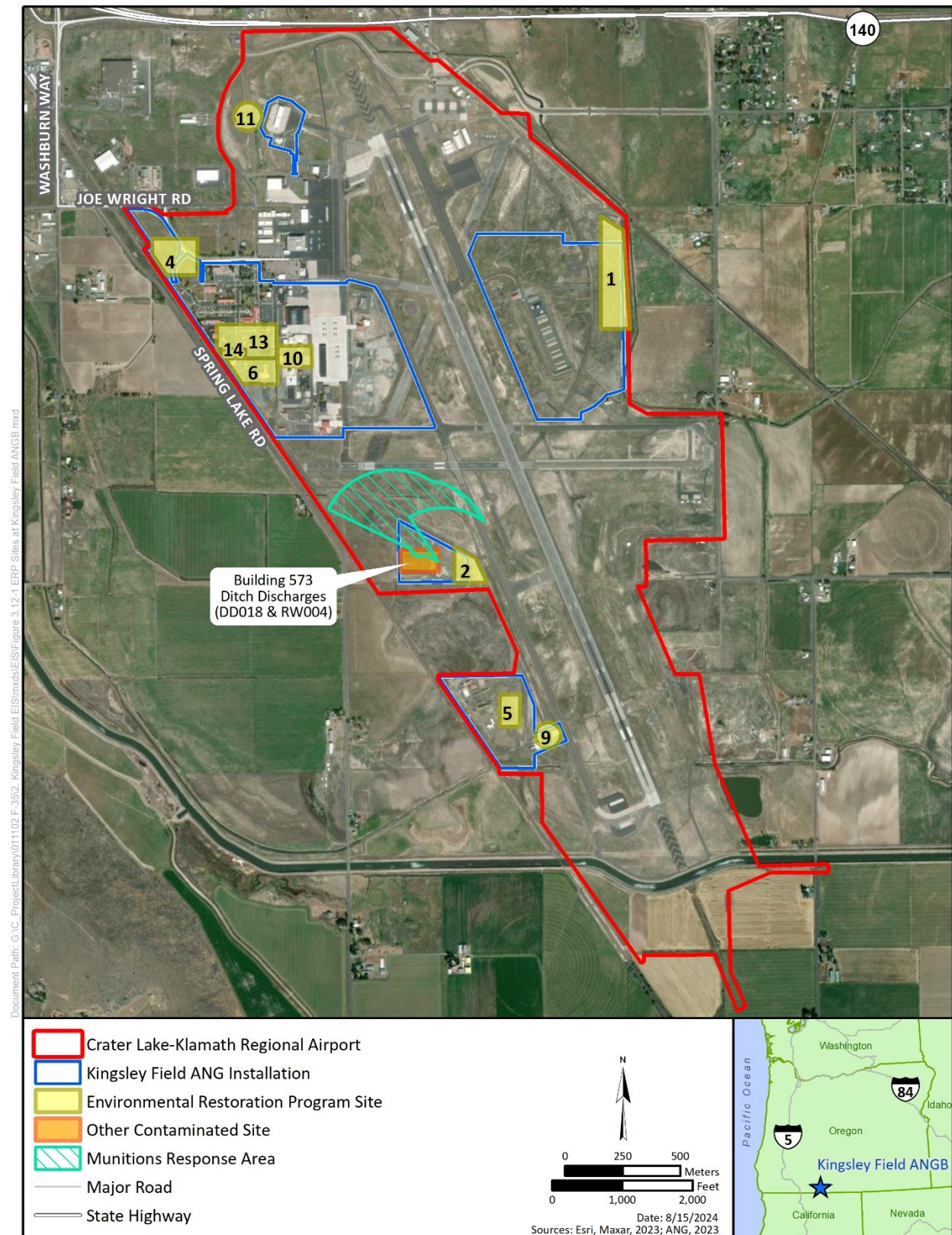


Figure 3.11-1 ERP Sites at Kingsley Field ANGB

Oregon PFAS Standards, Regulations, and/or Guidance

Oregon DEQ has designated per- and polyfluoroalkyl substances (PFAS) as one of 60 priority chemicals or chemical classes for its Toxics Reduction Strategy. In addition, Oregon DEQ is working with the Oregon Health Authority and other federal, state, and local agency partners to address growing public health and environmental concerns. Oregon DEQ and Oregon Health Authority are evaluating appropriate policy responses to protect public health and the environment from PFAS contamination (Oregon DEQ 2024c). Oregon has 2 years to adopt the EPA’s final drinking water regulation released on April 10, 2024 (Oregon Health Authority 2024).

In response to perfluorooctanesulfonic acid (PFOS)/perfluorooctanoic acid (PFOA) and other emerging contaminants, the Air Force Civil Engineer Center, responsible for environmental management and response across the DAF, established a program to systematically identify potential releases, address drinking water contamination, and prevent future contamination. Eight potential Areas of Concern or Potential Release Locations (PRLs) related to PFOS/PFOA contamination from AFFF were identified at Kingsley Field ANGB during a preliminary assessment in September 2015. In 2018, a Phase III regional site inspection (SI) was conducted at these eight PRLs to determine if PFOS/PFOA-contaminated groundwater had reached the ANG-leased property; provide a defensible No Further Action decision for qualifying PRLs; and develop data quality objectives for additional investigation of PRLs not meeting No Further Action criteria or requiring interim response actions, if appropriate (NGB 2018). All eight sites were recommended for further investigation to characterize potential PFOS/PFOA contamination (NGB 2018). Since PFOS/PFOA are also present in a wide variety of other materials, the ANG determined a supplemental assessment of non-AFFF-related PFOS/PFOA sources was necessary.

In 2022, a Supplemental Preliminary Assessment was conducted to identify potential Areas of Interest (AOIs), potentially responsible parties, and to develop recommendations for further investigation (Oregon ANG 2022). (Note: the AOIs were previously referred to as PRLs in past documents. For continuity of reference, the Supplemental Preliminary Assessment has retained the PRL numbering for AOIs 1 through 8). This assessment also expanded the geographic scope to include the former Kingsley Field AFB footprint. Ten new AOIs were identified: five (AOI 9, AOI 13, AOI 14, AOI 15, and AOI 16) are within the current Kingsley Field ANGB boundary, and five (AOI 10, AOI 11, AOI 12, AOI 17, and AOI 18) within the current LMT boundary (Oregon ANG 2022). Of these, six sites (AOI 9, AOI 10, AOI 12, AOI 13, AOI 14, and AOI 15) are included in the site investigation, while the remaining four AOIs showed no evidence of a PFAS-containing constituent release from past military use and were excluded (Oregon ANG 2023f).

Table 3.11-2 provides details on the AOIs and recommendations from the 2022 Supplemental Preliminary Assessment, and Figure 3.11-2 shows their locations.

Table 3.11-2 AOIs of PFOS/PFOA at Kingsley Field ANGB

AOI ID	Site Name and Location	Potential PFOS/PFOA Sources	Recommendations
1	Hangar 333	In 2007, approximately 200 gallons of AFFF plus associated water were released from Hangar 333's fire suppression system (total volume unknown) inside and outside of the hangar. Two nearby buildings (Building 332 and Building 334) included in AOI 1 are locations of potential PFOS/PFOA source materials. In 2018, soil sample analysis confirmed the presence of PFOS/PFOA in all surface soil samples collected in the Hangar 333 area and in three of six subsurface samples collected	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.
2	Fire Department Testing Area (FETA)-North ¹	From approximately 1995 to 2005, AFFF testing from three fire trucks from the Oregon ANG fire rescue unit would reportedly occur every Monday at one of the three locations: the North FETA, the South FETA, or the Compass Rose FETA. Typically, the fire department utilized 3 percent AFFF. The estimated amount of AFFF released weekly was 3 to 4 gallons per testing event; exact discharge quantities are unknown. The North FETA is a flat, grass- and dirt-covered area (see Figure 3.11-2).	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.
3	FETA-South ¹	See description in FETA-North. The South FETA is a flat, grass- and dirt-covered area (see Figure 3.11-2).	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.
4	FETA-Compass Rose ¹	See description in FETA-North. The Compass Rose FETA is a flat, grass- and dirt-covered area (see Figure 3.11-2). Of the three FETAs, the Compass Rose FETA site was the most heavily used.	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.
5	Building 573, Former Vehicle Maintenance Building	Small discharges of AFFF mixture from maintenance on fire trucks have occurred at this building	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.
6	Building 216, Current and Former Fire Station-	This new fire station was built in 1995. Monthly AFFF testing of one fire truck is performed in the grassy area north of Building 216, in the location of the former Building 216.	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.
7	North Outfall ¹	The North Outfall may have received any potential releases of AFFF that would have entered the drainage ditches and canals located to the east and west of the base (see Figure 3.11-2). It was determined that none of the AOIs except FETA-North (AOI 2) (located outside of the ANG-leased property) would likely contribute surface water runoff to the North Outfall.	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.

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AOI ID	Site Name and Location	Potential PFOS/PFOA Sources	Recommendations
8	South Outfall ¹	The South Outfall may have received any potential releases of AFFF that entered the drainage ditches and canals to the east and west of the base (see Figure 3.11-2). Documented use and storage of AFFF within the drainage basin (including AOIs 1, 3, 4, 5, and 6), could have discharged into the South Outfall.	PFOS/PFOA have been confirmed within the AOI. Additional sampling during the Supplemental SI is not required.
9	Former Sewage Treatment Plant ²	From about 1945 to 1995, the Former Sewage Treatment Plant treated sanitary and process wastewater from Kingsley Field, the CLKR Airport, and a nearby residential subdivision, all of which are potential PFOS/PFOA sources to the wastewater entering the plant. Sludge drying beds were located north of the plant and discharged wastewater to groundwater, and treated water was released into the adjoining Lost River Diversion Channel.	Sample potential release locations, such as the sludge drying beds, the treated water outfall, and around pipes or pump stations, where a preferential groundwater pathway may exist. Sample surface and vadose zone soils, and groundwater at presumed upgradient and downgradient hydrological locations.
10	Landfill 3/Crop Duster Area ^{1,2}	Interpretation of recent aerial photos suggests a white material was released into a catch basin and an area where dead vegetation is present adjoining the paved apron. AOI 10 includes Landfill 3 and the Crop Duster Area (see Figure 3.11-2). Maintenance wastes, pesticides, and demolition debris were reportedly placed in Landfill 3 from 1957 to 1985. Additionally, the Crop Duster Area is a likely location for releases of pesticides and herbicides during aircraft wash down and mixing, loading, or unloading of spray formulations.	Collect samples from these areas and in the vicinity of agricultural chemicals mixing and dispensing activities or spills, Sample surface and vadose zone soils, groundwater at presumed up- and downgradient hydrological locations, and catch basin sediment.
11	Former Dumpsite ^{1,2}	AOI 11 includes a former dumpsite and a former Boresight Range (see Figure 3.11-2) ³ . The dumpsite was used for an undetermined period to dispose of construction debris, electronic equipment, and general refuse, but .50-caliber ammunition may have been disposed in this area. The former Boresight Range identified at the north end of AOI 11 has the potential for small arms munitions residue in the affected area and firing platform (Shaw 2010, as cited in Oregon ANG 2022).	Evidence of specific ANG or USAF PFOS/PFOA releases to the environment was not found.
12	Former Fire Training and Crop Duster Wash Down ^{1,2}	Two fire training areas and a crop duster washdown area were formerly located at AOI 12 (see Figure 3.11-2) ⁴ . Fire training areas are likely release sites for AFFF, and crop duster washdown areas likely to contain residue from herbicides and pesticides, which may contain PFOS/PFOA. These uses reportedly ended by the early 1990s ⁵ . AOI 12 has been redeveloped with general aviation hangars, aircraft and vehicle parking, and the USFS air tanker base. Hangars may contain AFFF fire suppression systems, and the Class A foam used at the airtanker base may contain PFOS/PFOA.	Sample surface and vadose zone soils. Sample groundwater at presumed up-and downgradient hydrological locations.

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AOI ID	Site Name and Location	Potential PFOS/PFOA Sources	Recommendations
13	South Base ²	The “hush house” engine test cell facility includes storage and use of engine oil and has had minor POL releases recorded (see Figure 3.11-2). It adjoins former Landfill 5, and the current Kingsley Field ANGB rifle range. Munitions, landfills, and aircraft maintenance are all potential sources of PFOS/PFOA.	Sample surface and vadose zone soils. Sample groundwater at presumed up-and downgradient hydrological locations.
14	Kingsley Field Aircraft Maintenance Hangars ²	The Kingsley Field Aircraft Maintenance Hangars area includes two locations with aircraft maintenance activities (Buildings 219 and 213) and a wash rack (Building 237). Building 219, constructed in 1959, is used for aircraft maintenance and includes an AFFF-based fire suppression system. In 2006, the fire suppression system was noted as needing repair ⁶	Sample surface and vadose zone soils. Sample groundwater at presumed up-and downgradient hydrological locations. Sample sediment from floor drains or catch basins, if present.
15	POL Release Area ²	Petroleum contamination from multiple UST, AST, and dispensing location releases have been found in the POL Area. Remediation has occurred and groundwater monitoring is ongoing within the POL Area.	Sample surface and vadose zone soils. Sample groundwater to determine whether PFOS/PFOA were components of the POL releases. Sample sediment from floor drains or catch basins, if present.
16	Alert Hangar ²	Aircraft maintenance reportedly occurred on a sporadic basis at the Alert Hangar. No investigation for the presence of PFOS/PFOA has been performed.	Evidence of specific ANG or USAF PFOS/PFOA releases to the environment was not found.
17	Runways ^{1,2}	AOI 17 comprises the active Runways 7-25 and 14-32. Four safety incidents listed in NTSB databases ⁷ were identified at CLKR Airport and could potentially have warranted a fire response or precautionary measure. All of these incidents have the potential for PFOS/PFOA to have been released onto the runways and/or surrounding soils and stormwater catch basins. In addition to potential PFOS/PFOA releases from these landing accidents, pavement and asphalt sealers have the potential to have been formulated with PFOS/PFOA.	Evidence of specific ANG or USAF PFOS/PFOA releases to the environment was not found.
18	CLKR Airport Hangar Area ^{1,2}	AOI 18 includes the Airport Hanger Area, which encompasses large hangars which likely have AFFF fire suppression systems installed. The presence and maintenance of fire suppression systems can result in incidental releases of PFOS/PFOA-containing AFFF.	Evidence of specific ANG or USAF PFOS/PFOA releases to the environment was not found.
General		PFOS/PFOA Contamination near Installation Boundary	Collect additional surface and subsurface soil samples to determine the nature and extent of contamination. Collect additional groundwater samples on-base and off in upgradient location to quantify potential effects from upgradient sources to determine if PFOS/PFOA effects beyond the ANG-leased property are

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AOI ID	Site Name and Location	Potential PFOS/PFOA Sources	Recommendations
			increasing or decreasing. Collect additional surface water and sediment samples both on-base and off in upgradient location to quantify potential effects from upgradient sources, to define the nature and extent of PFOS/PFOA contamination beyond the ANG-leased property.

- Notes:*
- ¹Sites are located at non-ANG areas.
 - ²Identified in the 2022 Final Supplemental Preliminary Assessment.
 - ³Shaw 2010, as cited in Oregon ANG 2022
 - ⁴CH2M HILL 1981, as cited in Oregon ANG 2022
 - ⁵USACE 1994, as cited in Oregon ANG 2022
 - ⁶USAF 2006, as cited in Oregon ANG 2022
 - ⁷NTSB 2020a, 2020b, as cited in Oregon ANG 2022

Legend: AFFF = aqueous film-forming foam; ANG = Air National Guard; ANGB = Air National Guard Base; AOI = Area of Interest; AST = aboveground storage tank; FETA = Fire Department Testing Area; FUDS = Formerly Used Defense Site; LMT = Crater Lake-Klamath Regional Airport; NTSB = National Transportation Safety Board; PFOA = Perfluorooctanoic acid; PFOS = Perfluorooctane sulfonate; POL = petroleum, oil, and lubricant; PRL = Potential Release Location; SF = square foot/feet; USACE = United States Army Corps of Engineers; USAF = United States Air Force; USFS = United States Air Force; UST = underground storage tank.

Source: Oregon ANG 2018, 2022.

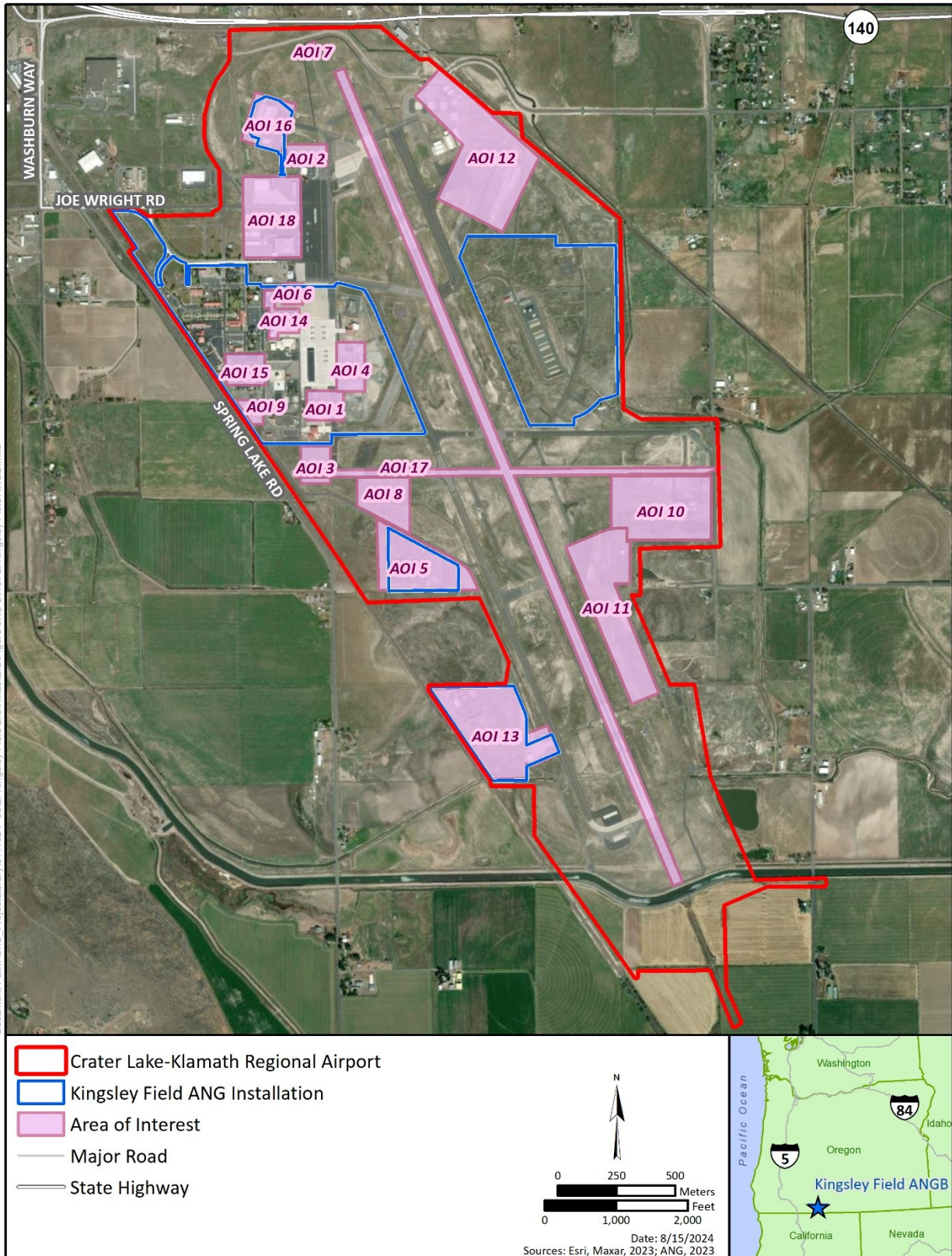


Figure 3.11-2 AOIs of PFOS/PFOA at Kingsley Field ANGB

3.11.2 Environmental Consequences

A comparative analysis of existing and proposed hazardous materials and waste management practices was performed to evaluate effects. The analyses included effects due to proposed construction activities as well as the proposed operational activities for the F-35A. The analysis considered the magnitude of anticipated increases in hazardous waste generation considering historic levels, existing management practices, and storage capacity. For ERP or AOI sites, the methodology compares the proximity of the proposed construction actions to the contaminated sites and considers construction activities and operational uses of the facilities to determine the effects on the ERP or AOI sites.

3.11.2.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented, and no F-35A beddown, associated operational changes, or beddown-related infrastructure construction would occur at LMT/Kingsley Field ANGB. Hazardous materials management, waste generation, or disposal changes would continue based on established practices. Although regular F-15C/D operations have ceased and associated hazardous materials activities have been reduced, the No Action Alternative retains the Existing Conditions (2023), which includes operational data, hazardous material management, and waste handling as they existed before the divestment of the F-15C/D fleet. Hazardous material and waste projections for the No Action Alternative are based on the 2023 modeling data and represent a consistent comparison, not current-day operations.

With a decrease in airfield and military training airspace operations, hazardous materials use and waste generation would be expected to decrease in line with reduced operations. Several proposed construction projects under the No Action Alternative involve buildings containing ACM (Projects 20a, 21b, 21c, 21d, and 22a). Additionally, some projects overlap with ERP Sites 4, 6, and 13 and AOIs 12, 14, and 15. See Tables 3.11-1 and 3.11-2 for the status of ERP sites and AOIs. Contaminated areas would be managed following the same protocols described for the Proposed Action Alternative.

Therefore, no significant effects on hazardous materials and waste would occur under the No Action Alternative.

3.11.2.2 Proposed Action Alternative

Hazardous Materials

Short-term effects would be anticipated due to construction activities associated with the Proposed Action. Construction activities would produce minor increases in handling, storage, use, and transportation of hazardous materials. The temporary increase in additional hazardous materials on-site during construction activities would be managed according to the base's *Hazardous Waste Management Plan* (Oregon ANG 2014). Additional aircraft, vehicles, and equipment would increase consumption of operating fluids and fuel; however, the long-term effects would not be significant. No direct work would be performed on the ASTs and no additional ASTs are proposed to be installed. Possible effects associated with these projects include tank ruptures or leaks during construction from the construction vehicles, equipment, and/or hazardous materials stored on-site.

The 173 FW has in place a *Final Spill Prevention, Control, and Countermeasure Plan* which would address these effects should they occur (Oregon ANG 2023e).

The types of hazardous materials needed for maintenance and operation of the F-35A would be similar to those used for maintenance and operation of the F-15C/D fleet with the one notable exception of the touch-up paint used for the low-observable coating on the F-35A. The F-35A low-observable coatings require climate-controlled storage and have a short shelf life (i.e., 90 days from date of manufacture). Containers stored locally are sized to minimize waste. Larger scale painting on the F-35A would be conducted at one of the F-35 depot locations. Under the Proposed Action, the total number of airfield operations would increase; therefore, throughput of petroleum substances and hazardous material streams would be expected to increase commensurately.

According to Kingsley Field ANGB personnel, AFFF was replaced with Fluorine-Free Foam in September 2024 (Forney, personal communication, 2024).

Hazardous Waste

Implementing the Proposed Action would have short-term effects on hazardous waste accumulation, primarily due to an increase in construction-related hazardous wastes. All construction-related hazardous waste would be managed by contractors in compliance with applicable federal and state regulations. The volume of hazardous waste generated during the operation and maintenance of the F-35A would be similar to that of the F-15C/D fleet. Waste would be tracked, analyzed, and classified to determine whether it is hazardous. All waste would be properly disposed of according to federal, state, and local requirements, with no trash or other solid waste being buried, burned, or otherwise disposed of at the project site. Any hazardous or deleterious materials storage, disposal, or accumulation near state waters must comply with Oregon Water Quality Standards (EPA 2022). The implementation of the Proposed Action is not expected to result in adverse long-term environmental effects. Hazardous waste generation would continue to be managed in accordance with the base's Hazardous Waste Management Plan and all applicable regulations. Additionally, no changes to the base's small quantity generator status are expected. Although the total number of airfield operations would increase under the Proposed Action, the F-35A's lower unscheduled maintenance needs compared to the F-15C/D would likely offset the minor increase in hazardous waste generation over time.

Toxic Substances

Toxic substances typically associated with buildings and facilities include ACM, LBP, and/or PCBs. No new toxic substances would be used or stored due to the Proposed Action. There are 13 buildings (Buildings 130, 219, 220, 221, 229, 230, 231, 234, 242, 243, 302, 331, and 500) that were identified with ACM and also involve the proposed projects under the Proposed Action.

Additionally, Buildings 208 and 220 had ACM identified; however, it has been subsequently removed. In accordance with the 2006 Asbestos Management Plan, removal of the ACM must be considered if the areas are included in a repair or construction project (Oregon ANG 2006b). If ACM is discovered within a building that is to be demolished or renovated, the proper state and federal rules and regulations would be followed, including but not limited to, 40 CFR section 61.145, *Standard for Demolition and Renovation* and 29 CFR section 1926.1101, *Asbestos Construction Standard*. DAFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, specifically addresses asbestos-contaminated and LBP-contaminated construction and

demolition debris management. Requirements address planning, exposure, recordkeeping, transportation, and disposal. Asbestos-contaminated construction and demolition debris must be treated as asbestos-containing waste, labeled in accordance with 29 CFR section 1926.1101(k), and disposed of in accordance with 40 CFR section 61.50, *Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations*, as well as any state or local requirements.

An LBP survey has not been conducted at Kingsley Field ANGB. Based on the age of several buildings at the base, there is a high likelihood that LBP was used at the facility (Oregon ANG 2006a). Hence, all buildings constructed prior to 1978 included under the Proposed Action projects would be tested for LBP prior to demolition or renovation. As a BMP, contractors who renovate or demolish buildings testing positive for LBP should be certified by the EPA and follow lead-safe work practices. LBP would be managed and disposed of in accordance with Toxic Substances Control Act, Occupational Safety and Health Administration regulations, Oregon requirements, and established ANG procedures, and established DAF procedures. The abovementioned state and federal rules and regulations as well as BMPs would be followed by the 173 FW during construction; therefore, there would be no significant effects with respect to toxic substances.

Contaminated Sites

The DoD uses the ERP to identify, characterize, clean up, and restore sites contaminated with toxic and hazardous substances, low-level radioactive materials, petroleum products, or other pollutants and contaminants. As part of the overall program to identify effects from historical operations, the DAF is also investigating potential effects related to chemicals known as PFAS. This family of chemicals was developed in the 1940s and includes PFOS, which was used in stain- and water-resistant products, and PFOA, which was used for protective coatings.

Five ERP sites (Site 4, Site 6, Site 10, Site 13, and Site 14) overlap with or are adjacent to some of the proposed construction, renovation, and/or demolition projects under the Proposed Action (Figure 3.11-3). All five ERP sites are closed with a determination of No Further Action; however, Sites 10, 13, and 14 have Land Use Controls/Institutional Controls in place (see Table 3.11-1). These controls would be taken into account prior to initiating any proposed projects.

Seven PFOS/PFOA AOIs (AOI 1, AOI 4, AOI 6, AOI 9, AOI 12, AOI 14, and AOI 15) overlap with 20 Proposed Action Alternative projects (Projects 2b, 4a-4c, 5a-5b, 7, 9a-9d, 13b-13d, 14, 16, 17, 20a-20b, and 23) (Figure 3.11-4). See Table 3.11-2 above for the status of the AOIs.

PFAS investigations at Kingsley Field ANGB are in progress and ongoing. Kingsley Field ANGB would manage PFAS-impacted materials (e.g., soils and dewatering effluent) in accordance with DoD policies and EPA guidelines during construction activities. Prior to construction, investigations would assess the potential for PFAS contamination, and if impacted materials are encountered, a Contaminated Media Management Plan would ensure proper handling, sampling, and disposal in compliance with federal, state, and local regulations.

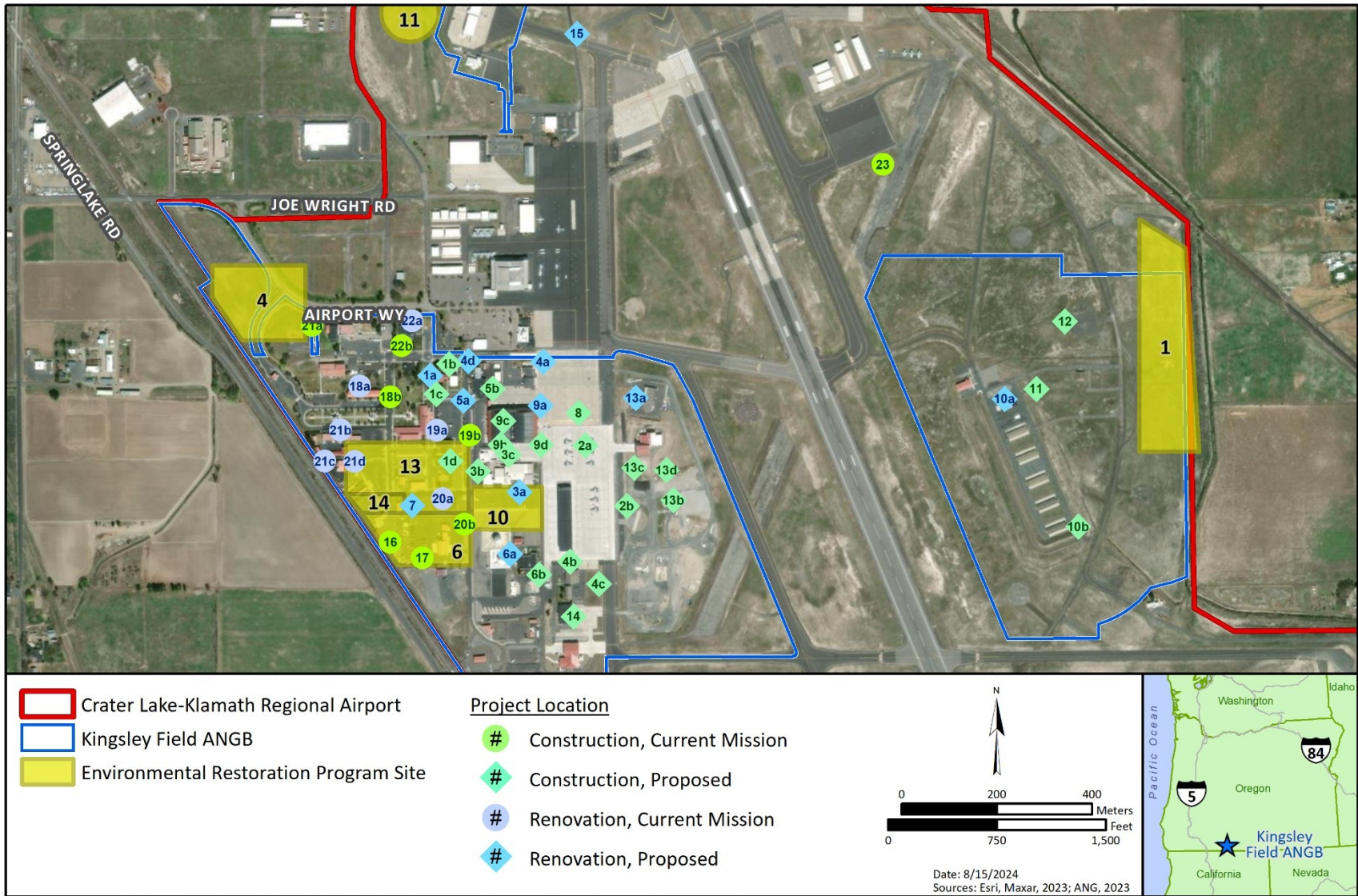


Figure 3.11-3 ERP Sites within the Vicinity of the Proposed Construction at Kingsley Field ANGB

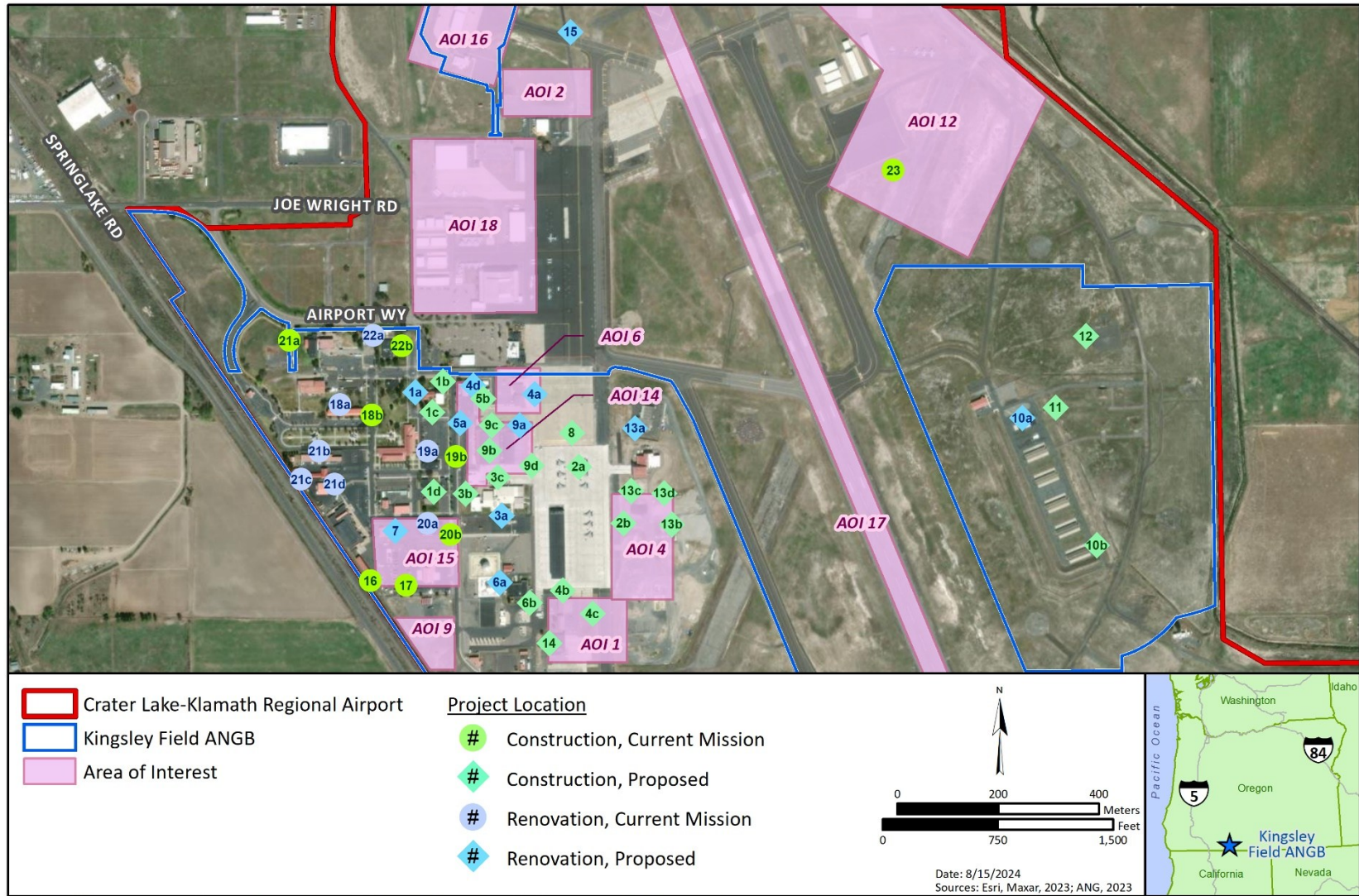


Figure 3.11-4 AOIs within the Vicinity of the Proposed Construction at Kingsley Field ANGB

Dewatering activities that occur during construction would be tested for PFAS contamination. If the water exceeds threshold contamination levels, it would be treated using a treatment train that may include Granular Activated Carbon, PFAS-tailored sorbents, ion-exchange resin, or foam fractionation. Any residual treated materials would be disposed of in accordance with DoD policies at either a treatment media regeneration facility or a municipal solid waste facility, following restrictions on incineration.

Should unforeseen PFAS contamination be discovered during construction, work would cease until the ERP Manager coordinates with relevant regulatory agencies to determine next steps. Contractors and personnel would follow Occupational Safety and Health Administration standards, ensuring proper worker safety during handling and disposal. These BMPs would ensure PFAS-impacted materials are managed responsibly, minimizing environmental and human health risks.

In April 2024, the EPA designated PFOS and PFOA as hazardous substances under CERCLA. This designation will affect the management requirements for excavated material (i.e., soil and groundwater) generated during construction. The volume of waste generated would be tracked and analyzed to determine whether each type of waste is hazardous. The DoD management of PFAS is evolving and a recent Office of the Secretary of Defense decision affected management requirements. On February 20, 2026, the Assistant Secretary of Defense for Energy, Installations, and Environment, issued a memo “Updated Interim Guidance on Destruction or Disposal of Materials Containing Per- and Polyfluoroalkyl Substances in the United States” that provides guidance to DoD installations regarding how to dispose of PFAS-containing materials (Assistant Secretary of Defense for Energy, Installations, and Environment 2026).

If contaminated media (e.g., soil, vapor, groundwater) was encountered during the course of site preparation (e.g., clearing, grading) or site development (e.g., excavation for installation of building footers) for proposed construction activities, work would cease until the 173 FW Environmental Manager establishes an appropriate course of action for the construction project to ensure that any applicable federal and state agency notification requirements are met, and to arrange for agency consultation as necessary if closed ERP sites are affected. By following these procedures, effects on ERP Sites 4, 6, 10, 13, and 14, and AOI Sites 1, 4, 6, 9, 12, 14, and 15 would not be significant.

The construction contractors would be responsible for ensuring their workers follow appropriate health and safety requirements including ensuring the field staff are Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response trained, if required. Therefore, no significant effects on hazardous materials, hazardous waste, toxic substances, or contaminated sites would occur.

3.11.3 Reasonably Foreseeable Actions and Environmental Trends

Hazardous materials use and hazardous waste generation at LMT/Kingsley Field ANGB would continue under both the Proposed Action and the No Action Alternative, and similar activities would occur during implementation of the reasonably foreseeable projects identified in Table 3.1-2. Hazardous materials required for F-35A operations and maintenance would be similar in type to those used for the F-15C/D fleet under Existing Conditions (2023). The types and quantities of hazardous materials associated with F-35A operations would not be expected to significantly differ

from those historically used for F-15C/D operations. Under the Proposed Action, increased airfield operations would be expected to result in a minor increase in petroleum use and hazardous waste generation; short-term increases in fuel use would also occur during construction activities associated with installation and airport improvement projects. Hazardous materials and wastes would be managed in accordance with the installation Hazardous Waste Management Plan and applicable federal, state, and local requirements, and pollution prevention and waste minimization practices would continue for both construction-related and operational wastes.

Facilities proposed for renovation, demolition, or construction would be inspected for ACM and LBP prior to the start of work, and any identified materials would be managed in accordance with applicable regulations. If contaminated media (soil, vapor, or groundwater) are encountered during site preparation or construction, work would stop and the 173 FW Environmental Manager would determine appropriate response actions, including any required notification and coordination for ERP sites or PFOS/PFOA areas of interest. Overall, hazardous materials and waste management conditions are expected to remain consistent with existing trends, and effects would not be significant under either the Proposed Action or the No Action Alternative.

3.12 BIOLOGICAL RESOURCES/WETLANDS

3.12.1 Affected Environment

Biological resources include plant and animal species and the habitats within which they occur. Plant associations are referred to generally as vegetation, and animal species are referred to generally as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal.

Although the existence and preservation of biological resources are intrinsically valuable, these resources also provide aesthetic, recreational, and socioeconomic values to society. This analysis focuses on species or vegetation types that are important to the functions of ecosystems, are of special societal importance, or are protected under federal or state law or statute. For purposes of this analysis, these resources are divided into four major categories: vegetation, wildlife, special status species, and wetlands.

The ROI for biological resources primarily consists of LMT/Kingsley Field ANGB, with additional information presented for the surrounding vicinity, where relevant. The ROI also includes areas under the military training airspace used by the 173 FW. Due to the nature of the actions proposed within the military training airspace, coastal resources and plant species were excluded from extensive review and analysis because the proposed activities would not result in new ground disturbance, and ordnance delivery and chaff and flare use would not exceed current levels and would occur in locations already used and authorized for those purposes. In addition, marine species, invertebrates, and fish were also excluded from review and analysis under the military training airspace as they would not likely be affected by the changes to the use of the military training airspace under the Proposed Action.

3.12.1.1 Vegetation

Vegetation at LMT/Kingsley Field ANGB is characterized predominantly by grassed and landscaped areas, with little native vegetation. Drainage ditches at LMT/Kingsley Field ANGB support aquatic and wetland vegetation, such as cattails (*Typha* spp.) and rushes (*Juncus* spp.).

Adjacent to runways and taxiways are typically mowed grasslands, composed of a mix of native and non-native species and include species such as shadscale saltbush (*Atriplex confertifolia*), saltgrass (*Distichlis spicata*), and squirrel’s tail (*Hordeum jubatum*) (NGB 2023). Two invasive plant species, perennial pepperweed (*Lepidium latifolium*) and Medusahead (*Taeniatherum caput-medusae*), were identified in 2022 (173 FW 2024a). The most dominant non-native species on the base include intermediate wheatgrass (*Elytrigia intermedia*) and bulbous bluegrass (*Poa bulbosa*) (NGB 2024d). Annual non-native grassland areas occur in smaller patches throughout the developed portions of the base and dominant species include cheatgrass (*Bromus tectorum*) and foxtail barley (*Hordeum murinum*) (NGB 2024d).

3.12.1.2 Wildlife

Wildlife habitat within the base is limited due to the small amount of natural vegetation, fragmentation, and disturbed nature of the surrounding area. In addition, the high level of activity, noise, and the surrounding airport also contribute to diminishing the quality of the local habitats to support wildlife. A total of 16 common bird species and 15 common mammal species were recorded during a comprehensive biological survey completed at Kingsley Field ANGB in 2021–2022 (NGB 2023). More details regarding these species can be found in the Kingsley Field Integrated Natural Resources Management Plan (NGB 2024d).

The military training airspace associated with 173 FW operations is located over the states of Oregon, Nevada, Idaho, and California. Wildlife within these areas occur in the following ecoregions: Coast Range, East Cascades Slopes and Foothills, Klamath Mountains, California High North Coast Range, and Northern Basin and Range (Griffith 2010). These ecoregions provide habitat for a variety of wildlife.

Additionally, the greater sage-grouse (*Centrocercus urophasianus*) occurs in sagebrush steppe underneath military training airspace associated with 173 FW operations in eastern Oregon, southern Idaho, northern California, and northern Nevada. The greater sage-grouse is considered sensitive in the state of Oregon (Oregon Department of Fish and Wildlife [ODFW] 2021) but is not federally or state-listed as threatened or endangered. ODFW created a management plan, the *Greater Sage-Grouse Conservation Assessment and Strategy for Oregon: A Plan to Maintain and Enhance Populations and Habitat* (ODFW 2011), that outlines management strategies for the species. Because the greater sage-grouse is a species with conservation and protective programs in place through state and federal agencies, including the U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management, and ODFW, it is included separately from general wildlife in this analysis.

3.12.1.3 Special Status Species

Appendix D includes a list of federal and state listed species that occur or have the potential to occur on Kingsley Field ANGB and under the military training airspace. This list was generated from the USFWS Information for Planning and Consultation (IPaC) tool (USFWS 2024a, 2024b), the ODFW Threatened, Endangered, and Candidate Fish and Wildlife Species List (ODFW 2024), the Oregon Department of Agriculture (2024), and Oregon Biodiversity Information Center (2019). A threatened and endangered species survey and report was completed for the ANGB in 2024 (173 FW 2024b). Seven federally listed threatened, endangered, or candidate species have the potential to occur at the base (USFWS 2024a). Four of these are also state listed. Three of the

seven federally listed species have occurred historically at Kingsley Field ANGB: Applegate's milk-vetch (*Astragalus applegatei*), shortnose sucker (*Chasmistes brevirostris*), and Lost River sucker (*Deltistes luxatus*). Only Applegate's milk-vetch occurs on the base at present. No critical habitat occurs on the base.

A total of 39 federally listed, proposed to be federally listed, and candidate species have potential to occur under the military training airspace (USFWS 2024b) (see Table D-1, Appendix D). Though critical habitat for some species does occur under the military training airspace, as described in Section 3.12.1, actions within the military training airspace would have no potential to impact on these species and therefore they are not considered further.

Applegate's milk-vetch is a federally endangered and narrowly distributed endemic species known to occur only in southern Klamath County, Oregon. Applegate's milk-vetch was discovered in several populations throughout the LMT and Kingsley Field property. During a 2008 survey completed by USFWS of the entire airport (approximately 1,251 acres), approximately 21,000 plants were documented at 28 distinct sites (173 FW 2024b). Some of the land surveyed included 16 sites off airport property. Some of the sites with high concentrations of plants were not located within Kingsley Field ANGB such as site #44 containing over 3,000 individuals within a single acre. In 2009, the USFWS concluded during its 5-year review that the plant is enhanced by ongoing mowing at the airport. Additionally, mowing keeps competitive grasses low and prevents the milk-vetch from being shaded out. The USFWS also observed that graveled areas such as road shoulders provided good habitat for the plant on the airport property (173 FW 2024b). During a 2011 follow-up survey, approximately 1,900 individual plants in 23 separate sites were observed at Kingsley Field ANGB (173 FW 2024b). However, populations of Applegate's milk-vetch on base have declined in recent years, with only 178 individuals recorded in 2022. Applegate's milkvetch occurred in patches of bare soil among the non-native perennial grasslands that dominated the installation. Plants tended to occur at the edges of swales or depressions, but not within those depressions, and they were observed where the soils were cracked and appeared alkaline. Possible causes for the population decline at Kingsley Field ANGB may include drought and encroachment of invasive species (173 FW 2024b).

The Lost River sucker and shortnose sucker are federally endangered species that were observed in water bodies on the base during 2011 surveys. As of 2024, the base does not support the habitat that these fish require (NGB 2024d). A small number of Lost River and shortnose suckers were historically found in the Lost River Diversion Channel that flows along the southern boundary of the airport property. However, habitat for the shortnose sucker and Lost River sucker does not exist on Kingsley Field ANGB as determined by the *Final Report Threatened and Endangered Species Surveys and Management Plan* (173 FW 2024b).

The yellow-billed cuckoo (*Coccyzus americanus*), gray wolf (*Canis lupus*), North American wolverine (*Gulo gulo luscus*), and monarch butterfly (*Danaus plexippus*) have the potential to occur at the base but have not been recorded there. The yellow-billed cuckoo is a long-distance migrant that occurs rarely in Oregon (Cornell University 2024). This species is generally found in wooded habitat with dense cover and water located nearby, including wooded areas with scrubby vegetation and dense thickets along waterbodies. Suitable habitat does not exist at Kingsley Field ANGB for the yellow-billed cuckoo (NGB 2024d), so any occurrence would likely be transient and rare.

The gray wolf inhabits a variety of habitats but overhunting and predator control programs in the 1900s resulted in severe population declines (USFWS 2024c). The gray wolf inhabits northern California and central Oregon, but intense development and human activity on the base would make a wolf occurrence highly unlikely. The gray wolf occupies large areas of forested landscapes with abundant ungulate populations; Kingsley Field ANGB does not contain forested habitat. The North American wolverine is found around Klamath Falls in north-central California and south-central Oregon (USFWS 2024d). Wolverines are highly territorial and require large areas of territory in high elevation, mostly sub-alpine and alpine, ecosystems. Kingsley ANGB would not support the North American wolverine. The monarch butterflies that occur in Oregon are part of the California overwintering population and these monarchs generally do not migrate to Mexico but instead migrate along the west coast. Monarchs may pass through the base during their west coast migration.

A total of 17 migratory birds of concern were identified for the base by the USFWS IPaC System (USFWS 2024a). In addition, 76 migratory birds that occur on the USFWS Birds of Conservation Concern or are covered by the Bald and Golden Eagle Protection Act have the potential to occur under the military training airspace (USFWS 2024b). Table D-2 in Appendix D identifies each migratory bird species and its potential seasonal occurrence within the base and military training airspace.

3.12.1.4 Wetlands

Three palustrine emergent wetlands totaling 0.29 acre occur on Kingsley Field ANGB (173 FW 2024c). All three wetlands were deemed Section 404 Non-Jurisdictional by the USACE, but Jurisdictional by the Oregon Department of State Lands (173 FW 2024c). Two out of the three wetlands occur within the vicinity of the project area near the eastern edge of Kingsley Field ANGB, but do not overlap the project locations. The third wetland is at the southern border of the Kingsley Field ANGB and is not shown in the figure. Common species within the wetlands include Baltic rush (*Juncus balticus*), broad-leaf cattail (*Typha latifolia*), spike rush (*Eleocharis palustris*), saltgrass (*Distichlis spicata*), Kentucky bluegrass (*Poa pratensis*), and greasewood (*Sarcobatus vermiculatus*) (173 FW 2024c).

3.12.2 Environmental Consequences

Analysis of effects focuses on how construction and operations would affect biological resources. Determination of the significance of potential effects on biological resources is based on: (1) the importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource; (2) the proportion of the resource that would be affected relative to its occurrence in the region; (3) the sensitivity of the resource to proposed activities; and (4) the duration of ecological ramifications. Effects to biological resources would be significant if species or habitats of concern were adversely affected over relatively large areas or if disturbances caused reductions in population size or distribution of a special status species. This section analyzes the potential for direct and indirect effects on biological resources from implementation of the Proposed Action.

3.12.2.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented, and no F-35A beddown, associated operational changes, or beddown-related infrastructure construction would

occur at LMT/Kingsley Field ANGB. 173 FW F-15C/D aircraft operations in the No Action timeframe results in a further reduction in operations (29 percent from Existing Conditions [2023]). Though the No Action Alternative assumes a reduction in operations at the airfield and in the military training airspace, biological resources would continue to be exposed to the noise associated with an airfield and in the military training airspace.

Construction activities would still be implemented under this alternative; however, effects would be localized and temporary. The site is relatively industrialized, and construction projects would occur outside of Applegate's milk-vetch areas, as documented in the Kingsley Field ANGB *Final Report Flora and Fauna Survey* (NGB 2023). BMPs would also be employed to minimize construction effects on water resources that could affect aquatic species.

As the No Action Alternative relies on the Existing Conditions (2023) for comparison purposes, effects on biological resources would remain consistent with the existing environment. No new construction-related effects on biological resources are expected beyond those already documented for Existing Conditions (2023). Therefore, there would be no significant effects on biological resources under the No Action Alternative.

3.12.2.2 Proposed Action Alternative

Vegetation

The base is composed of developed land and landscaped areas such as lawns, shrubbery, ornamental trees, and maintained, open fields of grass. Up to 704,900 SF of new impervious surfaces would result from construction activities. However, these would be within previously developed areas or actively managed landscaped areas. Therefore, there would be no significant removal of native plant communities and effects on vegetation would not be significant.

Wildlife

No construction, renovation, or demolition would occur beneath the military training airspace. Effects to wildlife on LMT/Kingsley Field ANGB from construction, renovation, or demolition would not be significant. Wildlife within the base is limited because habitat is primarily developed land and landscaped areas such as lawns, ornamental trees, or maintained open fields of grass. Noise associated with construction may cause mobile wildlife to temporarily avoid the area, including those that are protected under the Migratory Bird Treaty Act (MBTA). Disturbed nests in the immediate vicinity of construction activities would be susceptible to abandonment and depredation. However, bird and wildlife populations in the vicinity of the base where project components would occur are accustomed to elevated noise associated with aircraft and general military industrial use. As a result, indirect effects from construction noise would not be significant because the ambient noise levels within the vicinity are already elevated under Existing Conditions (2023) and would be unlikely to substantially increase by the relatively minor and temporary nature of construction under the Proposed Action. Any loss of commonly occurring individuals would not represent a noticeable portion of the population; therefore, no significant effects on wildlife would occur.

Operational noise levels at LMT/Kingsley Field ANGB would be expected to increase from Existing Conditions (2023) with the conversion to the F-35A aircraft from the F-15C/D. The majority of this area is primarily residential, commercial, industrial, and agricultural lands with little to no native wildlife habitat. Changes in operational noise would not be expected to

significantly affect terrestrial species in the area because species on and near the base are likely accustomed to elevated noise levels associated with aircraft and military operations as well as commercial, industrial, and agricultural activities.

As summarized in Section 3.2 and the *Final Noise Study* (DAF 2026), modeled military training airspace noise under the Proposed Action would increase relative to the No Action Alternative, including higher single-event noise levels for F-35A operations and increases in cumulative military training airspace noise levels (L_{dnmr}) in analyzed MOA/ATCAA areas. However, modeled military training airspace noise levels under the Proposed Action (up to 49 dB L_{dnmr} , depending on the MOA/ATCAA) would remain well below levels associated with wildlife hearing damage and below conservative continuous-noise screening levels identified in the literature (Bowles 1995). Similarly, modeled supersonic noise (maximum CDNL of 40 dBC in the Juniper/Hart MOA complex) would remain low and would not be expected to result in wildlife effects.

While a rare event due to size of the military training airspace and the typical altitude and frequency of operations, wildlife could be exposed to a brief direct overflight and associated peak noise (L_{max}) of up to 119 dB at 500 feet AGL. Flights at 500 to 5,000 feet AGL comprise approximately 2 percent of training activity, and L_{max} decreases with altitude (e.g., approximately 91 dB at 5,000 feet AGL and 81 dB at 10,000 feet AGL). Exposure to these peak noise levels would be brief (seconds in duration), and the highest levels would occur only directly beneath the flight path, with rapid attenuation away from the flight path. No harm to animal hearing would be anticipated as damage to hearing generally occurs at substantially higher levels (approximately 140 to 150 dB) (Bowles 1995). Additionally, research has demonstrated that bird responses to aircraft overflight are generally minor and generally do not affect nesting success, with flushing and other negative responses more likely at close distances and/or with repeated disturbance (ACC 2008; Delaney et al. 1999; Ellis et al. 1991; Mancini et al. 1988).

The proposed training would be episodic, and would not create a consistent, significant noise source in any one location. In the military training airspace, modeled cumulative subsonic noise under the Proposed Action would be up to 49 dB L_{dnmr} , and modeled supersonic noise would be up to 40 dBC CDNL. Collectively, these noise levels, the episodic nature of training, and the predominance of operations above 10,000 feet MSL would result in no significant effect to wildlife under the Proposed Action.

The effects described above for noise impacts on wildlife would apply to greater sage-grouse. To avoid impacts on greater sage-grouse leks (i.e., aggregations of breeding males), the 173 FW would continue to avoid greater sage-grouse core areas, as identified in the *Greater Sage-Grouse Conservation Assessment and Strategy for Oregon: A Plan to Maintain and Enhance Populations and Habitat* (ODFW 2011), to the maximum extent practicable during the breeding season (i.e., 1 March to 30 June), and would fly over these areas only when necessary to accomplish the training mission.

As discussed in Section 2.4.2, previously-identified mitigation measures for the military training airspace used by the 173 FW from the *Proposed Establishment and Modification of Oregon Military Training Airspace* (2017) (page 4-75) would continue to apply: establish buffer areas from surface to 1,000 feet AGL with a radius of 0.25 mile from mapped bald and golden eagle nests, and refrain from flying within these buffers from 1 January–15 August; coordinate with USFWS and ODFW to obtain current nesting information on an annual basis at the beginning of

each nesting season, and adjust the bald and golden eagle nesting buffer areas accordingly; and provide contact information for a website (e.g., <https://sua.faa.gov/sua/siteFrame.app>) where biologists studying and monitoring regional bald and golden eagle activity can check schedules for military sorties in the Juniper/Hart MOA Complex prior to flying annual nest surveys within the military training airspace. Additionally, as specified in the *Airspace Optimization for Readiness EIS for Mountain Home Air Force Base* (2023) (page 2-52), the DAF would continue to adhere to flight restrictions over the bighorn sheep lambing area near the 45 Ranch (over the Owyhee and South Fork Owyhee Rivers, south to Coyote Hole) in Idaho.

Since the number of airfield operations would increase under the Proposed Action, bird/wildlife aircraft strikes, including those with migratory birds, may also rise. Between 2005 and 2019, 96 bird strikes were reported at or near LMT/Kingsley Field ANGB, with peaks observed in June, September, and October (NGB 2024d). Most strikes involved small perching birds or passerines; however, 173 FW aircraft have also struck larger species such as raptors, wading birds, shorebirds, and waterfowl (NGB 2024d). Notably, 96 percent of aircraft flights occur above 10,000 feet MSL, higher than most bird flight altitudes. Over 90 percent of reported strikes occur at or below 3,000 feet AGL, though strikes at higher altitudes are common during migration. Ducks and geese have been observed up to 7,000 feet AGL (FAA 2024d). Under the Proposed Action, 6 percent of flights would occur below 10,000 feet MSL, where the risk of bird/wildlife strikes is highest. Although the proportion of flights below 10,000 feet MSL would remain low, the higher number of flights under the Proposed Action compared to the No Action Alternative would increase overall strike risk. Adherence to the BASH program would minimize strike risk (see Section 3.10, *Safety*). The 173 FW has established detailed procedures to reduce bird/wildlife aircraft strikes, including monitoring and responding to elevated risks. When risk is heightened, restrictions are placed on low-altitude flights and certain training activities (e.g., multiple approaches, closed pattern work) near the airport. Pilots receive special briefings whenever the potential for increased strikes exists within the military training airspace.

The Proposed Action would not change the locations, rates, or operating procedures for chaff and flare use. Therefore, the Proposed Action would not introduce a new or expanded pathway for biological resource effects, including wildfire-related effects, relative to the No Action Alternative.

Special Status Species

As documented in the *Kingsley Field Air National Guard Base Final Report Flora and Fauna Survey*, December 2023 (NGB 2023) and the *Integrated Natural Resources Management Plan 2024* (NGB 2024d), the only threatened and endangered species occurring on base is Applegate's milk-vetch. No construction would occur in the vicinity of areas where Applegate's milk-vetch has been observed, and no construction, demolition, or renovation would occur beneath the military training airspace.

In accordance with the *Installation Development Plan* (NGB 2015), the current policy is that there can be no loss of Applegate's milk-vetch without replacement. By FAA determination, the replacement cannot be accomplished on other airport properties. If the off-site replacement cannot be found and purchased, the State of Oregon will not allow a project to proceed. Transplanting this plant is challenging and usually unsuccessful, so replacement must be made by purchasing and protecting land with an existing Applegate's milk-vetch population.

Proposed construction would not affect the shortnose sucker and Lost River sucker since these species do not occur on the base. BMPs would still be used to avoid any effects on water resources from the proposed construction (see Section 3.7, *Water Resources*). Effects to bird species protected under the MBTA and Bald and Golden Eagle Protection Act would be the same as described in the Wildlife section above. Therefore, construction associated with the Proposed Action would not affect special status species.

Annual military airfield operations at LMT/Kingsley Field ANGB would increase under the Proposed Action. Changes in operational noise would not be expected to affect terrestrial species in the area because species on and near the base are likely accustomed to elevated noise levels associated with aircraft and military operations, and the large geographic area of the military training airspace coupled with the episodic nature of training at levels mostly above 10,000 feet MSL at high rates of speed, result in limited noise effects in any one area. Effects to potentially occurring federally or state listed species on the base and underlying the military training airspace used by the 173 FW would be similar to those described within the wildlife section. Since threatened and endangered species may experience temporary and brief noise disturbances, airfield operations under the Proposed Action may affect, but are not likely to adversely affect threatened and endangered terrestrial mammals, reptiles, and birds.

Military readiness operations are exempt from the prohibitions of the MBTA, provided they do not result in a significant adverse effect on populations of migratory bird species. Regardless, migratory birds occurring on the base would not be expected to be significantly affected by the noise from the F-35A at LMT/Kingsley Field ANGB since they would already be habituated to aircraft noise from existing operations. Additionally, 96 percent of flights in the military training airspace would occur over 10,000 feet MSL which is much higher than most bird flight. An increase in airfield operations may result in a slight increased opportunity for bird/wildlife aircraft strikes to occur, including those with migratory birds. However, adherence to the existing BASH program would minimize the risk of bird/wildlife aircraft strikes (see discussion in the *Wildlife* section, and Section 3.10, *Safety*).

Critical habitat that occurs beneath the military training airspace is unlikely to be affected by operational changes under the Proposed Action. No ground disturbance under the military training airspace would occur, and ordnance use including chaff and flares would not increase from current conditions. Brief and intermittent noise disruptions would not significantly negatively affect critical habitat. Therefore, the critical habitat that occurs under the military training airspace would experience no effect from the Proposed Action.

The NGB conducted informal consultation with the USFWS under Section 7(a)(2) of the Endangered Species Act for the basing of the F-35A FTU at Kingsley Field ANGB, including associated construction and airspace activities. The consultation package included the Request for Initiation of Informal Consultation and supporting biological assessment documentation and was submitted to USFWS on November 21, 2024. USFWS concurred with the determination that the Project may affect, but is not likely to adversely affect federally listed species and designated critical habitat. Informal consultation is complete, and formal consultation is not anticipated based on the current Proposed Action.

Wetlands

None of the proposed construction or facility renovation projects associated with the Proposed Action are located in or adjacent to any wetland area; therefore, there is no anticipated effect to wetlands.

3.12.3 Reasonably Foreseeable Actions and Environmental Trends

Reasonably foreseeable actions identified in Table 3.1-2 consist primarily of facility and pavement improvement projects within the developed airport/installation area and are not expected to substantially change biological resources conditions. Construction activities would occur largely in previously disturbed areas that lack high-quality wildlife habitat. Where applicable, avoidance and minimization measures would be implemented to prevent effects to wetlands and to habitat for Applegate's milk-vetch. If Applegate's milk-vetch or any other federally or state-listed species is encountered during construction, the USFWS and ODFW would be notified, and work in the vicinity would stop until appropriate conservation measures are established.

Under the Proposed Action, increases in aircraft operations and associated noise would be expected to result in minor, intermittent disturbance effects on wildlife at the installation and within existing military training airspace; however, these effects would be limited by the existing operational setting and the continued use of avoidance measures and agency coordination. Overall, continued implementation of conservation measures and consultation with USFWS and ODFW for projects near sensitive habitats would minimize potential effects, and biological resources conditions are expected to remain consistent with existing trends under both the Proposed Action and the No Action Alternative.

3.13 VISUAL RESOURCES

3.13.1 Affected Environment

Visual effects deal broadly with the extent to which the Proposed Action or alternative(s) would either: (1) contrast with, or detract from, the visual resources and/or the visual character of the existing environment; or (2) produce light emissions that create annoyance or interfere with activities.

The ROI for visual resources primarily consists of LMT/Kingsley Field ANGB, with additional information presented for the surrounding vicinity, where relevant. The visibility of aircraft, contrails, or lights does not constitute an adverse effect unless it diminishes the integrity of a property's historic significance (FAA 2025a). Therefore, effects on visual resources as a result of the Proposed Action's operations within military training airspace are not carried forward for analysis except as they relate to cultural resources (see Section 3.9, *Cultural Resources*). Effects on visual resources as they relate to construction and operations at the base are analyzed.

3.13.1.1 Visual Character

Klamath Falls is mainly comprised of suburban development surrounded by agricultural farmland. The city lies in the eastern foothills of the Cascade Mountain Range and the dominant visual feature is Mount Shasta, often displaying a snowcapped peak. Klamath Falls also consists of two lakes and two rivers. The visual environment at LMT/Kingsley Field ANGB is characteristic of an

industrial airfield environment and is primarily surrounded by agricultural farmland and forests (City of Klamath Falls 2016). Agricultural uses are located to the west, south and east. Views from the airport and base include tree cover, shrubs, the Cascade Range, and rural farmland.

The visual environment specific to Kingsley Field ANGB is characteristic of a military base; most structures are one to two-story buildings constructed primarily of beige brick-tone masonry or beige corrugated metal. Grass lawn areas and ornamental trees and shrubs are prevalent throughout the base and serve as a buffer between buildings, roads, and other developed areas. Public views of Kingsley Field ANGB are available at LMT and for those traveling on Springlake Road, although views of the base off Springlake Road are obstructed by LMT. The viewshed does include views of the Cascade Mountain Range when weather and air quality conditions allow. There are no other substantial natural landforms or manmade structures dominating the viewshed.

3.13.1.2 Light Emissions

Existing light emissions at LMT/Kingsley Field ANGB are associated with runway and taxiway edge lighting, approach lighting systems, and other visual safety navigational aids. Additionally, apron ramp lighting, building security lighting, and street lighting on access roadways create light emissions from LMT/Kingsley Field ANGB. The surrounding community produces light emissions associated with things like street lighting for nearby highways (Southside Expressway and Highway 39); street lighting on arterial/collector roads; headlights/brake lights from automobiles; neighboring residential, commercial, and industrial areas (building security lights, household/commercial interior and exterior lighting); and lighted parking lots or sports fields.

3.13.2 Environmental Consequences

3.13.2.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented, and no F-35A beddown, associated operational changes, or infrastructure construction related to the beddown would occur at LMT/Kingsley Field ANGB. Although the 173 FW no longer conducts regular F-15C/D operations at Kingsley Field, the No Action Alternative retains the operational assumptions from the Existing Conditions (2023) data for comparison purposes, including a 29 percent reduction in operations. Basic activities at the base would continue as they do under Existing Conditions (2023), and construction and repair projects necessary to support ongoing base operations would be implemented. The visual environment would remain largely consistent with that described in Section 3.13.1. Therefore, no significant effects on visual resources would be anticipated under the No Action Alternative.

3.13.2.2 Proposed Action Alternative

Visual Character

There are no aesthetically sensitive locations or designated historic districts within the viewshed of the proposed construction areas. All proposed construction would be located within Kingsley Field ANGB and would be visually consistent with the appearance of existing infrastructure.

During the proposed construction and demolition activities, the visual characteristics of areas undergoing development would be temporarily altered by the use of construction equipment, and

the delivery and stockpiling of construction materials. At the completion of construction, the proposed facilities and associated infrastructure would remain as permanent visual features within the viewshed; however, the principal visual features of the facilities would remain consistent with the existing military setting and visual character of Kingsley Field ANGB. After construction is complete and the F-15C/D aircraft replaced, there would be additional frequency of aircraft operations in the viewshed of the base, as described in Section 2.1. However, the area surrounding the base is primarily rural and there would not be significant effects on the viewshed given that there would not be any new activities. Any visual effects from these construction projects or additional aircraft operations as a result of the Proposed Action would not be significant.

Light Emissions

The Proposed Action would not substantially increase light emissions or create visual effects. Nighttime operations at LMT would remain low, comprising 2 percent of operations, and would not significantly increase the overall nighttime light emissions in the ROI. Construction of new facilities, parking lots, and roads within the base would include security lighting and street lighting, as applicable. The proposed renovation to Taxiway A (Project 15) would include taxiway edge lighting and other additional visual safety aids. The existing environment as it relates to light emissions is characteristic of an industrial airfield environment. The characteristics of most airport lighting systems create potential sources of annoyance to nearby residents, such as visual Navigational Aids, edge lights, and others, which emanate light emissions. There would be no appreciable net increase of light emissions that is inconsistent with the current environment and therefore no significant effects.

3.13.3 Reasonably Foreseeable Actions and Environmental Trends

Reasonably foreseeable actions identified in Table 3.1-2 include facility and pavement improvement projects within and near LMT/Kingsley Field ANGB. These projects would occur within an existing developed airfield setting and are not expected to measurably change the visual character of the airport or nearby community. Under the Proposed Action, new or modified facilities and infrastructure would be consistent with the established airfield environment influenced by military, commercial, and civilian aviation users. Visual effects associated with aircraft operations would remain similar to Existing Conditions (2023) and the No Action Alternative, and implementation of the Proposed Action is not expected to substantially increase light emissions or introduce notable new sources of visual contrast. Overall, visual resource conditions in the area surrounding LMT/Kingsley Field ANGB are expected to remain consistent with existing trends under both the Proposed Action and the No Action Alternative.

3.14 INFRASTRUCTURE/UTILITIES/NATURAL RESOURCES AND ENERGY SUPPLY/ TRANSPORTATION/PUBLIC TRANSPORTATION

3.14.1 Affected Environment

Infrastructure refers to the system of public works, such as utilities and transportation, which provide the underlying framework for a community. Utilities include water, power supply, and waste management. Transportation encompasses roadways, vehicle movement, pedestrian and bicycle traffic, and mass transit. Analysis of Natural Resources and Energy Supply evaluates a project's consumption of natural resources (e.g., water, asphalt, aggregate, wood) and energy

supplies (e.g., electricity, natural gas for heating, fuel for aircraft and ground vehicles). Consumption of natural resources and energy use may result from construction, operation, and maintenance of the Proposed Action or No Action Alternative.

All DoD installations are required to proactively plan and assess infrastructure, utility requirements and essential services to accommodate personnel increases and their dependents. Kingsley Field ANGB routinely evaluates community facilities and services to address changes from new or deployed units. Infrastructure or utility needs are identified during project planning, and if additional capacity is required, it is incorporated into the project, ensuring deficiencies are addressed early.

The ROI for infrastructure primarily includes Kingsley Field ANGB, with relevant information about the adjacent area, including local and municipal natural resource and energy sources. The ROI excludes land beneath military training airspace, as no ground disturbance, construction, or infrastructure changes would occur. Evaluated infrastructure components include potable water, wastewater, stormwater, electrical and natural gas systems, solid waste management, and transportation networks.

3.14.1.1 Potable Water

Potable water for Kingsley Field ANGB is provided by the City of Klamath Falls. The City of Klamath Falls' water supply system connects to the LMT potable water system through two water lines, which tie into the City of Klamath Falls' 16-inch main water line (NGB 2015). After entering the Kingsley Field ANGB main line, water is dispersed to different facilities throughout the base via laterals of various sizes. The city's water supply comes from groundwater that is supplied by 11 wells in the region. In 2020, the City of Klamath Falls Water Division produced approximately 2.5 billion gallons of potable water, with a potential maximum day production of 26.5 million gallons (City of Klamath Falls 2020). Kingsley Field ANGB is one of the City's top water users (City of Klamath Falls 2020). The combined usage of water from LMT and Kingsley Field ANGB in FY 2023 was approximately 22 million gallons (Kingsley Field ANGB 2024).

3.14.1.2 Wastewater

Kingsley Field ANGB manages their own domestic and industrial wastewater collection system within the operational boundary of the base, separate from the airport (Oregon ANG 2023c). Wastewater is conveyed into the City of Klamath Falls municipal system. The base system consists of a series of gravity lines, pump stations, and septic systems (NGB 2015).

3.14.1.3 Stormwater

Kingsley Field ANGB has multiple stormwater conveyances, including drainage basins and outfalls shared with the LMT (Oregon ANG 2023c). Stormwater from the base drains to Klamath Irrigation District ditches and is then discharged to the Lost River, about 2 miles southeast of LMT (City of Klamath Falls 2021). The surface water runoff from the base is discharged to five permitted outfalls or internal observation points located on all sides of the base (Oregon ANG 2023c). Stormwater runoff is discharged from different ditches, canals, and culverts into various drains that eventually drain to the Lost River Diversion Channel.

Kingsley Field ANGB maintains a SWPPP as a BMP to monitor stormwater discharge, manage stormwater, and comply with the LMT's Oregon DEQ NPDES General Stormwater Discharge Permit (1200-Z).

3.14.1.4 Electrical and Natural Gas

Electricity and natural gas are supplied to Kingsley Field ANGB by PacifiCorp and Avista Utilities (City of Klamath Falls 2021). Electricity consumption for 2023 at Kingsley Field ANGB and LMT was 5,722,316 kilowatt-hours (Kingsley Field ANGB 2024). Natural gas consumption for FY 2023 was 212,025 hundred cubic feet (Kingsley Field ANGB 2024).

3.14.1.5 Solid Waste

Municipal solid waste at Kingsley Field ANGB is managed in accordance with the 173 FW Integrated Solid Waste Management Plan (Oregon ANG 2021) and guidelines specified in DAFMAN 32-7002, *Environmental Compliance and Pollution Prevention*. Solid waste is disposed of by Waste Management Inc. or the Klamath County Solid Waste Division facility (Oregon ANG 2021). The waste is disposed of at the Klamath County Landfill. LMT and Kingsley Field ANGB produced 2,009 tons of solid waste in FY 2023 (Kingsley Field ANGB 2024).

3.14.1.6 Transportation

LMT/Kingsley Field ANGB is located approximately 5 miles south of downtown Klamath Falls. U.S. Highway 97 is the primary access road to Klamath Falls. Regional access to Klamath Falls from the east and west is provided by State Route 140, connecting Klamath Falls to Medford and Ashland, Oregon. Kingsley Field ANGB is accessed via the Main Gate located on Airport Way (Figure 3.14-1), just south of Joe Wright Road (County Highway 803). Joe Wright Road directly connects to U.S. Highway 97 to the west and State Highway 140 via Washburn Way. Washburn Way is a major north-south road that also provides access from Klamath Falls to Kingsley Field ANGB. A secondary gate to Kingsley Field ANGB is located on County Highway 876/Spring Lake Road (Figure 3.14-1); however, this gate is only used when needed or for construction traffic access and remains closed on most weekdays.

Traffic conditions for the weekday afternoon peak hour at key intersections along State Highway 140 proximate to Kingsley Field were studied for the *Klamath Falls Urban Area Transportation System Plan* (City of Klamath Falls 2012). The study assigned levels of service for these key intersections. Levels of service range from A to F, with A indicating a free-flow of traffic and Level F indicating stop-and-go waves with traffic exceeding the amount that can be served. The Washburn Way/State Highway 140 intersection consists of ramps connecting the two roads via the Washburn Way overpass; the level of service at weekday afternoon peak hour conditions is C (indicating stable but restricted flow with significant interactions with others in the traffic stream) for the westbound ramps and F for the eastbound ramps. The intersection of U.S. Highway 197 and Joe Wright Road was not studied (City of Klamath Falls 2012).

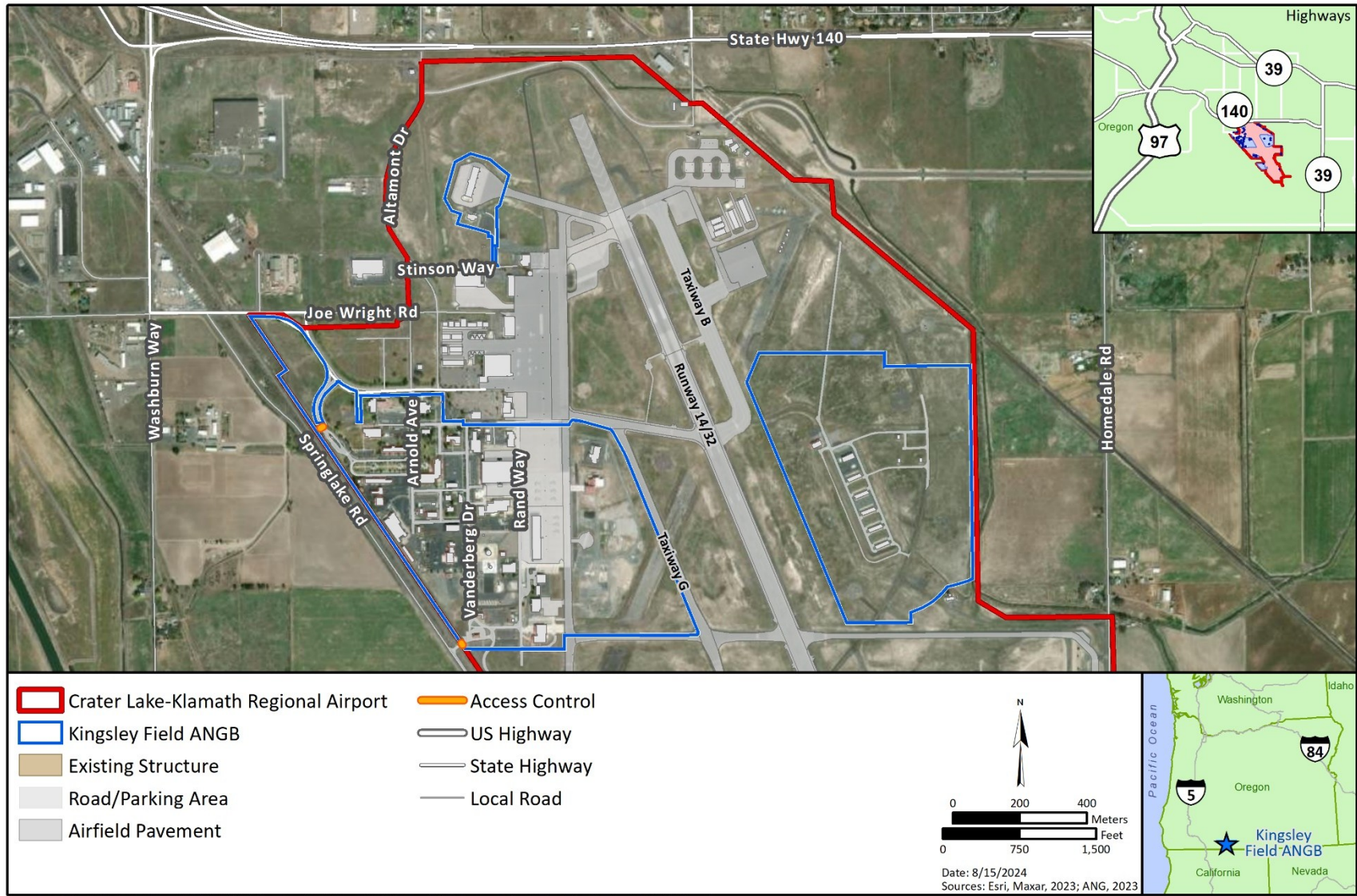


Figure 3.14-1 Transportation Network for Kingsley Field ANGB

The road network at LMT/Kingsley Field is a series of streets in a grid pattern. The primary entry through the Main Gate accesses Kingsley Way/Fighter Alley, which directs vehicles to the McConnell Circle entrance to the base. Vandenberg Drive and Arnold Avenue are the primary north-south streets through the base and Gentile Street and Bong Street are the primary east-west streets at Kingsley Field ANGB. Traffic control at intersections is signed, and there are no signalized intersections at Kingsley Field ANGB.

Parking is available at 12 parking lots providing space for 721 vehicles at Kingsley Field ANGB. No specific overflow parking is designated at the base.

3.14.2 Environmental Consequences

Potential effects on infrastructure elements are assessed in terms of effects of the Proposed Action on existing service levels. Effects on public services/utilities and transportation networks are assessed with respect to the potential for disruption or improvement of current utility systems and traffic circulation patterns and deterioration or improvement of existing levels of service on local roads. Effects may arise from physical changes to circulation or utility corridors, construction activity, and introduction of construction-related traffic and utility use.

Effects as a result of energy and natural resources consumption may include disruption, degradation, or improvement of existing levels of service or potential change in demand for energy or natural resources. Adverse effects on roadway capacities would be significant if roads with no history of capacity exceedance had to operate at or above their full design capacity as a result of an action. Transportation effects may arise from changes in traffic circulation, delays due to construction activity, or changes in traffic volumes.

3.14.2.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented, and no F-35A beddown, associated operational changes, or infrastructure construction related to the beddown would occur at LMT/Kingsley Field ANGB. Although the 173 FW no longer conducts regular F-15C/D operations at Kingsley Field, the No Action Alternative retains the operational assumptions from the Existing Conditions (2023) data for comparison purposes, including a 29 percent reduction in operations. Basic activities at the base would continue as they do under Existing Conditions (2023), and construction and repair projects necessary to support ongoing base operations would be implemented.

The demand for water (e.g., if used to control dust) could increase during demolition and construction phases associated with the No Action Alternative. However, this increase would be temporary and intermittent and would not be expected to affect regional water supply.

Under the No Action Alternative, there would be approximately 331,600 SF of new impervious surfaces as a result of proposed construction. In accordance with the Energy and Independence Security Act Section 438, any temporary increase in surface water runoff as a result of the proposed construction would be attenuated through the use of temporary and/or permanent drainage management features; these drainage management features would tie into existing drainage structures where appropriate. The proposed construction activities could temporarily affect the quality of stormwater runoff. However, implementation of appropriate standard construction practices (as described previously), preventative maintenance, and periodic inspections and

sampling to detect risk to stormwater, especially during active construction activity, would minimize these potential effects (see Section 3.7, *Water Resources*). Therefore, effects on the existing stormwater drainage system as a result of the No Action Alternative would not be significant.

Construction activity associated with the No Action Alternative could result in some interruptions of utility services during construction. These effects would be temporary, occurring briefly during active construction periods. In addition, the demand for energy (primarily electricity) could increase slightly during demolition and construction phases. The energy supply at the base and in the region is adequate and would not be affected by this temporary increase in demand. Therefore, effects related to energy systems would not be significant.

Under the No Action Alternative, approximately 336,000 SF of construction footprint would generate construction and demolition debris requiring landfill disposal. Multiple proposed demolition projects would result in a temporary increase in solid waste generation, and the modest increase in personnel and equipment use would also contribute slightly to long-term waste. However, effects on local landfills are not expected to exceed permitted throughput or reduce available capacity.

Off-base contractors conducting construction and demolition activities at Kingsley Field ANGB would be responsible for disposing of waste in accordance with federal, state, and local regulations. Much of the C&D material could be recycled, reused, or otherwise diverted from landfills, while non-recyclable waste would be collected in dumpsters for removal. Kingsley Field ANGB would continue to manage solid waste under its Integrated Solid Waste Management Plan. Therefore, effects on solid waste management under the No Action Alternative would not be significant.

Consumption of energy and natural resources would increase slightly due to the small increase in personnel at Kingsley Field ANGB. However, these changes would not result in significant effects.

3.14.2.2 Proposed Action Alternative

Potable Water

Water consumption would be expected to increase slightly as a result of the small increase in personnel; however, an increase of up to 30 personnel on the base would not be expected to affect regional water supply. Additionally, the demand for water (e.g., if used to control dust) could also increase during demolition and construction phases. However, this increase would be temporary and intermittent and would not be expected to affect regional water supply. Therefore, effects on potable water would not be significant under the Proposed Action.

Wastewater

Wastewater generation would be expected to increase slightly as a result of the increase of up to 30 personnel on the base. However, there have been no deficiencies identified with the existing system, and it is expected that the existing sanitary sewer system is generally adequate to serve the facilities proposed under this alternative. Therefore, effects on the management of wastewater would not be significant under the Proposed Action.

Stormwater

Under the Proposed Action, approximately 933,050 SF of temporary soil disturbance would occur, including up to 704,900 SF of new impervious surfaces from construction. In accordance with Energy Independence and Security Act Section 438, any temporary increase in surface water runoff from construction would be managed through temporary and/or permanent drainage features, which would connect to existing drainage systems where appropriate. Construction activities could temporarily affect stormwater quality; however, applying standard construction practices, preventative maintenance, and regular inspections and sampling during active construction would minimize these potential effects (see Section 3.7, *Water Resources*). Therefore, effects on the existing stormwater drainage system due to construction would not be significant.

Electrical and Natural Gas

Demand for electricity and natural gas would be expected to increase slightly due to the increase in 30 personnel, and the building space and facilities to be constructed would require more electricity. However, any new facilities and additions associated with this alternative would be implemented with more energy-efficient design standards and utility systems than are currently in place. In addition, construction projects would incorporate Leadership in Energy and Environmental Design and sustainable development concepts to achieve optimum resource efficiency, sustainability, and energy conservation. Therefore, average energy consumption would be expected to stay the same or decrease compared to energy consumption associated with existing facilities. In addition, an increase of up to 30 personnel on the base would not be expected to affect regional energy supply.

Construction activity associated with the Proposed Action could result in some interruptions of utility services during construction. These effects would be temporary, occurring briefly during active construction periods. In addition, the demand for energy (primarily electricity) could increase slightly during demolition and construction phases. The energy supply at the base and in the region is adequate and would not be affected by this temporary increase in demand. Therefore, effects related to energy systems would not be significant.

Solid Waste

Under the Proposed Action, construction would cover a 933,050 SF footprint, generating construction and demolition debris requiring landfill disposal. Several demolition projects would substantially increase solid waste generation. However, effects on local landfills are not expected to exceed permitted throughput or significantly reduce remaining capacity. Off-base contractors performing construction and demolition at Kingsley Field ANGB would be responsible for disposing of generated waste, adhering to federal, state, and local regulations for municipal solid waste collection and disposal. Much of the waste can be recycled, reused, or diverted from landfills. Non-recyclable construction and demolition waste would be collected in dumpsters until removed. Debris from Project 15, Taxiway A, would produce a significant volume of concrete waste. Kingsley Field ANGB would manage solid waste according to its Integrated Solid Waste Management Plan. Therefore, effects related to solid waste management would not be significant.

Transportation

An additional 30 personnel would utilize the surrounding access roads to Kingsley Field ANGB as well as the on-base transportation network. Regional roads leading to the Main Gate have varied

levels of traffic congestion during peak morning and afternoon travel times; however, the number of additional vehicles associated with the Proposed Action commuting to Kingsley Field ANGB daily is very low and not anticipated to affect the current roadway level of service. The on-base transportation network would be slightly affected by the increase in base personnel. The main gate has adequate capacity to handle the additional vehicles entering and existing the base.

Under the Proposed Action, construction, renovation, and demolition projects would affect the local transportation network short-term in and around Kingsley Field ANGB. The extra vehicles stationed at the base during construction may increase traffic and reduce circulation, but the effects would be temporary. Additionally, the secondary base access gate could be utilized to alleviate construction traffic entering and exiting the base. Proposed transportation Projects 16 and 17 would have a positive effect on parking and traffic congestion on base. To further reduce potential effects on transportation, the construction contractor would develop a Traffic Control Plan. Therefore, there would be no significant effects on transportation from the Proposed Action.

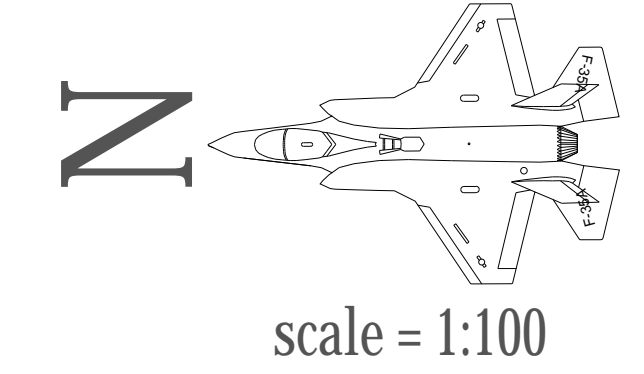
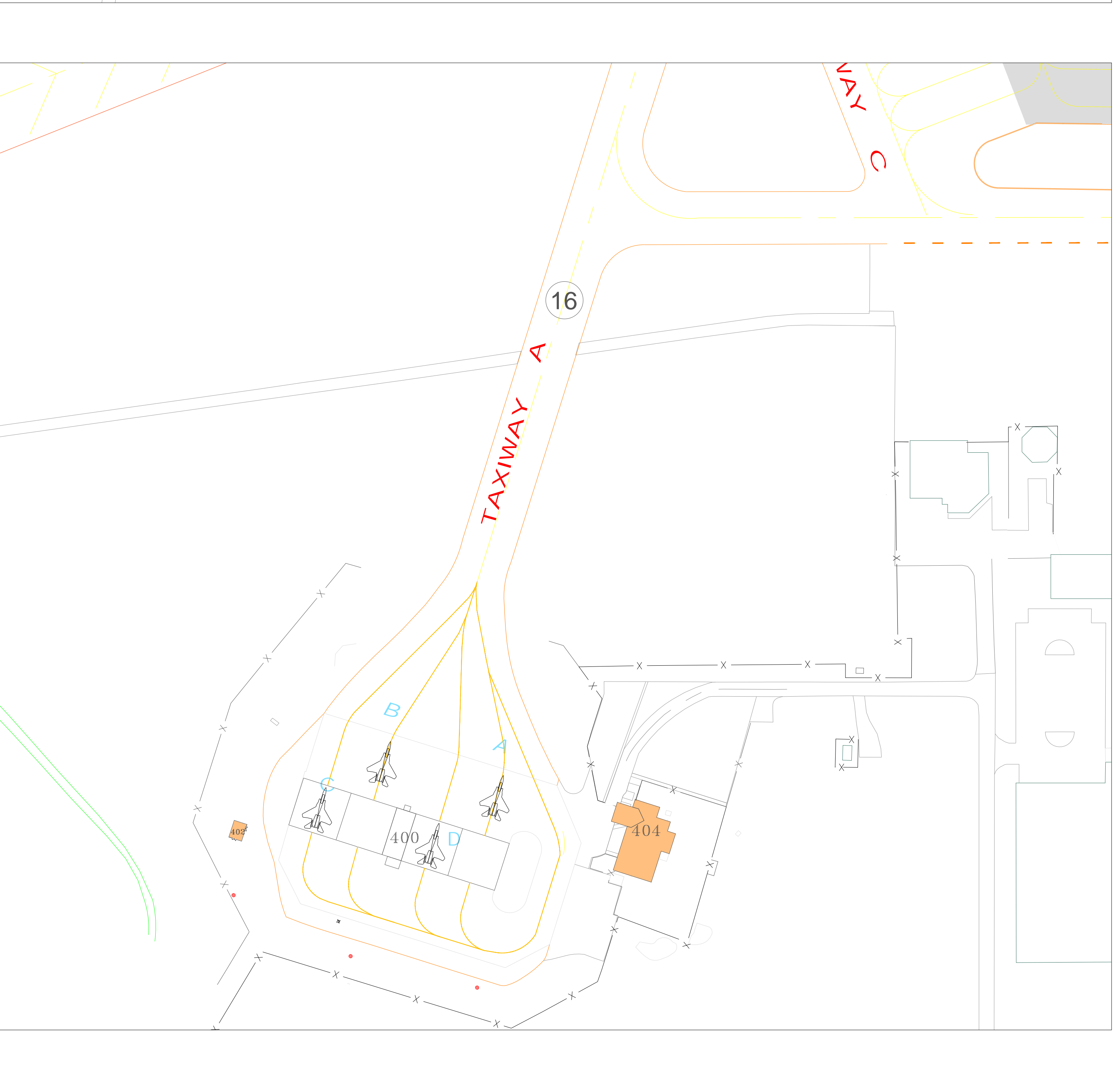
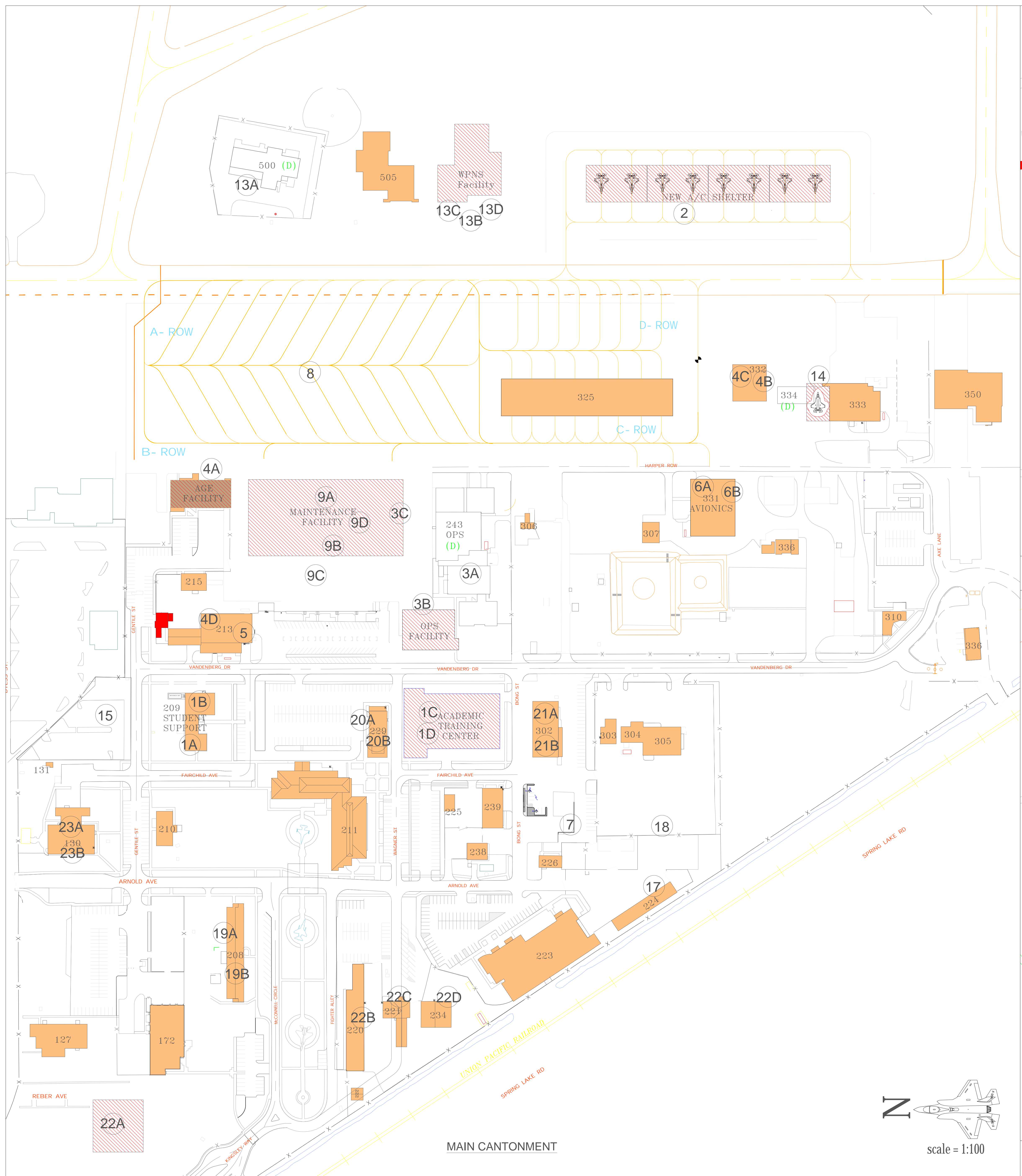
3.14.3 Reasonably Foreseeable Actions and Environmental Trends

Reasonably foreseeable actions identified in Table 3.1-2, together with the Proposed Action or the No Action Alternative, could result in small, localized changes in demand for utilities, public services, and transportation in the area surrounding LMT/Kingsley Field ANGB. Available information indicates existing systems have sufficient capacity to accommodate these changes.

Water demand could increase slightly, but current and projected capacity is sufficient to meet drinking water and operational needs. During construction, stormwater and erosion would be managed through standard BMPs (e.g., silt fencing, vegetation management, and ditching), and long-term runoff from new or modified impervious surfaces would be managed through existing and/or project-specific retention and detention features, as applicable. Electricity and natural gas demand would increase temporarily during construction; over the long term, the modest change in personnel under either alternative is not expected to result in measurable regional increases in energy demand. New facilities and renovations would incorporate sustainable design practices (e.g., energy efficiency measures consistent with Leadership in Energy and Environmental Design principles), improving resource efficiency relative to existing infrastructure.

Short-term solid waste generation would increase during demolition and construction and would be disposed of at permitted facilities with adequate capacity. Over the long term, any increase in solid waste associated with modest personnel changes would be minor and could be accommodated by existing waste management systems. The local transportation network is expected to accommodate temporary construction traffic and the long-term traffic associated with modest changes in personnel. Overall, infrastructure and utilities conditions are expected to remain consistent with existing trends under both the Proposed Action and the No Action Alternative.

APPENDIX A CONSTRUCTION FOOTPRINT MAP



**APPENDIX B1
AGENCY CORRESPONDENCE**



**DEPARTMENT OF THE AIR FORCE
WASHINGTON DC**

OFFICE OF THE ASSISTANT SECRETARY

SAF/IEI
1665 Air Force Pentagon
Washington DC 20330-1665

William "Chuck" Garrison
Director, Northwest Mountain Airports Division
Federal Aviation Administration
2200 S 216th Street
Des Moines WA 98198

Dear Mr Garrison

The Department of the Air Force (DAF) proposes to beddown F-35A Lightning II (F-35A) aircraft to replace the existing F-15 C/D aircraft at the 173rd Fighter Wing (173 FW), a unit of the Oregon Air National Guard, stationed at Kingsley Field Air National Guard Base, Klamath Falls, Oregon. The DAF previously invited the Federal Aviation Administration (FAA) to participate as a Cooperating Agency (CA) on the Environmental Assessment (EA) for the beddown of F-15 EX Eagle II aircraft at the 173 FW and the FAA's Office of Airports accepted the invitation in a letter signed 13 May 2022 (copy attached).

The DAF is elevating the analysis from an EA to an Environmental Impact Statement (EIS) as a result of a change to the previously defined scope. Consequently, the DAF requests that the FAA continue to participate as a CA in the preparation of the new FAA jurisdiction and statutory responsibilities as described in the Airport and Airway Improvement Act of 1982 (49 United States Code 47101) and Section 163 of the 2018 FAA Reauthorization Act.

This CA arrangement is established pursuant to 40 Code of Federal Regulations (CFR) § 1501.8, Cooperating Agencies. As the lead, the DAF requests the FAA CA support by:

- Participating in the scoping process;
- Assuming responsibility, upon request by the DAF, for developing information and preparing analyses, including portions of the EIS, on issues for which the FAA has special expertise;
- Making staff support available to enhance interdisciplinary review capability and provide specific comments;
- Providing review and comments within the timelines prescribed in the program milestone schedule; and
- Responding in writing to this request.

The DAF will act as the Lead Agency for purposes of compliance with Section 7 of the Endangered Species Act of 1973, as amended (16 USC §1536); Section 106 of the National

Historic Preservation Act of 1966 (54 USC §300101 et seq.) and implementing regulations (36 CFR 800); and similar regulatory consultation or coordination requirements.

Should you or your staff have further questions regarding the subject EIS or this request, our point of contact at Headquarters Air Force is Mr. Jack Bush at (703) 614-0237 or jack.bush@us.af.mil and at Headquarters National Guard Bureau, our points of contact are Ms. Kristi Kucharek at (240) 612-9471 or kristi.kucharek@us.af.mil, and Lt Col Matthew Curtin at (805) 588-0532 or matthew.curtin.1@us.af.mil.

Sincerely

ROBERT E. MORIARTY, P.E., SES
Deputy Assistant Secretary of the Air Force
(Installations)

Attachment:
FAA F-15EX EA CA response letter

cc:
SAF/GCN
AF/JAOE
AF/A4C
NGB/A4A/A8/JA

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**



U.S. Department
of Transportation
**Federal Aviation
Administration**

Northwest Mountain Region
Seattle Airports District Office
2200 S. 216th Street
Des Moines, WA 98198

July 25, 2023

Mr. Robert E. Moriarty, P.E., SES
Deputy Assistant Secretary of the Air Force (Installations)
SAF/IEI
1665 Air Force Pentagon
Washington DC 20330-1665

Dear Robert Moriarty:

Thank you for your letter signed June 13, 2023 requesting the Federal Aviation Administration (FAA) participate as a Cooperating Agency (CA) to the Department of the Air Force (DAF) preparation of an Environmental Impact Statement (EIS). The EIS is for the proposed beddown of F-35A Lightning II (F-35A) aircraft at Crater Lake-Klamath Regional Airport (FAA identifier LMT) in Klamath Falls, Oregon. The F-35A will replace the existing F-15 C/D aircraft at the 173rd Fighter Wing, a unit of the Oregon Air National Guard stationed at Kingsley Field Air National Guard Base, located at LMT.

The FAA's Office of Airports (ARP) previously agreed to participate as a CA in the preparation of the Environmental Assessment (EA) for the beddown of F-15 EX Eagle II aircraft at LMT. With the change in aircraft, ARP supports DAF's decision to elevate the analysis and prepare an EIS for this proposal and we agree to be a CA pursuant to 40 CFR §1501.8. As a CA, we agree to assign staff with the goal to help develop a single, comprehensive EIS and, if possible, a joint decision document to meet each agency's distinct obligations under the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. §§ 4321 - 4374) to support the decision making of both agencies. In addition, FAA's ARP will:


- Participate in the scoping process.
- Upon request by DAF, to the extent practical, support the development of information and analyses, including portions of the EIS concerning issues for which ARP has special expertise, with the following exception:
 - ARP is relying on DAF, as lead agency, to fund major activities or analyses it requests from ARP pursuant to 40 CFR 1501.8(b)(3). Specifically, the modeling and analysis of military and civil aircraft noise impacts for the civil airport location.
- To the extent practicable, support DAF's interdisciplinary review capability pursuant to 40 CFR §1501.8 (b)(4).
- Consult with DAF in development of a schedule, meet the schedule, and elevate, as appropriate, to the senior DAF official, any issues relating to purpose and need, alternatives, or other issues that may affect ARP's ability to meet DAF's schedule.

- Review and provide comments regarding matters for which ARP has jurisdiction by law and special expertise consistent with 40 CFR §1503.2 and specific comments pursuant to 40 CFR §1503.3, as well as ensuring the EIS is legally sufficient for the purposes of relying on the EIS pursuant to 40 CFR §1506.3 associated with ARP’s separate but connected action.

As LMT is a civil airport associated with DAF’s proposed action, please note where FAA’s ARP has jurisdiction by law, ARP will be an “action agency” on behalf of the FAA. Under the Airport and Airway Improvement Act of 1982 (49 U.S.C. 47101) and relevant implementing regulations, ARP has approval authority over an airport sponsor’s Airport Layout Plan (ALP). This approval, consistent with provisions under 49 U.S.C 47101 and Section 163 of the 2018 FAA Reauthorization Act, is a major federal action requiring compliance with NEPA. ARP’s action, however, is not substantially the same as DAF’s action. FAA’s ARP needs to ensure that DAF, as the lead agency, prepares an EIS that is sufficient for our independent obligation to comply with NEPA. This includes ensuring that the EIS meets statutory requirements pursuant to NEPA, regulatory requirements pursuant to 40 CFR Parts 1500-1508, and FAA Order 1050.1F *Environmental Impacts: Policies and Procedures* so that ARP may rely on the final EIS and sign a joint decision document.

I trust this is responsive to your request and we look forward to working with your team to develop an achievable schedule and support DAF throughout the NEPA process. If you or your staff have any questions or concerns, the regional point of contact for this is Ilon Logan at ilon.logan@faa.gov.

Sincerely,

 WILLIAM C GARRISON
2023.07.25 03:38:05
-07'00'

William C. Garrison
Director, Airports Division, Northwest Mountain Region

Cc: Ilon Logan, Environmental Protection Specialist, Northwest Mountain Region
Michael Lamprecht, Environmental Protection Specialist, Airport Planning and
Environmental Division

***Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026***

The sample scoping letter following was distributed to the list below:

Ron Alvarado, State Conservationist, Natural Resources Conservation Services, U.S. Department of Agriculture, 1201 NE Lloyd Blvd, Ste 900, Portland OR 97232
Jackie Andrew, Assistant Director Forest Planning NEPA, U.S. Forest Service, Pacific Northwest Region, 1220 SW 3rd Ave, Portland OR 97204
John Barsalou, Director, Crater Lake-Klamath Falls Regional Airport, 6775 Arnold Ave, Klamath Falls OR 97603
Mika Blain, City of Klamath Falls, Ward 2, 500 Klamath Ave, Klamath Falls OR 97601
Barry Bushue, State Director, Bureau of Land Management, 1220 SW 3rd Ave, Portland OR 97204
The Honorable Wlinsvey Campos, Oregon State Legislature, District 28, 900 Court St NE, H-480, Salem OR 97301
City of Klamath Falls Planning, 500 Klamath Ave, Klamath Falls OR 97601
Greg Davis, Captain, Klamath County Fire District No. 1, 143 N Broad St, Klamath Falls OR 97601
Derrick Degroot, Klamath County Board of Commissioners, 305 Main St, Klamath Falls OR 97601
Ann Farris, Program Manager and THPO, Oregon Department of Environmental Quality Cleanup, Emergency Response, and Hydrogeology Program, Eastern Region, 475 NE Bellevue Dr, Bend OR 97701
Brandon Fowler, Emergency Manager, Klamath County Public Health, 305 Main St, Klamath Falls OR 97601
Judy Gordon, Assistant Regional Director, U.S. Fish and Wildlife Service, Pacific Region, 911 NE 11th Ave, Portland OR 97232
Kevin Heatley, Field Manager, Bureau of Land Management, Klamath Falls Office, 2795 Anderson Ave, #25, Klamath Falls OR 97603
Wyatt Hefley, Air Tanker Base Manager, U.S. Forest Service, 6300 Summers Ln, Klamath Falls OR 97603
Dave Henslee, Klamath County Board of Commissioners, 305 Main St, Klamath Falls OR 97601
Paul Henson, State Supervisor, U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, 2600 SE 98th Ave, Ste 100, Portland OR 97266
Klamath County Cultural Coalition, PO Box 576, Klamath Falls OR 97601
Klamath County Museums, 1451 Main St, Klamath Falls OR 97601
Klamath County Public Health, 3314 Vandenberg Ave, Klamath Falls OR 97603
The Honorable Tina Kotek, Governor, State of Oregon, 900 Court St, Ste 254, Salem OR 97310-4047
Jennie Land, Area Manager, Bureau of Reclamation, Klamath Basin, 6600 Washburn Way, Klamath Falls OR 97603
Doug Laye, Manager, Klamath Falls Fish and Wildlife Office, U.S. Department of the Interior, 1936 California Ave, Klamath Falls OR 97601
The Honorable Dennis Linthicum, Oregon State Senate, District 28, 900 Court St NE, S-311, Salem OR 97301
Abbie McClung, City of Klamath Falls, Ward 4, 500 Klamath Ave, Klamath Falls OR 97601
Kelley Minty Morris, Klamath County Board of Commissioners, 305 Main St, Klamath Falls OR 97601
Randy Moore, Chief, U.S. Forest Service, Klamath Ranger District, 2819 Dahlia St, Ste A, Klamath Falls OR 97601
Jeremy Morris, Director, Klamath County Public Works, 305 Main St, Klamath Falls OR 97601
Hunter Moyles, Wildlife Biologist, USDA/APHIS/Wildlife Services - Kingsley Field, 211 Arnold Ave, Kingsley Field, Klamath Falls OR 97603
Kelsey Mueller Wendt, City of Klamath Falls, Ward 5, 500 Klamath Ave, Klamath Falls OR 97601
Jeffrey Nettleton, Area Manager, Bureau of Reclamation, Klamath Basin, 6600 Washburn Way, Klamath Falls OR 97603

***Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026***

Erik Nobel, Planning Director, Klamath County, 305 Main St, Government Center, Klamath Falls OR 97601

Oregon Department of Environmental Quality, 803 Main St, Ste 201, Klamath Falls OR 97604-9998

Oregon Department of Fish and Wildlife, Klamath Watershed District Office, 1850 Miller Island Rd, Klamath Falls OR 97603

Oregon Historical Society, 1200 SW Park Ave, Portland OR 97205

Michelle Pirzadeh, Acting Regional Administrator, USEPA Region 10, 1200 Sixth Ave, Ste 155, Seattle WA 98101

Ramona Quinn, Klamath County Public Health, 3314 Vandenberg Rd, Klamath Falls OR 97603

Terra Russo, City of Klamath Falls, Ward 3, 500 Klamath Ave, Klamath Falls OR 97601

Scott Souders, Engineer, Klamath Falls City Development/Planning, 500 Klamath Ave, Klamath Falls OR 97601

Isaak Stapleton, Interim Director, Native Plant Conservation, Oregon Department of Agriculture, 635 Capitol St NE, Salem OR 97301-2532

Phil Studenberg, City of Klamath Falls, Ward 1, 500 Klamath Ave, Klamath Falls OR 97601

Jonathan Teichert, City Manager, City of Klamath Falls, 500 Klamath Ave, Klamath Falls OR 97601

U.S. Army Corps of Engineers, Portland District, PO Box 2946, Portland OR 97208

Iain Vasey, Director of Development Services, City of Klamath Falls, 226 S 5th St, Klamath Falls OR 97601

Fred Way, Forest Supervisor, U.S. Forest Service, Fremont-Winema National Forest Headquarters, 1301 S G St, Lakeview OR 97630

The Honorable Carolyn Westfall, Mayor, City of Klamath Falls, 500 Klamath Ave, Klamath Falls OR 97601

Mark Willrett, Director, Department of Public Works, City of Klamath Falls, 226 S 5th St, Klamath Falls OR 97601



Sample Agency Letter

NATIONAL GUARD BUREAU
3501 FETCHET AVENUE JOINT BASE ANDREWS 20762-5157

4 June 2024

NGB/A4FR

Isaak Stapleton
Interim Director
Native Plant Conservation
Oregon Department of Agriculture
635 Capitol St NE
Salem OR 97301-2532

Dear Mr. Stapleton

The National Guard Bureau (NGB) pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 United States [U.S.] Code 4321 et seq.), is preparing an Environmental Impact Statement (EIS) that will analyze potential effects to human health and the natural environment, including historic properties and traditional cultural resources, for a proposed undertaking.

The purpose of the Proposed Action is to increase F-35A pilot production in support of the National Defense Strategy. The Proposed Action would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission (Attachments 2, 3). This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. The 173 FW pilots would conduct training from the installation and in existing military training airspace associated with the 173 FW installation (Attachment 4). There would be modifications to the existing military training airspace under this Proposed Action; however, there could be an increase in operations within the airspace. The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

The undertaking is the operation and associated infrastructure construction of one formal training unit (FTU) squadron of F-35A Lightning II (F-35A) aircraft at Kingsley Field Air National Guard Base (ANGB) at the Crater Lake-Klamath Regional Airport (LMT), in Klamath Falls, Oregon (Attachment 1). The squadron would consist of 24 F-35A Primary Aerospace Vehicles Authorized (PAA) and two Backup Aerospace Vehicles Authorized (BAA) and would replace the existing 26 F-15C/D aircraft.

The NGB invites you to attend an in-person public scoping meeting at Crater Lake-Klamath Regional Airport. The materials that will be presented at the open-house meeting will

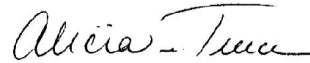
also be available on the website for viewing. The date, time, and address for the public scoping meeting is:

Wednesday June 26, 2024
5:00–7:00 p.m.
Crater Lake-Klamath Regional Airport
3000 Airport Way
Klamath Falls, Oregon

Further, the NGB requests information or agency-specific preliminary comments that would alleviate or highlight areas of concerns preceding this EIS. Areas of concern may include potential effects to: physical, ecological, social, cultural, and archaeological resources. The NGB also requests any information that your agency may have regarding other proposed, ongoing, or recently completed projects that could create or exacerbate impacts resulting from the Proposed Action.

Please respond within thirty (30) days of receipt of this letter to NGB Project Manager, ATTN: F-15EX, F-35A EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject titled as ATTN: Klamath Falls F-35A EIS. Thank you for your assistance.

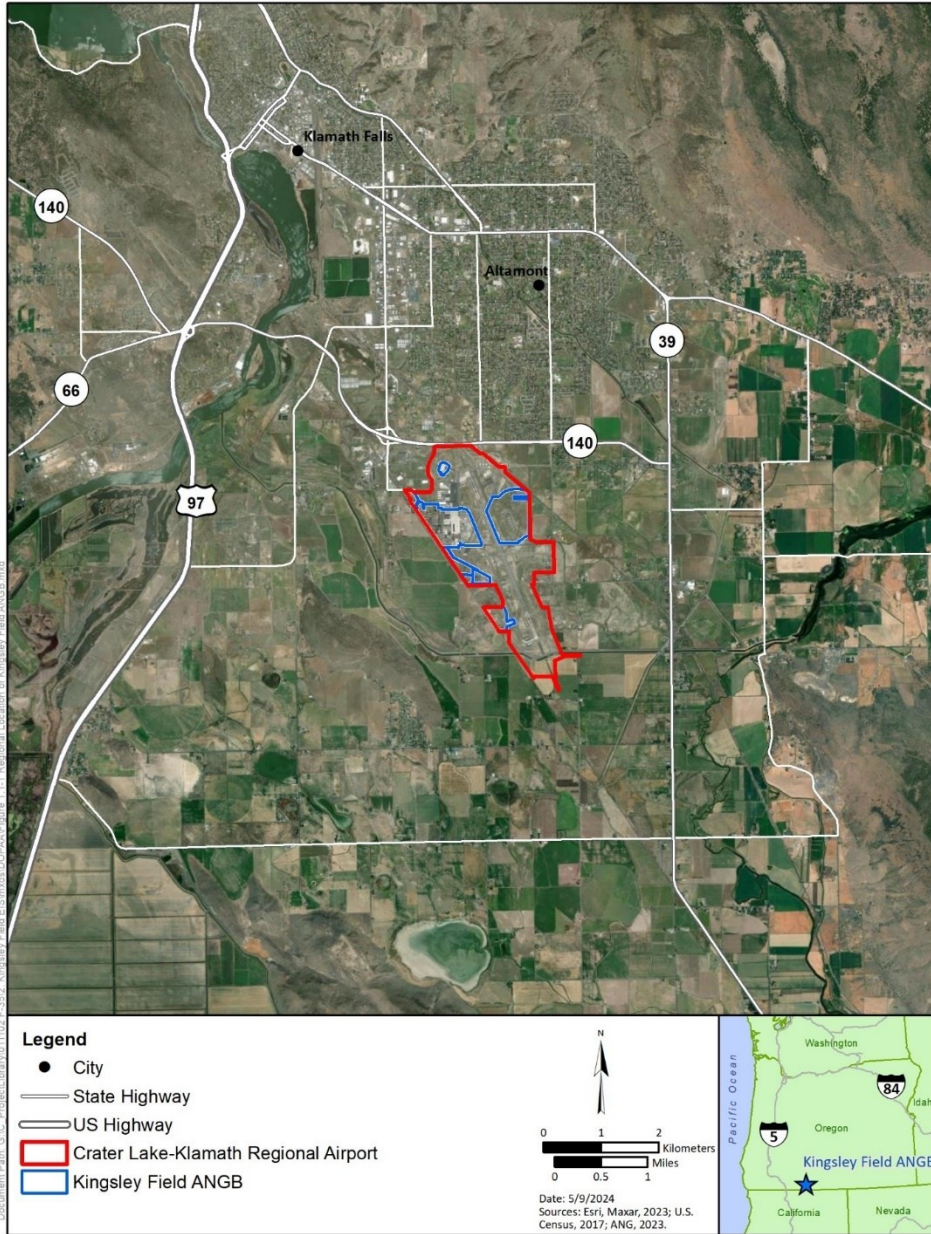
Sincerely,



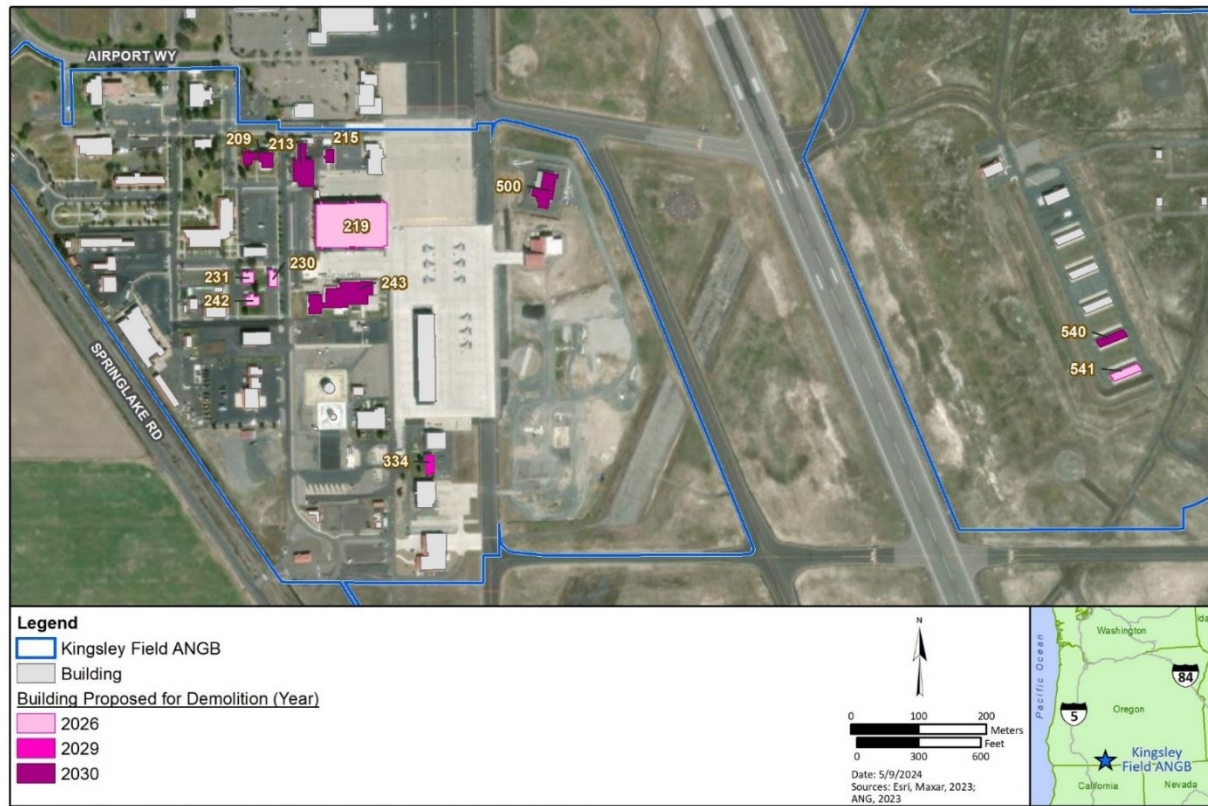
Alicia Treece, NGB/A4FR
NEPA Program Manager

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB

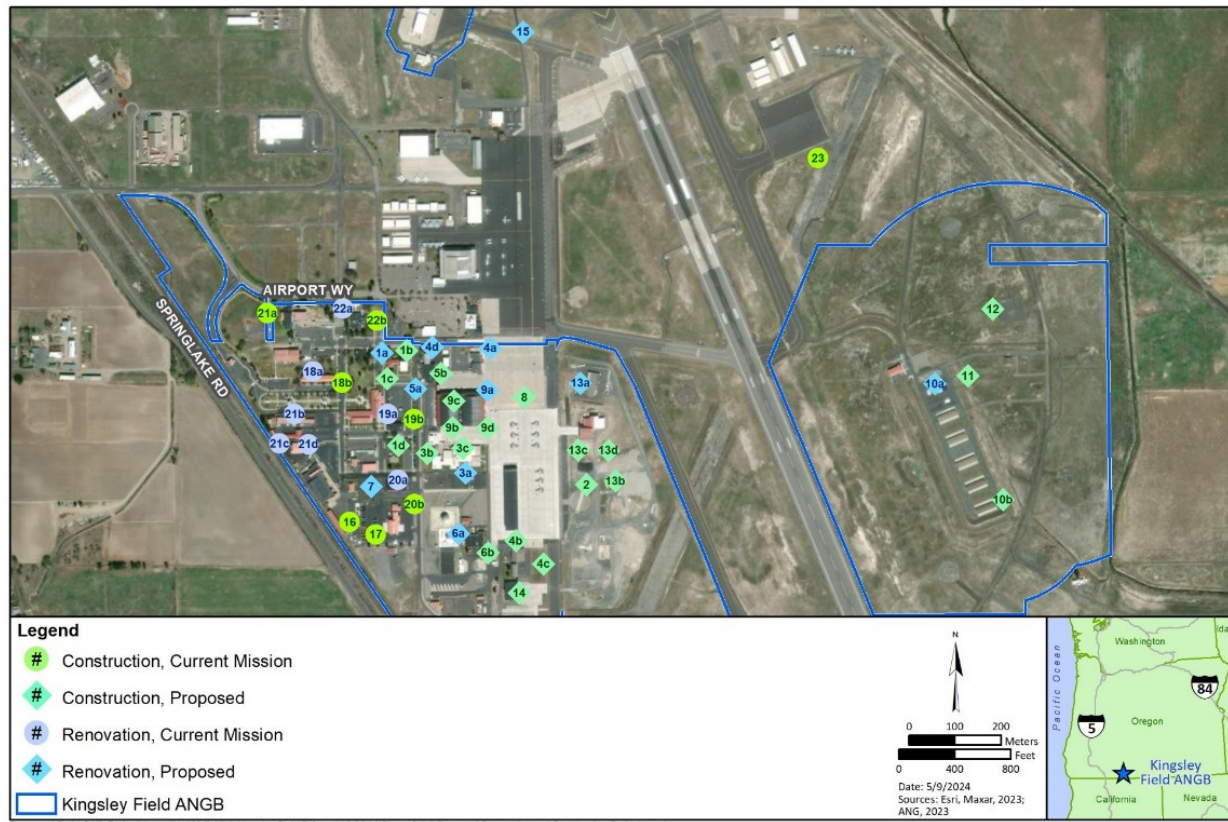


Attachment 2 – Proposed Construction, Renovation, and Demolition Project Maps



Proposed Demolition Projects

Attachment 2 – Proposed Construction, Renovation, and Demolition Project Maps



Proposed Construction and Renovation Projects

Attachment 3 – Proposed Construction, Renovation, and Demolition Project Tables

Summary of Construction and Renovation Projects

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#1 Provide Training Classrooms¹	1a	Modify existing B209 (existing simulator building) to house flight training classrooms (companion to Project 1b/1c).	Alternate	2027	0	0	Yes	No
	1b	Construct addition to B209 to include entire category code (i.e., authorized area) for flight training classrooms (companion to Project 1a/1c).	Alternate	2027	3,500	3,500	Yes	No
	1c	Construct new building containing 4 FMS, 6 MMRT, and contractor support (companion to Project 1a/1b).	Alternate	2027	29,583	29,583	Yes	No
	1d	Construct new building containing flight training classrooms, 4 full motion simulators, 6 MMRT, and contractor support (includes demolition of B242, B230, B231).	Preferred	2027	38,300	23,958	Yes	No
#2 Construct Echo Aircraft Shelter	2	Construct 4-bay, 8 aircraft shelter sized to universal fighter standards.	Preferred	2027	316,000	272,000	Yes	No
#3 Operations Group Facility²	3a	Repair B243 operations group facility to meet F-35 requirements for special access program facilities, office space, and contractor support.	Alternate	2028	0	0	Yes	No
	3b	Construct new operations group facility containing special access program facilities, office space, contractor support (includes demolition of B243).	Alternate	2028	25,200	0	Yes	No

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 3 – Proposed Construction, Renovation, and Demolition Project Tables

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
	3c	Construct new operations group facility combined with maintenance facility containing special access program facilities, office space, contractor support, includes demolition of B243 (companion to Project 9d).	Preferred	2028	25200	0	Yes	No
#4 ASE Facility³	4a	Repair B216 for use as aircraft support equipment facility.	Alternate	2029	0	0	Yes	No
	4b	Construct addition to B332 to accommodate increase requirement for ASE facility	Preferred	2029	1,750	0	Yes	No
	4c	Construct new B332 for use as ASE facility	Alternate	2029	15,000	0	Yes	No
	4d	Repair B213 for use as ASE facility	Alternate	2029	0	0	Yes	No
#5 Engine Shop⁴	5a	Repair B213 engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	0	0	Yes	No
	5b	Construct new engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	15,000	5,000	Yes	No
#6 Avionics/ Pilot Fitment Facility	6a	Repair B331 to accommodate reduced avionics, battery room, and pilot fitment facility.	Preferred	2029	0	0	Yes	No
	6b	Construct new B331 avionics, battery room, and pilot fitment facility.	Alternate	2028	12,000	0	Yes	No
#7 Loading Dock	7	Repair loading dock for larger load leveler and better space utilization.	Preferred	2026	50,000	4,000	Yes	No
#8 Temporary LAMS Shelters	8	Install temporary LAMS shelters for aircraft on existing pavements.	Preferred	2027	0	0	Yes	No

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 3 – Proposed Construction, Renovation, and Demolition Project Tables

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#9 Maintenance Hangar and Shops⁵	9a	Repair and reconfigure B219 maintenance hangar and shops to include improvements for seismic, light protection systems, and fire protection systems.	Alternate	2027	0	0	Yes	No
	9b	Construct new 6-aircraft maintenance hangar (Phase 1), includes demolition of east bay B219 (integrates with 9c Phase 2).	Alternate	2028	50,700		Yes	No
	9c	Construct new aircraft maintenance shops (Phase 2), includes demolition of west bay B219 (integrates with 9b Phase 1).	Alternate	2026	36,800		Yes	No
	9d	Construct new combined 6-aircraft maintenance hangar, aircraft maintenance shops, and AMU. Includes demolition of B219.	Preferred	2027	90,000		Yes	No
#10 Munitions Maintenance and Inspection Facility⁶	10a	Repair existing maintenance and inspection facility to meet SCIF needs and update systems.	Preferred	2027	0	0	Yes	No
	10b	Construct new munitions maintenance and inspection facility for 1.1 (mass detonation) and 1.2 (fragmentation) explosives operations to meet minimum explosive standards.	Preferred	2026	3,900	3,900	Yes	No
#11 Munitions Trailer	11	Construct new pull through maintenance facility for large trailers.	Preferred	2026	1,500		Yes	No
#12 Munitions Assembly Pad	12	Construct new munitions assembly pad and inert storage facility.	Preferred	2030	20,000	20,000	Yes	No

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 3 – Proposed Construction, Renovation, and Demolition Project Tables

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#13 Weapons Facility⁷	13a	Repair B500 weapons release facility to meet standards for F-35 and safety and seismic upgrades.	Alternate	2027	0	0	Yes	No
	13b	Construct new hangar bay for weapons load training and light protection system parking spot	Preferred	2027	15,000	15,000	Yes	No
	13c	Construct new facility attached to weapons load training bay including all shops for associated AMU AFSC's (currently AMXS).	Alternate	2027	22,400	22,400	Yes	No
	13d	Construct new weapons release facility attached to weapons load training facility.	Preferred	2027	18,000	18,000	Yes	No
#14 Fuel Cell Bay⁸	14	Construct additional fuel cell maintenance bay onto existing B333 fuel cell bay, and light protection system parking spot	Preferred	2029	6,800	0	Yes	No
#15 Taxiway A	15	Repair Taxiway A access ramp to B400	Preferred	2026	8,500	0	Yes	No
#16 LRS Covered Parking	16	Construct LRS covered parking for LRS primary vehicles.	Preferred	2030	2,000	2,000	Yes	Yes
#17 Civil Engineering Covered Parking	17	Construct civil engineering covered parking for snow plowing vehicles.	Preferred	2030	4,000	4,000	Yes	Yes
#18 Troop Camp	18a	Repair existing B208 troop camp.	Preferred	2040	0	0	Yes	Yes
	18b	Construct new troop camp.	Alternate	2040	17,489	0	Yes	Yes
#19 Services Facility	19a	Repair B209 services facility.	Preferred	2035	0	0	Yes	Yes
	19b	Construct new services facility.	Alternate	2035	2,950	0	Yes	Yes
#20 Base Exchange/ Starbase	20a	Repair B302 base exchange and starbase facility.	Preferred	2035	0	0	Yes	Yes
	20b	Construct new base exchange and starbase facility.	Alternate	2035	7,860	0	Yes	Yes

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 3 – Proposed Construction, Renovation, and Demolition Project Tables

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#21 Civil Engineering Shops	21a	Construct new civil engineering combined facility.	Preferred	2030	30,000	25,600	Yes	Yes
	21b	Repair B220 civil engineering shops.	Alternate	2030			Yes	Yes
	21c	Repair B221 civil engineering administration.	Alternate	2030	0	0	Yes	Yes
	21d	Repair B234 civil engineering emergency management and storage.	Alternate	2030	0	0	Yes	Yes
#22 Dining Facility	22a	Repair B130 dining facility.	Preferred	2030	0	0	Yes	Yes
	22b	Construct new dining facility.	Alternate	2030	10,800	0	Yes	Yes
#23 C-17 Ramp	23	Construct C-17 Ramp on the east side of airfield for C-17 movement per the Oregon Cascadia Zone.	Preferred	2026	300,000	300,000	Yes	Yes

Notes: ¹Project 1 would require the choice of Project 1a, 1b, 1c combined or Project 1d alone. Project 1d would require the demolition of B242, B230, and B231.

²Project 3 would require the choice between Project 3a, 3b, or 3c. Project 3c requires selection of Project 9d.

³Project 4 would require the choice between Project 4a, 4b, 4c, or 4d.

⁴Project 5a/5b would not be implemented if the preferred Project 9d is implemented. Implementation of Project 5a or 5b required that Project 9a be implemented.

⁵Project 9 would require the choice of Project 9a, Project 9b/9c, or Project 9d. Implementation of the Project 9c or 9d options would eliminate the need for Project 5a/5b.

Project 9d is the companion to Project 3c. Project 9d would eliminate the need for Project 13c.

⁶Project 10b would require demolition of B540 and B541.

⁷Project 13 would require the choice of the following: 13a/13b, 13b/c, or 13 b/d. Project 13c would not be compatible with 9d.

⁸Project 14 would require demolition of B334.

Legend: AMU = aircraft maintenance unit; AFSC = air force specialty code; AMXS = aircraft maintenance squadron; ASE = aircraft support equipment; B = Building, FMS = full motion simulator; LAMS = large area maintenance shelters; LRS = logistics readiness squadron; MMRT = mobile mission rehearsal trainer; PFF = pilot fitment facility; SCIF = sensitive compartmented information facilities; SF = square feet

Attachment 3 – Proposed Construction, Renovation, and Demolition Project Tables

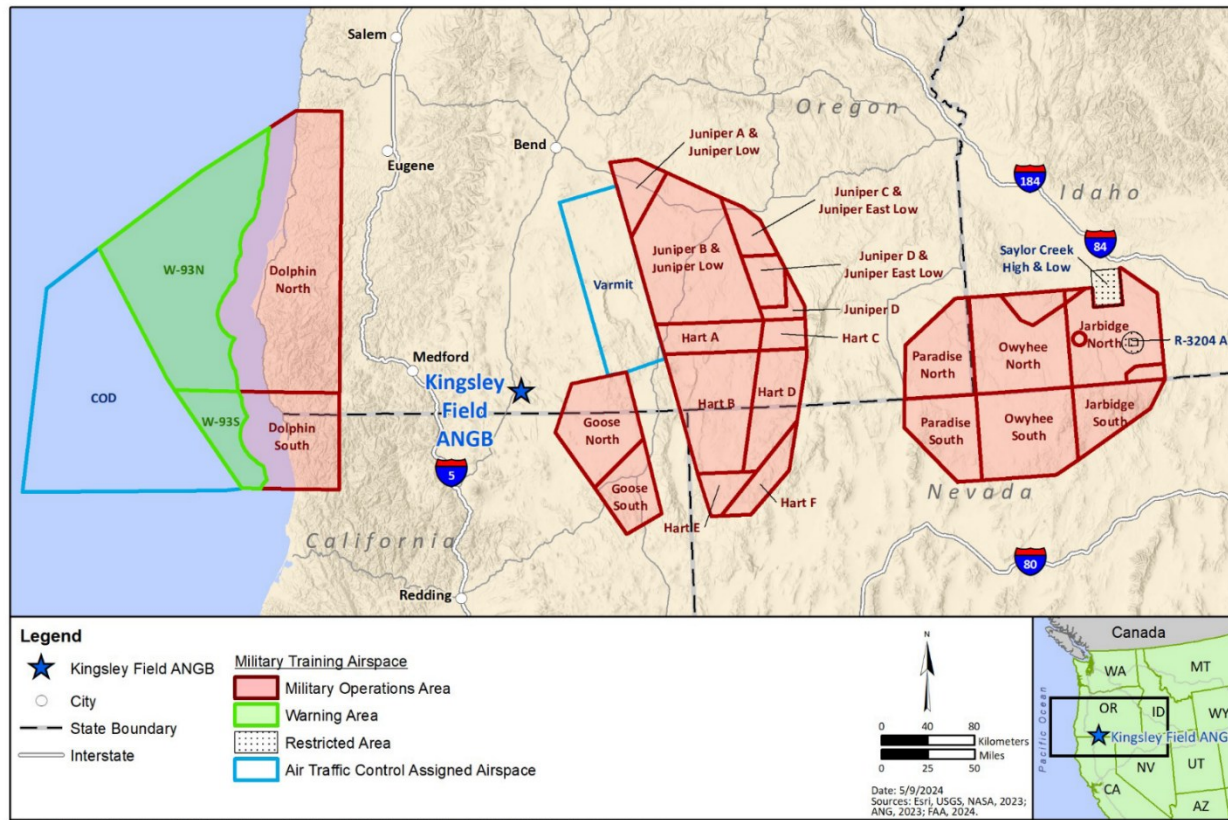
Proposed Demolition Projects

<i>Building Number</i>	<i>Total Area of Demolition (SF)</i>	<i>Year Building was Constructed</i>	<i>Year Proposed for Demolition</i>
B209	8,717	1989	2030
B213	15,271	1959	2030
B215	2,400	1959	2030
B219	83,305	1959	2026
B230	2,926	1959	2026
B231	2,916	1958	2026
B242	2,830	1961	2026
B243	32,570	1987	2030
B334	3,772	1987	2029
B500	12,112	1957	2030
B540	5,450	1959	2030
B541	5,450	1959	2026
Total SF of Demolition =	177,719		

Legend: B = Building; SF = square feet.

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Draft – April 2026**

Attachment 4 – Kingsley Field ANGB Military Training Airspace Map



Kingsley Field ANGB Military Training Airspace



NATIONAL GUARD BUREAU
3501 FETCHET AVENUE JOINT BASE ANDREWS 20762-5157

21 November 2025

NGB/A4FR
Shepperd Hall
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Jennie Land
Deputy Field Supervisor
Klamath Falls Fish and Wildlife Office
1936 California Avenue
Klamath Falls, OR 97601

SUBJECT: Request for Initiation of Informal Consultation Under Section 7(a)(2) of the Endangered Species Act for Basing F-35A Lightning II Formal Training Unit at Kingsley Field Air National Guard Base Klamath Falls, Oregon

Dear Deputy Field Supervisor Snider,

The National Guard Bureau (NGB) is requesting initiation of informal consultation under section 7(a)(2) of the Endangered Species Act (ESA), for the proposed basing of the F-35A Lightning II Formal Training Unit at Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon. The NGB and the Department of the Air Force (DAF) propose to maintain the combat capability of the Air National Guard (ANG) by establishing this formal training unit (FTU) of F-35A Lightning II, including the construction of associated infrastructure.

The NGB and the DAF have determined that the Proposed Action at Kingsley Field ANGB would have no effect on federally listed species found within the installation. For the associated airspace, the NGB and DAF have determined that the Proposed Action may affect, but is not likely to adversely affect multiple federally listed birds, mammals, and terrestrial reptiles (please refer to the list of species located in Table 1 having a “not likely to adversely affect” determination). A project description and our supporting analysis are provided below. We request your written concurrence if you agree with our determinations.

Kingsley Field ANGB

The NGB and the DAF have determined that the Proposed Action will have no effect on federally listed marine species, invertebrates, plants, and fish (please refer to the list of species in Table 1 having a “no effect” determination). As confirmed within the *Final Integrated Natural Resources Management Plan* (NGB 2024), *Final Flora and Fauna Survey* (NGB 2023), and *Final Report Threatened and Endangered Species Surveys and Management Plan* (173 FW 2024), federally listed marine species, invertebrates, plants, and fish would not be impacted by construction, as their habitats do not overlap the project construction footprint. Additionally, no critical habitat occurs within the base boundaries. Although the Applegate’s milk-vetch (*Astragalus applegatei*) currently occurs on base, areas of occurrence are known and monitored (173 FW 2024) and the construction footprint would not overlap with these areas. The shortnose

sucker (*Chasmistes brevirostris*) and Lost River sucker (*Deltistes luxatus*) occurred historically on Kingsley Field ANGB, but habitat for these species no longer occurs on the base (NGB 2024). Therefore, the Proposed Action would have no effect on Applegate’s milk-vetch, short-nose sucker, and Lost River sucker, and these species are not carried forward for consultation.

Airspace

For the Proposed Action, established military training airspace configurations, as previously assessed within the *Environmental Impact Statement for Proposed Establishment and Modification of Oregon Military Training Airspace* (NGB 2017), are not proposed to change. The proposed activities in the airspace would not result in new ground disturbance, ordnance delivery and chaff and flare use would not exceed current levels and would occur in locations already used and authorized for those purposes, and underwater species would not experience measurable changes in noise levels. From this previous analysis, NGB and DAF have determined that the Proposed Action would have no effect on the critical habitats that occur below the airspace (please refer to list of critical habitats in Table 1). Brief and intermittent noise effects to individuals of listed species, as described below, would not affect the physical attributes of any critical habitat below the airspace. Therefore, the critical habitats that occur under the airspace would experience no effect from the Proposed Action. However, since the federally listed birds, mammals, and terrestrial reptiles listed in Table 1 may experience temporary and brief noise disturbances from the establishment of the F-35A FTU, airfield and airspace operations under the Proposed Action may affect, but are not likely to adversely affect the threatened and endangered bird, mammal, and terrestrial reptile species listed in Table 1.

Table 1 Federal and State Listed Species Potentially Occurring on Kingsley Field ANGB and Under the Airspace

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status</i>	<i>Potential Occurrence on Kingsley Field ANGB</i>	<i>Potential Occurrence Under the Airspace</i>	<i>Species Effects Determination</i>	<i>Critical Habitat Effects Determination</i>
Birds						
Western snowy plover	<i>Charadrius nivosus</i>	ST, T	-	P	NLAA	NE
California Condor	<i>Gymnogyps californianus</i>	EX	-	P	NLAA	NE
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	T	P	P	NLAA	-
Northern spotted owl	<i>Strix occidentalis caurina</i>	ST, T	-	P	NLAA	NE
Hawaiian petrel	<i>Pterodroma sandwichensis</i>	E	-	P	NLAA	-
Marbled murrelet	<i>Brachyramphus marmoratus</i>	SE, T	-	P	NLAA	NE
Short-tailed albatross	<i>Phoebastria albatrus</i>	SE, E	-	P	NLAA	-

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status</i>	<i>Potential Occurrence on Kingsley Field ANGB</i>	<i>Potential Occurrence Under the Airspace</i>	<i>Species Effects Determination</i>	<i>Critical Habitat Effects Determination</i>
Fish						
Shortnose sucker	<i>Chasmistes brevirostris</i>	SE, E	P	P	NE	NE
Lost River sucker	<i>Deltistes luxatus</i>	SE, E	P	P	NE	NE
Bull trout	<i>Salvelinus confluentus</i>	T	-	P	NE	NE
Hutton Tui chub	<i>Gila bicolor</i> ssp.	ST, T	-	P	NE	-
Tidewater goby	<i>Eucyclogobius newberryi</i>	E	-	P	NE	NE
Warner sucker	<i>Catostomus warnerensis</i>	ST, T	-	P	NE	NE
Desert dace	<i>Eremichthys across</i>	T	-	P	NE	NE
Lahontan cutthroat trout	<i>Oncorhynchus clarkia henshawi</i>	ST, T	-	P	NE	-
Reptiles						
Leatherback sea turtle	<i>Dermochelys coriacea</i>	SE, E	-	P	NE	-
Loggerhead sea turtle	<i>Caretta caretta</i>	ST, E	-	P	NE	-
Northwestern pond turtle	<i>Actinemys marmorata</i>	PT	-	P	NLAA	-
Olive ridley sea turtle	<i>Lepidochelys olivacea</i>	ST, T	-	P	NE	-
Mammals						
Gray wolf	<i>Canis lupus</i>	E	P	P	NLAA	-
North American wolverine	<i>Gulo gulo luscus</i>	ST, T	P	P	NLAA	NE
Pacific marten (Coastal Distinct Population Segment)	<i>Martes caurina</i>	T	-	P	NLAA	NE
Snails						
Bruncau hot springsnail	<i>Pyrgulopsis bruneauensis</i>	E	-	P	NE	-
Insects						
Monarch butterfly	<i>Danaus plexippus</i>	PT	P	P	NE	-
Suckley's Cuckoo Bumble Bee	<i>Bombus suckeyi</i>	PE	P	P		
Franklin's bumble bee	<i>Bombus franklini</i>	E	-	P	NE	-
Oregon silverspot butterfly	<i>Speyeria zerene hippolyta</i>	T	-	P	NE	NE

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status</i>	<i>Potential Occurrence on Kingsley Field ANGB</i>	<i>Potential Occurrence Under the Airspace</i>	<i>Species Effects Determination</i>	<i>Critical Habitat Effects Determination</i>
Crustaceans						
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	E	-	P	NE	-
Shasta crayfish	<i>Pacifastacus fortis</i>	E	-	P	NE	-
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	-	P	NE	-
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E	-	P	NE	-
Plants						
Applegate’s milk-vetch	<i>Astragalus applegatei</i>	SF, E	O	-	NE	-
Whitebark pine	<i>Pinus albicaulis</i>	ST, T	-	P	NE	-
Cook’s lomatiium	<i>Lomatium cookii</i>	SE, E	-	P	NE	NE
Gentner’s fritillary	<i>Fritillaria gentneri</i>	SE, E	-	P	NE	-
Greene’s tuctoria	<i>Tuctoria greenii</i>	E	-	P	NE	-
Kincaid’s lupine	<i>Lupinus sulphureus</i> ssp. <i>kincaidii</i>	ST, T	-	P	NE	-
Mcdonald’s rock-cress	<i>Arabis macdonaldiana</i>	SE, E	-	P	NE	-
Slender Orcutt grass	<i>Orcuttia tenuis</i>	T	-	P	NE	-
Slickspot peppergrass	<i>Lepidium papilliferum</i>	T	-	P	NE	NE
Western lily	<i>Lilium occidentale</i>	SE, E	-	P	NE	-
Sand dune phacelia	<i>Phacelia argentea</i>	ST, T	-	-	-	NE

Legend: ANGB = Air National Guard Base; E = Federally Endangered; EX = Experimental Population; T = Federally Threatened; PT = Proposed Federally Threatened; PE = Proposed Federally Endangered; SE = State Endangered; ST = State Threatened; O = Observed; P = Potential; NLAA = Not Likely to Adversely Affect; NE = No Effect
Source: NGB 2017, 2023, 2024; 173 FW 2024 ODFW 2024; Oregon Department of Agriculture 2024; USFWS 2025.

Proposed Action

Kingsley Field ANGB

The proposal is the beddown, operation, and associated infrastructure construction of one FTU squadron of F-35A Lightning II (F-35A) aircraft at Kingsley Field ANGB at the Crater Lake-Klamath Regional Airport (LMT), in Klamath Falls, Oregon (Attachments 1–5). A description of the construction projects and their locations are found in Attachments 2 and 3. The squadron would consist of up to 24 F-35A Primary Aerospace Vehicles Authorized (PAA) and 2 Backup Aerospace Vehicles Authorized (BAA) and would replace the existing 26 F-15C/D aircraft. PAA is the number of aircraft authorized to a unit in order to perform its operational

mission, while BAA is the aircraft that would be used only if one of the PAA aircraft is out of commission.

To accommodate the proposed F-35A beddown, or retention of the F-15C/D aircraft, construction of new facilities, and/or renovation of existing facilities, and some facility demolition would be necessary. All construction would be located within the base and/or airport boundaries (Attachment 2). The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field would likely occur in Fiscal Year (FY) 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 PAA (plus 2 BAA) F-35A aircraft would be based at Kingsley Field. Much of the proposed construction and renovation would occur before the first new aircraft would arrive but may continue after the first aircraft arrives. The duration of construction is dependent upon the complexity and breadth of development needed to support the beddown. Approximately 30 additional contracted personnel would provide support in security, system administration, training, and simulator operations. Airfield Operations

To provide the training needed to ensure combat readiness, F-35A aircrews would conduct operations in two types of areas: (1) an airfield associated with an installation, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A would use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures.

The annual flying program for the F-35A is 250 hours per aircraft. Though each aircraft may not achieve the full amount of annual flying hours, the analysis evaluates the full 250 hours per aircraft. Thus, with up to 24 PAA proposed for the F-35A, the total flying hour program for the 173 FW would be 6,000 hours annually. The number of sorties conducted depends on the training mission set and the average sortie duration for the 173 FW (Table 2), which depends upon the 173 FW's proximity to their training airspace.

Table 2 Current and Estimated Proposed Annual Airspace Sorties

<i>Aircraft Type</i>	<i>Existing Average Sortie Duration (hours)</i>	<i>Total Aircraft Sorties</i>
F-15C/D	1.3	3,194
F-35A	1.3	4,585

Military Training Airspace

Pilots operating the aircraft would conduct training from the base and in existing military training airspace associated with the 173d Fighter Wing (173 FW). Training operations would take place within existing military airspace and military training ranges; however, there would likely be an increase in the number of airspace operations.

The existing training airspace utilized by the 173 FW includes, but is not limited to Military Operations Areas (MOAs) and associated Air Traffic Control Assigned Airspace (ATCAA), as well as Warning Areas (W-) and Restricted Areas (R-) (Attachment 4). Under the Proposed Action, there are no proposed changes to the configurations of any military training airspace. The F-35A aircraft would use the same training airspace that the current aircraft use. It is expected that the F-35A would use a similar altitude profile as the F-15C/D in training;

however, the majority of F-35A training would occur at altitudes above 20,000 feet mean sea level (MSL) (Table 4). The use of low altitudes for air-to-air training would be expected to decrease as most training operations would emphasize survivability against surface-to-air threats, which requires increased use of high-altitude airspace and increased standoff distances.

Table 3 describes the existing training airspace managed and/or utilized by the 173 FW. See Attachment 4 for a depiction of the airspace. The 173 FW utilizes over-land and over-water military training airspace to meet training requirements. There are also ATCAAs overlying the Juniper/Hart, Dolphin, and Goose MOAs with altitudes spanning from 18,000 feet MSL up to 51,000 feet MSL.

Table 3 173 FW Military Training Airspace

<i>Military Training Airspace</i>	
• Goose North MOA	• Varnit Air Refueling ATCAA
• Goose North ATCAA	• Dolphin N/S MOA
• Goose South MOA	• Dolphin N/S ATCAA
• Goose South ATCAA	• W-93 N/S
• Juniper Low MOA	• COD ATCAA
• Juniper East Low MOA	• Paradise N/S MOA
• Juniper A/B/C/D MOA	• Owyhee N/S MOA
• Juniper A/B/C/D ATCAA	• Jarbidgc N/S MOA
• Hart A/B/C/D/E/F MOA	• Saylor Creek High/Low
• Hart A/B/C/D/E/F ATCAA	• R-3204 A-C

Legend: ATCAA = Air Traffic Control Assigned Airspace; MOA = Military Operations Area; R- = Restricted Area; W- = Warning Area.

Chaff and flares are the principal defensive countermeasures dispensed by military aircraft to evade attack by enemy air defense systems. Although the F-35A’s stealth features substantially reduce its detectability, pilots must train to employ defensive countermeasures.

Chaff and flare use is authorized in ANG-managed airspace in Oregon. The Oregon ANG would continue to implement a minimum release altitude of 5,000 feet above ground level (AGL) for flares deployed in ANG-managed Oregon airspace (NGB 2017). The 173 FW would continue to adhere to local operating procedures for chaff and flare release. The allocation and use of defensive countermeasures is not expected to change from the current usage (NGB 2017). The 173 FW would continue to receive the same allocation of chaff and flares that they currently receive. They would be expected to be used at the same rates in the same places, subject to the same restrictions that exist now.

Air-to-air ordnance is used to destroy other aircraft and includes air-to-air missiles (AIM-120 and AIM-9) and the cannon. The F-15C/D has 20-millimeter (mm) cannon systems, and the F-35A cannon is 25mm. Air-to-ground ordnance is used for ground-based targets. The F-15C/D does not carry any air-to-ground ordnance since it does not have an air-to-ground mission. In support of air-to-air training missions, the F-15C/D carries training missiles and instrument pods (which help record the aircraft’s position for training purposes). These training aids do not release from the aircraft.

No live air-to-ground munitions would be assembled, stored, or loaded at Kingsley Field ANGB. Inert air-to-ground munitions would be used for munitions assembly and load training. Munitions for the F-35A would be similar in type and amount to that of the F-15C/D. Aircrew air-to-ground training would be primarily accomplished via aircraft training mode (i.e., air-to-ground ordnance is neither physically loaded nor released from the aircraft), simulator training events, or during deployments to various training locations such as the Saylor Creek Bombing Range that support live/inert air-to-ground weapons release events. On seldom occasions, inert ordnance would be loaded on aircraft and released in local approved restricted areas. Regulations on safety for storage, handling, and use of ordnance would all remain as they are now.

Analysis of Effects on Threatened and Endangered Species

Kingsley Field ANGB

Construction from the Proposed Action would occur in previously disturbed and developed areas on Kingsley Field ANGB, which do not provide native wildlife habitat that would support the federally listed species in Table 1 (Attachment 2). Therefore, construction would have no effect on threatened and endangered species (NGB 2024).

Operational noise levels at Kingsley Field ANGB would be expected to increase from baseline with the conversion to the F-35A aircraft from the existing F-15C/D (Attachment 5). The Proposed Action would result in an increase in the size of the Day-Night Average Sound Level (DNL) contours in all directions from the base as a result of the proposed increase in operations and the higher noise levels of the F-35A as compared to the F-15C/D. An additional 2,329 acres of land off the airport property would be exposed to DNL greater than 65 decibels (dB) (Attachment 5). The off-airport acreage would be composed of 2,788 acres exposed to 65 to 70 dB DNL (an increase of 1,229 acres), 1,192 acres exposed to 70 to 75 dB DNL (an increase of 663 acres), 435 acres exposed to 75 to 80 dB DNL (an increase of 346 acres), 90 acres exposed to 80 to 85 dB DNL (an increase of 88 acres), and 2 acres exposed to greater than 85 dB DNL (an increase of 2 acres) (Attachment 5). The majority of this area is residential, commercial, industrial, and agricultural lands with little to no native wildlife habitat. The yellow-billed cuckoo (*Coccyzus americanus*), the gray wolf (*Canis lupus*), and the North American wolverine (*Gulo gulo luscus*) (Table 1) have not been recorded on Kingsley Field ANGB and are all highly unlikely to occur on the base due to habitat selection and species distribution (NGB 2024). The changes in operational noise on Kingsley Field ANGB would not be expected to significantly affect federally listed species in the area because of the absence of suitable habitat. Additionally, species on and near the base are likely accustomed to elevated noise levels associated with aircraft and military operations as well as other noise associated with commercial, industrial, and agricultural operations. Small increases in noise levels would not result in significant negative effects to federally listed species that occur near the base (Table 1).

Since the number of airfield operations would increase under the Proposed Action, there may be an increase in the potential for bird/wildlife aircraft strikes to occur, including those with the federally listed bird species found in Table 1. Between 2005 and 2019, 96 reported bird strikes occurred at or in the immediate vicinity of Kingsley Field ANGB with peaks observed in June, September, and October (NGB 2024). However, 94 percent of aircraft flights would occur above 10,000 feet mean sea level (MSL) which is higher than most birds fly (Table 4). Over 90

percent of reported bird strikes occur at or below 3,000 feet AGL but strikes at higher altitudes are common during migration. Ducks and geese have been observed up to 7,000 feet AGL (FAA 2024). Six percent of aircraft flights would occur below 10,000 feet MSL under the Proposed Action. Flights at those altitudes would have the highest Bird/Wildlife Aircraft Strike Hazard (BASH) risk. Under current operations, 5 percent of flights are below 10,000 feet MSL, but the number of current operations is approximately half of what is proposed, so the likelihood of a bird-aircraft strike is higher under the Proposed Action due to the increased number of proposed operations. Adherence to the existing BASH program would minimize the risk of bird/wildlife aircraft strikes. The 173 FW has developed procedures designed to minimize the occurrence of bird/wildlife aircraft strikes and has documented detailed procedures to monitor and react to heightened risk of bird/wildlife aircraft strikes. When risk increases, limits are placed on low-altitude flight and some types of training (e.g., multiple approaches, closed pattern work) in the airport environment. Special briefings are provided to pilots whenever the potential exists for increased bird/wildlife aircraft strikes within the airspace. Threatened and endangered bird species (Table 1) would experience a negligible increase in risk for BASH under the Proposed Action.

Table 4 F-35A and F-15C/D Training Altitude Distribution

<i>Altitude (Feet)</i>	<i>Percent Use – F-15C/D</i>	<i>Percent Use – F-35A</i>
500-5,000 AGL	2	2
5,000 AGL-10,000 MSL	5	4
10,000-20,000 MSL	50	33
20,000-30,000 MSL	26	39
30,000-40,000 MSL	17	21
>40,000 MSL	2	1

Airspace

During airspace operations (see Attachment 4 for a map of the military training airspace), federally listed birds, mammals, and terrestrial reptiles would be exposed to noise 3 to 5 dB greater in terms of Sound Exposure Level (SEL) and 6 to 8 dB greater in Maximum Sound Level (L_{max}) from the F-35A when compared to the F-15C/D (assuming military power and 400 knots). Therefore, the baseline airspace noise levels of 35 to 47 dB Onset-Rate Adjusted Day-Night Average A-weighted Sound Level (L_{dnmr}) (depending on the MOA/ATCAA) would increase to 40 to 49 dB L_{dnmr} , well below the safe limit of continuous noise of 70 dB, and substantially below the 140 dB shown to cause damage to wildlife hearing (Bowles 1995).

While a rare event due to expansiveness of the airspace and high elevation and low frequency of operation, there is the possibility that federally listed birds, mammals, or terrestrial reptiles could be subjected to a very brief direct overflight and experience a peak noise level (L_{max}) of 119 dB at if the aircraft passed by at 500 feet AGL. 500 feet AGL is only authorized in the northeastern section of Owyhee North MOA and the northwestern corner of Jarbidge North MOA and managed by Mountain Home AFB. The ANG would continue to follow current and future restrictions in place (USAF, 2020). However, flights at 500–5,000 feet AGL only make up 2 percent of all training and the L_{max} decreases to 91 dB if an aircraft passes at 5,000 feet AGL. The L_{max} decreases further to 81 dB at 10,000 feet AGL. Exposure to these peak noise levels would last only a few seconds and the animal would need to be directly beneath the flight path to

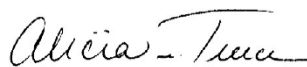
experience this level of noise as the noise reduces drastically the further the animal is from the flight path. No damage to animal hearing is anticipated in this circumstance, as damage to hearing generally only occurs at levels over 140 to 150 dB (Bowles 1995).

Although hearing ranges vary greatly among wildlife groups, models used to estimate hearing capacity in animals are conservative (Bowles 1995), and, as described above, Day-Night Average A-weighted Sound Levels would be well below the safe limit of continuous noise of 70 dB (Bowles 1995), and peak noise levels (Lmax) of 119 dB at 500 feet AGL would be well below the 140 dB shown to cause damage to wildlife hearing (Bowles 1995). Therefore, the noise levels under the Proposed Action would not be expected to cause harm to federally listed birds, mammals, or terrestrial reptiles (species listed in Table 1).

Since the federally listed birds, mammals, and terrestrial reptiles listed in Table 1 may experience temporary and brief noise disturbances from the establishment of the F-35A FTU, airfield and airspace operations under the Proposed Action may affect, but are not likely to adversely affect the threatened and endangered bird, mammal, and terrestrial reptile species listed in Table 1.

We request written concurrence with our determinations as part of the informal consultation process. If you have any questions or concerns, please contact Alicia Treece, NGB Project Manager, National Guard Bureau, NGB/A4FR, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157, or NGB.CCA4F.NEPACOMMENTS@us.af.mil with the subject titled as ATTN: F-15EX, F-35A EIS. Thank you in advance for your assistance in this effort.

Sincerely,



Alicia Treece, NGB/A4FR
NEPA Program Manager

Attachments:

- 1 – Regional Location Map of Kingsley Field ANGB
- 2 – Proposed Construction, Renovation, and Demolition Project Maps
- 3 – Proposed Construction, Renovation, and Demolition Project Tables
- 4 – Kingsley Field ANGB Military Training Airspace Map
- 5 – Proposed Action F-35A Comparison to No Action–DNL Contours
- 6 – Biological Analysis Prepared using IPaC: Klamath Falls ANG F-35A Basing Construction
- 7 – Biological Analysis Prepared using IPaC: Klamath Falls ANG F-35A Airspace

References:

- 173 FW. 2024. Final Report Threatened and Endangered Species Surveys and Management Plan. 173rd Fighter Wing, Kingsley Field Air National Guard Base, Klamath Falls, Oregon. March.
- Bowles, A.E. 1995. Responses of Wildlife to Noise. In: Wildlife and Recreationists: Coexistence Through Management and Research (R.L. Knight and K.J. Gutzwiller eds). Island Press, Washington D.C.
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- USFWS. 2025. Information for Planning and Consultation. Accessed November 20, 2025 at: <https://ipac.ecosphere.fws.gov/>



United States Department of the Interior

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In Reply Refer To:
2026-0016901

Alicia Treece
NEPA Program Manager
NGB/A4FR
Shepperd Hall
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Subject: Letter of Concurrence for the Basing F-35A Lightning II Formal Training Unit project
at Kingsley Field Air National Guard Base Klamath Falls, Oregon

Dear Ms. Treece:

This responds to your letter dated and received on November 21, 2025, and updated final version on December 11, 2025 (Assessment), requesting concurrence from the U.S. Fish and Wildlife Service (Service), pursuant to the requirements of section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), for the subject action. The Service's response to your request is based on the biological assessment included in your letter, the attachments, and information in our files.

The proposed project (Project) is the retention, operation, and associated infrastructure construction of one FTU squadron of F-35A Lightning II (F-35A) aircraft at Kingsley Field Air National Guard Base (ANGB) at the Crater Lake-Klamath Regional Airport (LMT), in Klamath Falls, Oregon. The proposed squadron consists of up to 24 F-35A Primary Aerospace Vehicles Authorized (PAA) and two Backup Aerospace Vehicles Authorized (BAA) and will replace the existing 26 F-15C/D aircraft.

All infrastructure construction will take place on the Kingsley Field ANGB in previously disturbed and developed areas and includes the demolition and/or renovation of existing facilities as well as the construction of new facilities. Much of the proposed construction and renovation will occur before the first new aircraft arrives but may continue afterwards. Delivery of the first aircraft will likely occur in Fiscal Year (FY) 2027 with the remaining aircraft delivered in or by FY 2029, for a total of up to 23 F-35 PAA (plus two BAA).

Ms. Trecece_F35A Training

Reference 2026-0016901

F-35A aircrews will conduct combat readiness training operations in two types of areas: (1) an airfield associated with an installation, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A will use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures. Established military training airspace configurations, as previously assessed within the *Environmental Impact Statement for Proposed Establishment and Modification of Oregon Military Training Airspace* (NGB 2017), will remain the same, although F-35A training requirements will increase to 4,585 hours compared to 3,194 hours required for F-15C/D aircraft.

The National Guard Bureau (NGB) and the Department of the Air Force (DAF) determined that the Proposed Action at Kingsley Field ANGB will have no effect on federally listed species found within the installation as their habitat does not overlap the project construction footprint, nor is there critical habitat occurring within the base boundaries. While Applegate's milk-vetch (*Astragalus applegatei*) does occur on base, areas of occurrence are known and monitored (173 FW 2024), and the construction footprint will not overlap with these areas. Therefore, the NGB and DAF dismissed these species from further consideration related to construction generated impacts.

For the associated airspace, the NGB and DAF have determined that the proposed action may affect, but is not likely to adversely affect western snowy plover (*Charadrius nivosus*), yellow-billed cuckoo (*Coccyzus americanus*), northern spotted owl (*Strix occidentalis caurina*), Hawaiian petrel (*Pterodroma sandwichensis*), marbled murrelet (*Brachyramphus marmoratus*), short-tailed albatross (*Phoebastria albatrus*), gray wolf (*Canis lupus*), North American wolverine (*Gulo gulo luscus*), and pacific marten (Coastal Distinct Population Segment, *Martes caurina*). The proposed action will not affect designated critical habitat for federally listed species occurring under the airspace. The NGB and DAF also determined the proposed action would have "no effect" to 30 federally listed or proposed species within the action area (Assessment p. 3 and 4, 2025). The Service does not have the authority to provide concurrence for "no effect" determinations due to policy and implementing regulations for section 7 of the Act. Therefore, the Service's concurrence on the determinations made by the NGB and DAF is limited to the effects to the species listed above that may be affected by the Project.

Effects to Species

The proposed action will increase the noise levels at Kingsley Field ANGB and under the airspace, potentially impacting the above listed species. The size of the Day-Night Average Sound Level (DNL) contours in all directions from the base will increase as a result of the proposed increase in operations and the higher noise levels of the F-35A as compared to the F-15C/D. Noise levels on off-airport acres are expected to increase to 65-85 dB DNL, with two acres potentially exposed to levels greater than 85 dB DNL. However, there is little to no wildlife habitat on Kingsley Field ANGB and any species within proximity to project activities are likely used to elevated noise levels associated with aircraft, military, commercial, industrial, and agricultural operations. Therefore, small increases in noise levels will not result in significant negative effects to federally listed species that occur near the base.

Airspace noise levels during operations will increase three to five dB in terms of Sound Exposure Level (SEL) and six to eight dB greater in Maximum Sound Level (L_{max}) compared to the F-15C/D. The level of 35 to 47 dB Onset-Rate Adjusted Day-Night Average A-weighted

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Ms. Trecece_F35A Training

Reference 2026-0016901

Sound Level (L_{dnmr}) will increase to 40-49 dB L_{dnmr} . This level remains well below the safe 70db limit for continuous noise and substantially below the 140 dB shown to damage wildlife hearing (Bowles 1995). Peak noise levels of up 119 dB could occur if an aircraft passed directly above an animal at 500 feet above ground level (AGL) but would last only seconds and would still remain under the 140 dB damage level. Additionally, only two percent of the flights would occur between 500 – 5,000 feet AGL, so there would be a low likelihood of disturbance effects to the affected species. Therefore, the small increases in noise levels would result in discountable effects to federally listed species that occur under the airspace.

Due to the increased number of airfield operations under the proposed action the potential for bird/wildlife aircraft strikes to occur may increase, including the federally listed bird species listed above. However, continued adherence to the existing Bird/Wildlife Aircraft Strike Hazard (BASH) program, which contains procedures designed to minimize occurrences of bird/wildlife aircraft strikes within the airspace, will minimize this risk. Therefore, any negative impacts to listed species from aircraft strikes related to the proposed action will be negligible.

Summary and Conclusion

In summary, the Project is not expected to result in adverse effects to the above listed federally listed species or their designated critical habitat. Based on the information provided in your the biological assessment included in your letter, the attachments, and information in our files, we concur with the determination that the Project may affect, but is not likely to adversely affect the western snowy plover, yellow-billed cuckoo, northern spotted owl, Hawaiian petrel, marbled murrelet, short-tailed albatross, grey wolf, North American wolverine, and pacific marten (Coastal Distinct Population Segment).

This concludes informal consultation pursuant to section 7 of the Act. Reinitiation of consultation on this action may be necessary if: (1) new information reveals effects of the action that may affect species or critical habitats in a manner or to an extent not considered in the assessment; (2) the action is subsequently modified in a manner that causes an effect to species or critical habitats not considered in this analysis; or (3) a new species is listed or critical habitat designated that may be affected by the proposed action.

Thank you for your efforts to conserve federally listed species. If you have any questions about this document, please contact Jeanne Spaur at jeanne_spaur@fws.gov.

Sincerely,

JENNIE LAND

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LAND
Date: 2026.02.18 13:22:56
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Jennie Land
Field Supervisor

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Ms. Trecece_F35A Training

Reference 2026-0016901

Cc: Kessina Lee, USFWS, Oregon State Supervisor

Lisa Ellis, USFWS, Idaho State Supervisor

Kristen Jule, USFWS, Reno Field Supervisor

References Cited

173 FW. 2024. Final Report Threatened and Endangered Species Surveys and Management Plan. 173rd Fighter Wing, Kingsley Field Air National Guard Base, Klamath Falls, Oregon. March.

Bowles, A.E. 1995. Responses of Wildlife to Noise. In: Wildlife and Recreationists: Coexistence Through Management and Research (R.L. Knight and K.J. Gutzwiller eds). Island Press, Washington D.C.

National Guard Bureau. 2017. Environmental Impact Statement for Proposed Establishment and Modification of Oregon Military Training Airspace. April.

**APPENDIX B2
NATIVE AMERICAN CORRESPONDENCE**

The sample tribal scoping letter following was distributed to the list below:

Betty Aleck, THPO, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada, 208 Capitol Hill, Nixon NV 89424

Christopher Bailey, Cultural Protection Specialist, Confederated Tribes of the Grand Ronde Community of Oregon, 8720 Grand Ronde Rd, Grand Ronde OR 97347-9712

Yatch Bamford, Chairman, Pit River Tribe, California, 36970 Park Ave, Burney CA 96013

Doug Barrett, Chief, Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, 1245 Fulton Ave, Coos Bay OR 97420

Gracie Begay, Chairwoman, Wells Band of the Te-Moak Tribe of Western Shoshone Indians, PO Box 809, Wells NV 89835

Darryl Brady, Chairman, Yomba Shoshone Tribe of the Yomba Reservation, Nevada, HC 61, Box 6275, Austin NV 89310

Robert Brunoe, THPO, Confederated Tribes of the Warm Springs Reservation of Oregon, PO Box C, Warm Springs OR 97761

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Patrick Burt, THPO, Washoe Tribe of Nevada & California (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community, & Washoe Ranches), Highway 395 South, Gardnerville NV 89410

Rose Clayburn, THPO, Yurok Tribe of the Yurok Reservation, PO Box 1027, Klamath CA 95548

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Arlo Crutcher, Chairman, Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon, 111 N Reservation Rd, McDermitt NV 89421

Carla Dahlberg, Chairman, Fort Independence Indian Reservation, PO Box 67, Independence CA 93526

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Elwood Emm, Chairman, Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada, 171 Campbell Ln, Yerington NV 89447

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Natalie Forrest-Perez, Interim THPO, Pit River Tribe, California, 36970 Park Ave, Burney CA 96013

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Joseph Holley, Chairman, South Fork Band of the Te-Moak Tribe of Western Shoshone Indians of Nevada, 525 Sunset St, Elko NV 89801

Joseph James, Chairperson, Yurok Tribe of the Yurok Reservation, 190 Klamath Blvd, Klamath CA 95548

Carla Keene, Chairman, Cow Creek Band of Umpqua Tribe of Indians, 2371 NE Stephens, Ste 100, Roseburg OR 97470-1399

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Brian Mason, Tribal Chairman, Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada, 1036 Idaho State Highway 51, PO Box 219, Owyhee NV 89832-0219

Brenda Meade, Chairperson, Coquille Indian Tribe, 3050 Tremont St, North Bend OR 97459-3059

Arlan Melendez, Chairperson, Reno-Sparks Indian Colony, Nevada, 34 Reservation Rd, Reno NV 89502

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Delores Pigsley, Chairwoman, Confederated Tribes of Siletz Indians, PO Box 549, Siletz OR 97380

Jackie Potter, Jr., Chairman, Redding Rancheria, 2000 Redding Rancheria, Redding CA 96001

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Shane Saulque, Chairman, Utu Utu Gwaitu Paiute Tribe, 25669 Highway 6 PMBI, Benton CA 93512

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Lee Tyler, Chairman, Shoshone-Bannock Tribes of the Fort Hall Reservation, Agency Building 82, 1 Pima Dr, Fort Hall ID 83203

Thomas Wasson, Chairman, Winnemucca Indian Colony of Nevada, 200 S Virginia St, 8th Fl, Winnemucca NV 89501

Bridgett Wheeler, Interim THPO, Coquille Indian Tribe, 3050 Tremont St, North Bend OR 97459-3059

Catherine Williams-Tuni, Chairwoman, Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada, 565 Rio Vista Dr, Fallon NV 89406-6415

Mary Wuester, Chairperson, Lone Pine Paiute Shoshone Tribe, 1103 S Main St, Lone Pine CA 93545



Sample Tribal Letter

DEPARTMENT OF THE AIR FORCE
173D FIGHTER WING
KINGSLEY FIELD OREGON

13 June 2024

Colonel Lee R. Bouma
173 FW/CC
211 Arnold Ave. Building A
Klamath Falls OR 97603

Phillip Del Rosa
Chairperson
Alturas Indian Rancheria, California
901 County Road 56
Alturas CA 96101

SUBJECT: Invitation to Initiate Government-to-Government Consultation Associated with the Kingsley Field F-35A Lightning II Beddown Environmental Impact Statement

Dear Chairperson Del Rosa

The Oregon Air National Guard (ORANG) would like to formally invite you and your representatives to consult on a proposed F-35A Lightning II (F-35A) beddown at the 173d Fighter Wing (173 FW) Kingsley Field Air National Guard Base (ANGB) located in Klamath Falls, OR (Attachment 1). We are hopeful that this invitation to consult will serve as the beginning of an open dialogue with the goal of building long-lasting relationships between the ORANG and Tribal Nations.

Pursuant to the National Environmental Policy Act of 1969 (NEPA), the National Guard Bureau (NGB) is preparing an Environmental Impact Statement (EIS) that will analyze impacts that could significantly affect the quality of the human environment, including those with the potential to affect historic properties, sacred sites, and traditional cultural properties. The purpose of the Proposed Action is to increase F-35A pilot training opportunities in support of the National Defense Strategy. In addition to the beddown and use of the F-35A, the Proposed Action would require facility improvements and the construction of new structures and infrastructure in support of this mission. The F-35As will replace the F-15C/D fleet currently stationed at Kingsley Field. This beddown action and associated training would ensure the availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this Proposed Action; however, there could be an increase in operations within the airspace. The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

The NGB has reviewed the undertaking and is currently defining the project's Area of Potential Effects (APE) as the jurisdictional boundary of Kingsley Field ANGB (Attachment 3), areas affected by noise levels of 65 dB DNL and greater from the aircraft operations, and lands located beneath existing military training airspace from surface level to the top of each airspace designation plus a 1-mile horizontal buffer (Attachment 4). As the EIS develops to include results from the noise study, NGB will continue to consult with federally recognized Tribes regarding any possible changes to the APE identified in this initial notification letter.

As part of our efforts to evaluate the effects of our action, we respectfully invite you to consult on the attached project details, the proposed APE, and to provide comments for our proposed undertaking. If you would like to request formal consultation, we will work with you to adopt procedures that meet the needs and requirements of your Tribe. Please provide comments to Michelle Kasunic, Acting Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at michelle.kasunic@us.af.mil with the subject titled ATTN: 173 FW EIS. Thank you for your assistance, and we look forward to working with you as the proposed EIS continues to develop.

Sincerely,



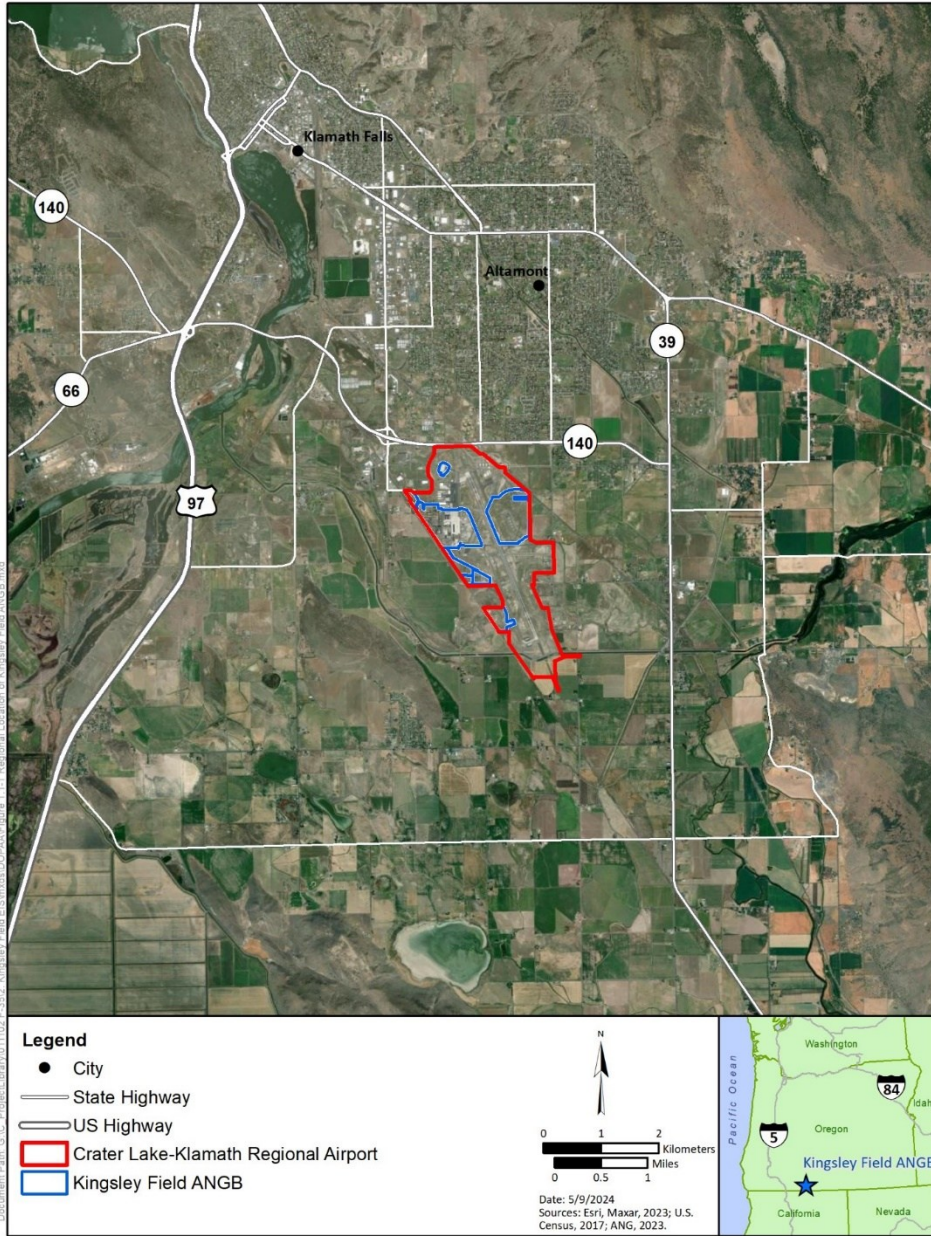
LEE R. BOUMA, Colonel, ORANG
Commander, 173d Fighter Wing

Attachments:

1. Regional Location Map of Kingsley Field ANGB
2. Proposed Construction, Renovation, and Demolition Project Table
3. Kingsley Field ANGB Area of Potential Effects
4. Kingsley Field ANGB Military Training Airspace Map
5. List of Tribes Being Consulted

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 – Regional Location Map of Kingsley Field ANGB



**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 2 – Proposed Construction, Renovation, and Demolition Project Tables

Summary of Construction and Renovation Projects

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#1 Provide Training Classrooms¹	1a	Modify existing B209 (existing simulator building) to house flight training classrooms (companion to Project 1b/1c).	Alternate	2027	0	0	Yes	No
	1b	Construct addition to B209 to include entire category code (i.e., authorized area) for flight training classrooms (companion to Project 1a/1c).	Alternate	2027	3,500	3,500	Yes	No
	1c	Construct new building containing 4 FMS, 6 MMRT, and contractor support (companion to Project 1a/1b).	Alternate	2027	29,583	29,583	Yes	No
	1d	Construct new building containing flight training classrooms, 4 full motion simulators, 6 MMRT, and contractor support (includes demolition of B242, B230, B231).	Preferred	2027	38,300	23,958	Yes	No
#2 Construct Echo Aircraft Shelter	2	Construct 4-bay, 8 aircraft shelter sized to universal fighter standards.	Preferred	2027	316,000	272,000	Yes	No
#3 Operations Group Facility²	3a	Repair B243 operations group facility to meet F-35 requirements for special access program facilities, office space, and contractor support.	Alternate	2028	0	0	Yes	No
	3b	Construct new operations group facility containing special access program facilities, office space, contractor support (includes demolition of B243).	Alternate	2028	25,200	0	Yes	No

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<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
	3c	Construct new operations group facility combined with maintenance facility containing special access program facilities, office space, contractor support, includes demolition of B243 (companion to Project 9d).	Preferred	2028	25200	0	Yes	No
#4 ASE Facility³	4a	Repair B216 for use as aircraft support equipment facility.	Alternate	2029	0	0	Yes	No
	4b	Construct addition to B332 to accommodate increase requirement for ASE facility	Preferred	2029	1,750	0	Yes	No
	4c	Construct new B332 for use as ASE facility	Alternate	2029	15,000	0	Yes	No
	4d	Repair B213 for use as ASE facility	Alternate	2029	0	0	Yes	No
#5 Engine Shop⁴	5a	Repair B213 engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	0	0	Yes	No
	5b	Construct new engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	15,000	5,000	Yes	No
#6 Avionics/ Pilot Fitment Facility	6a	Repair B331 to accommodate reduced avionics, battery room, and pilot fitment facility.	Preferred	2029	0	0	Yes	No
	6b	Construct new B331 avionics, battery room, and pilot fitment facility.	Alternate	2028	12,000	0	Yes	No
#7 Loading Dock	7	Repair loading dock for larger load leveler and better space utilization.	Preferred	2026	50,000	4,000	Yes	No
#8 Temporary LAMS Shelters	8	Install temporary LAMS shelters for aircraft on existing pavements.	Preferred	2027	0	0	Yes	No

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#9 Maintenance Hangar and Shops⁵	9a	Repair and reconfigure B219 maintenance hangar and shops to include improvements for seismic, light protection systems, and fire protection systems.	Alternate	2027	0	0	Yes	No
	9b	Construct new 6-aircraft maintenance hangar (Phase 1), includes demolition of east bay B219 (integrates with 9c Phase 2).	Alternate	2028	50,700		Yes	No
	9c	Construct new aircraft maintenance shops (Phase 2), includes demolition of west bay B219 (integrates with 9b Phase 1).	Alternate	2026	36,800		Yes	No
	9d	Construct new combined 6-aircraft maintenance hangar, aircraft maintenance shops, and AMU. Includes demolition of B219.	Preferred	2027	90,000		Yes	No
#10 Munitions Maintenance and Inspection Facility⁶	10a	Repair existing maintenance and inspection facility to meet SCIF needs and update systems.	Preferred	2027	0	0	Yes	No
	10b	Construct new munitions maintenance and inspection facility for 1.1 (mass detonation) and 1.2 (fragmentation) explosives operations to meet minimum explosive standards.	Preferred	2026	3,900	3,900	Yes	No
#11 Munitions Trailer	11	Construct new pull through maintenance facility for large trailers.	Preferred	2026	1,500		Yes	No
#12 Munitions Assembly Pad	12	Construct new munitions assembly pad and inert storage facility.	Preferred	2030	20,000	20,000	Yes	No

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#13 Weapons Facility⁷	13a	Repair B500 weapons release facility to meet standards for F-35 and safety and seismic upgrades.	Alternate	2027	0	0	Yes	No
	13b	Construct new hangar bay for weapons load training and light protection system parking spot	Preferred	2027	15,000	15,000	Yes	No
	13c	Construct new facility attached to weapons load training bay including all shops for associated AMU AFSC's (currently AMXS).	Alternate	2027	22,400	22,400	Yes	No
	13d	Construct new weapons release facility attached to weapons load training facility.	Preferred	2027	18,000	18,000	Yes	No
#14 Fuel Cell Bay⁸	14	Construct additional fuel cell maintenance bay onto existing B333 fuel cell bay, and light protection system parking spot	Preferred	2029	6,800	0	Yes	No
#15 Taxiway A	15	Repair Taxiway A access ramp to B400	Preferred	2026	8,500	0	Yes	No
#16 LRS Covered Parking	16	Construct LRS covered parking for LRS primary vehicles.	Preferred	2030	2,000	2,000	Yes	Yes
#17 Civil Engineering Covered Parking	17	Construct civil engineering covered parking for snow plowing vehicles.	Preferred	2030	4,000	4,000	Yes	Yes
#18 Troop Camp	18a	Repair existing B208 troop camp.	Preferred	2040	0	0	Yes	Yes
	18b	Construct new troop camp.	Alternate	2040	17,489	0	Yes	Yes
#19 Services Facility	19a	Repair B209 services facility.	Preferred	2035	0	0	Yes	Yes
	19b	Construct new services facility.	Alternate	2035	2,950	0	Yes	Yes
#20 Base Exchange/ Starbase	20a	Repair B302 base exchange and starbase facility.	Preferred	2035	0	0	Yes	Yes
	20b	Construct new base exchange and starbase facility.	Alternate	2035	7,860	0	Yes	Yes

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 2 – Proposed Construction, Renovation, and Demolition Project Tables

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#21 Civil Engineering Shops	21a	Construct new civil engineering combined facility.	Preferred	2030	30,000	25,600	Yes	Yes
	21b	Repair B220 civil engineering shops.	Alternate	2030			Yes	Yes
	21c	Repair B221 civil engineering administration.	Alternate	2030	0	0	Yes	Yes
	21d	Repair B234 civil engineering emergency management and storage.	Alternate	2030	0	0	Yes	Yes
#22 Dining Facility	22a	Repair B130 dining facility.	Preferred	2030	0	0	Yes	Yes
	22b	Construct new dining facility.	Alternate	2030	10,800	0	Yes	Yes
#23 C-17 Ramp	23	Construct C-17 Ramp on the east side of airfield for C-17 movement per the Oregon Cascadia Zone.	Preferred	2026	300,000	300,000	Yes	Yes

Notes: ¹Project 1 would require the choice of Project 1a, 1b, 1c combined or Project 1d alone. Project 1d would require the demolition of B242, B230, and B231.

²Project 3 would require the choice between Project 3a, 3b, or 3c. Project 3c requires selection of Project 9d.

³Project 4 would require the choice between Project 4a, 4b, 4c, or 4d.

⁴Project 5a/5b would not be implemented if the preferred Project 9d is implemented. Implementation of Project 5a or 5b required that Project 9a be implemented.

⁵Project 9 would require the choice of Project 9a, Project 9b/9c, or Project 9d. Implementation of the Project 9c or 9d options would eliminate the need for Project 5a/5b.

Project 9d is the companion to Project 3c. Project 9d would eliminate the need for Project 13c.

⁶Project 10b would require demolition of B540 and B541.

⁷Project 13 would require the choice of the following: 13a/13b, 13b/c, or 13 b/d. Project 13c would not be compatible with 9d.

⁸Project 14 would require demolition of B334.

Legend: AMU = aircraft maintenance unit; AFSC = air force specialty code; AMXS = aircraft maintenance squadron; ASE = aircraft support equipment; B = Building, FMS = full motion simulator; LAMS = large area maintenance shelters; LRS = logistics readiness squadron; MMRT = mobile mission rehearsal trainer; PFF = pilot fitment facility; SCIF = sensitive compartmented information facilities; SF = square feet

Attachment 2 – Proposed Construction, Renovation, and Demolition Project Tables

Proposed Demolition Projects

<i>Building Number</i>	<i>Total Area of Demolition (SF)</i>	<i>Year Building was Constructed</i>	<i>Year Proposed for Demolition</i>
B209	8,717	1989	2030
B213	15,271	1959	2030
B215	2,400	1959	2030
B219	83,305	1959	2026
B230	2,926	1959	2026
B231	2,916	1958	2026
B242	2,830	1961	2026
B243	32,570	1987	2030
B334	3,772	1987	2029
B500	12,112	1957	2030
B540	5,450	1959	2030
B541	5,450	1959	2026
Total SF of Demolition =	177,719		

Legend: B = Building; SF = square feet.

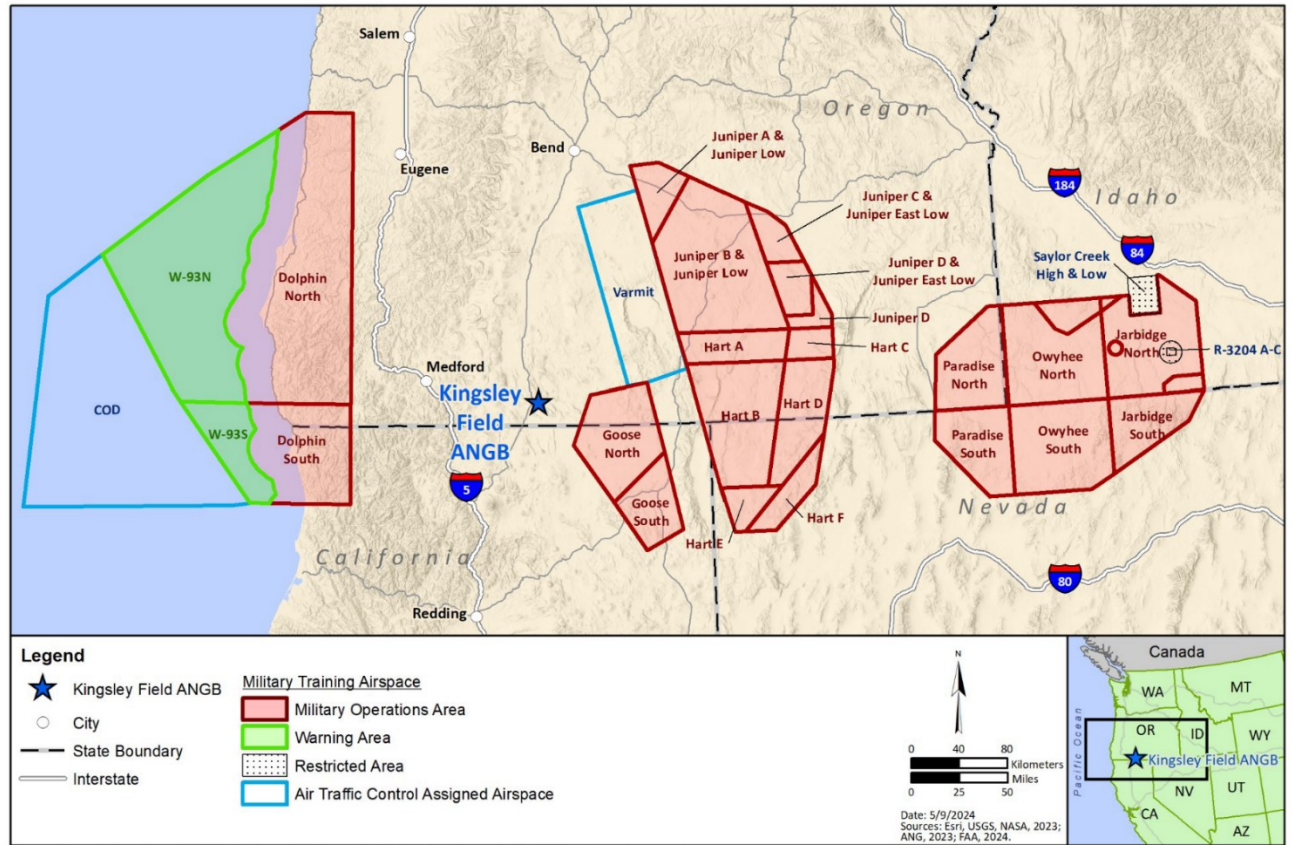
**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Draft – April 2026**

Attachment 3 – Kingsley Field ANGB Area of Potential Effects



**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 4 – Kingsley Field ANGB Military Training Airspace



Attachment 5 List of Tribes Being Consulted

- Alturas Indian Rancheria, California
- Big Pine Paiute Tribe
- Bishop Paiute Tribe
- Burns Paiute Tribe
- Cedarville Rancheria, California
- Confederated Tribes and Bands of the Yakama Nation
- Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians
- Confederated Tribes of Goshute Reservation, Nevada and Utah
- Confederated Tribes of the Grand Ronde Community of Oregon
- Confederated Tribes of Siletz Indians
- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of the Warm Springs Reservation of Oregon
- Coquille Indian Tribe
- Cow Creek Band of Umpqua Tribe of Indians
- Elk Valley Rancheria, California
- Elko Band of the Te-Moak Tribe of Western Shoshone Indians of Nevada
- Eastern Shoshone Tribe of the Wind River Reservation
- Fort Bidwell Indian Community of the Fort Bidwell Reservation of California
- Fort Independence Indian Reservation
- Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon
- Indians of Nevada (Four constituent bands: Battle Mountain Band; Elko Band; South Fork Band and Wells Band)
- Klamath Tribes
- Lone Pine Paiute Shoshone Tribe
- Modoc Nation
- Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada
- Pit River Tribe, California
- Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada
- Redding Rancheria
- Reno-Sparks Indian Colony, Nevada
- Resighini Rancheria, California
- Shoshone-Bannock Tribes of the Fort Hall Reservation
- Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada
- South Fork Band of the Te-Moak Tribe of Western Shoshone Indians of Nevada
- Summit Lake Paiute Tribe of Nevada
- Susanville Indian Rancheria
- Tolowa Dee-ni' Nation
- Utu Utu Gwaitu Paiute Tribe
- Walker River Paiute Tribe of the Walker River Reservation, Nevada
- Washoe Tribe of Nevada & California (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community, & Washoe Ranches)
- Wells Band of the Te-Moak Tribe of Western Shoshone Indians
- Winnemucca Indian Colony of Nevada
- Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada
- Yomba Shoshone Tribe of the Yomba Reservation, Nevada
- Yurok Tribe of the Yurok Reservation

The sample tribal letter for Invitation to Continue Government-to-Government Consultation for California following was distributed to the list below:

Betty Aleck, THPO, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada, 208 Capitol Hill, Nixon NV 89424
Patrick Burt, THPO, Washoe Tribe of Nevada & California (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community, & Washoe Ranches), Highway 395 South, Gardnerville NV 89410
Rose Clayburn, THPO, Yurok Tribe of the Yurok Reservation, PO Box 1027, Klamath CA 95548
Kathy Dowd, THPO, Resighini Rancheria, California, PO Box 529, Klamath CA 95548
Michon Eben, THPO, Reno-Sparks Indian Colony, Nevada, 98 Colony Rd, Reno NV 89502
Cynthia Ford, THPO, Tolowa Dee-ni' Nation, 12801 Mouth of Smith River Rd, Smith River CA 95567
Arian Hart, Chairperson, Susanville Indian Rancheria, 745 Joaquin St, Susanville CA 96130
Ginny Hatch, Chairwoman, Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada, 171 Campbell Lane, Yerington NV 89447
Linda Howard, Chairperson, Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada, 171 Campbell Lane, Yerington NV 89447
Joseph James, Chairperson, Yurok Tribe of the Yurok Reservation, 190 Klamath Blvd, Klamath CA 95548
Melany Johnson, THPO, Susanville Indian Rancheria, 745 Joaquin St, Susanville CA 96130
Arlan Melendez, Chairperson, Reno-Sparks Indian Colony, Nevada, 34 Reservation Rd, Reno NV 89502
Fawn Murphy, Chairperson, Resighini Rancheria, California, 158 E Klamath Beach Rd, Klamath CA 95548
James Phoenix, Chairman, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada, 208 Capitol Hill, Nixon NV 89424
Jackie Potter, Jr., Chairman, Redding Rancheria, 2000 Redding Rancheria, Redding CA 96001
Shane Saulque, Chairman, Utu Utu Gwaitu Paiute Tribe, 25669 Highway 6 PMBI, Benton CA 93512
Serrell Smokey, Chairman, Washoe Tribe of Nevada & California (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community, & Washoe Ranches), 919 US Highway 395 North, Gardnerville NV 89410
Jeri Thompson, Chairperson, Tolowa Dee-ni' Nation, 12801 Mouth of Smith River Rd, Smith River CA 95567



Sample California Tribal Letter

**DEPARTMENT OF THE AIR FORCE
173D FIGHTER WING
KINGSLEY FIELD OREGON**

26 March 2025

Colonel Adam J. Gaudinski
173 FW/CC
211 Arnold Ave. Building A
Klamath Falls OR 97603

Betty Aleck
THPO
Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada
208 Capitol Hill
Nixon, NV 89424

**SUBJECT: Invitation to Continue Government-to-Government Consultation Associated
with the Kingsley Field F-35A Lightning II Beddown Environmental Impact Statement**

Dear Ms. Aleck

The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon (Attachment 1). This proposal also includes the necessary facility improvements and construction required to support the mission. The NGB has determined that the proposed Federal action is an undertaking as defined in 36 Code of Federal Regulations (CFR) Section 800.16(y) and it is a type of activity that has the potential to cause effects on historic properties.

NGB has prepared a Preliminary Draft Environmental Impact Statement (EIS) under the National Environmental Policy Act of 1969 (NEPA) to evaluate potential environmental effects associated with the proposed Federal action alternatives. The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

The NGB is conducting the environmental analysis for the undertaking in accordance with NEPA, as amended. The Preliminary Draft EIS is available upon request and the Draft EIS is expected to become available on the project website in July 2025 (www.kingsleyfieldf35eis.com).

The NGB initiated consultation with your office on 13 June 2024. The purpose of this letter is to continue consultation pursuant to the terms of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations found at 36 CFR Section 800. This letter serves to identify historic properties within the Area of Potential Effects

(APE) for the undertaking and gauge project effects located within the bounds of the proposed undertaking.

The Proposed Undertaking

The purpose of the proposed undertaking is to increase F-35A pilot production in support of the National Defense Strategy. The proposed undertaking would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this proposed undertaking; however, there could be an increase in operations within the airspace.

The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field would occur in Fiscal Year (FY) 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 Primary Aerospace Vehicle Authorized (PAA) (plus 2 Backup Aerospace Vehicle Authorized [BAA]) F-35A aircraft would be based at Kingsley Field.

To provide the training needed to ensure combat readiness, F-35A aircrews would conduct operations in two types of areas: (1) an airfield associated with the installation, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A would use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures.

The No Action Alternative

Under the No Action Alternative, the 173 FW would continue to conduct their current mission using existing F-15C/D aircraft. Any construction and repair projects required for the current mission would be implemented. Implementation of the No Action Alternative would include the interior renovation of Buildings 130 and 302. It would include the interior renovation of Buildings 220, 221, and 234 if alternate options are chosen.

Area of Potential Effects (36 CFR Section 800.4(a)(1))

An APE is defined in 36 CFR Section 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” The NGB has reviewed the undertaking and defined the APE for the proposed undertaking specific to the state of California as the lands located beneath existing military training airspace from surface level to the ceiling of each airspace designation plus a 1-mile horizontal buffer. Attachment 1 includes a map of the APE.

Identification of Listed Historic Properties (36 CFR Section 800.4(b))

Information on cultural resources within the APE was derived from conducting background research using the National Register of Historic Places (NRHP) Information Database to identify NRHP-listed properties beneath the affected airspace that can include national historic landmarks, cultural landscapes, national monuments, historic trails, and historic battlefields within the same area.

Twenty-four listed historic properties are located on lands beneath the existing airspace associated with 173 FW in California (Attachment 2). The listed historic properties in California include 15 archaeological sites, a shipwreck, a light station, a lighthouse, Gasquet Ranger Station Historic District, a schoolhouse, a catholic church, a carpenter and paint shop associated with the Tule Lake Segregation Center, the Nevada-California-Oregon Railway Depot, and a Nevada-California-Oregon Railway general office building (National Park Service [NPS] 2024a, 2024b). Twelve California State Historic Landmarks are located beneath the military training airspace (see Attachment 2). These historic landmarks are titled: Applegate-Lassen Trail, Battery Point Lighthouse, Battle of Land's Ranch-1872, Brother Jonathan Cemetery, Camp Lincoln, Evans and Baily Fight, Fort Ter-Wer Site, Fremont's Camp, Indian Village Site, Infernal Caverns Battleground, Pioneer Stage Road to Oregon, and S.S. Emidio (NoeHill 2024).

NGB invited 44 federally recognized Tribal Nations who may cultural or historical ties to lands beneath the airspace to consult on this proposed undertaking. Of the 44 Tribal Nations, NGB received responses from 7 Tribal Nations. In accordance with Executive Order (EO) 13175, *Consultation and Coordination with Indian Tribal Governments*; EO 12372, *Intergovernmental Review of Federal Programs*; and Section 106 of the National Historic Preservation Act and its implementation regulations found at 36 CFR parts 800.2, 800.3, and 800.4, the 173 FW and NGB respectfully request your assistance in identifying the following:

- traditional resources or sacred sites that may be located within the current APE;
- historic properties in the APE of which we may not be aware; and/or
- your Tribe's interest in participating in additional consultation.

Results of Identification and Evaluation (36 CFR Section 800.4(d))

Because the proposed undertaking in California is an airspace action, only those historic properties that would reasonably be affected by visual (overflights, chaff and flares) and noise intrusions are considered. These include architectural resources, archaeological resources with standing buildings or structures, and traditional cultural properties and sacred sites.

Under the Proposed Action, the F-35A would use a very similar altitude profile as the F-15C/D in training; however, the F-35A would utilize altitudes above 20,000 feet mean sea level (MSL) 16 percent more than the F-15C/D currently does. The use of low altitudes (between 500 feet above ground level [AGL] and 10,000 feet MSL) would remain approximately the same as it currently is.

In general, noise from the F-35A would be 3 to 5 decibels (dB) greater in terms of sound exposure level (SEL) and 6 to 8 dB greater in maximum sound level (L_{max}) when compared to the F-15C/D while operating in military power and 400 knots. The greatest Day-Night Average Sound Level (DNL)/Onset-Rate Adjusted Day-Night Average Sound Level (L_{dnmr}) of 49 dB would occur in Juniper Low, Juniper East Low, Goose North, and Goose South Military Operations Areas (MOAs) due to a combination of an increase in operations in Goose and the lower airspace floor and lower altitudes in Juniper Low and Juniper East Low MOAs. The remainder of the Juniper and Hart complex outside of the Juniper Low and Juniper East Low areas would experience DNL/ L_{dnmr} of 40 dB. The DNL/ L_{dnmr} in Dolphin North and South MOA would be less than 35 dB due to the relatively small number of sorties spread over a large area with a minimum altitude of 11,000 feet MSL. Overall, there would be an increase in DNL/ L_{dnmr} of 2 to 5 dB across the airspace, except Dolphin North and South MOAs that would experience a negligible change from the No Action Alternative. Based on noise level calculations for lands beneath the military training airspace, there would be no significant effects on archaeological resources, historic structures, or traditional cultural properties as a result of the implementation of the proposed undertaking.

Due to the high altitude of the overflights, small size of the aircraft, and the high speeds, the aircraft would not be readily visible to observers on the ground. Therefore, visual intrusions would be minimal and would not represent an increase sufficient to cause adverse effects on the settings of cultural resources.

No ground disturbance would occur under the airspace and use of ordnance and defensive countermeasures would occur in areas already used for these activities. The 173 FW would adhere to local operating procedures for chaff and flare release to include the Mountain Home Airspace and restricted airspace associated with the Saylor Creek Range (Department of the Air Force [DAF] 2023). Overall, flares are unlikely to adversely affect cultural resources. Therefore, the introduction of material to archaeological sites or standing structures from the use of flares would not have an adverse effect on these resources.

Conclusion

Pursuant to 36 CFR Section 800.4(d)(1), the NGB has reached a preliminary determination of no historic properties affected for the proposed undertaking with respect to historic properties beneath the military training airspace. However, prior to finalizing our effects determination, we would like to solicit input regarding Tribal resources that may be present within the APE.

If you request additional consultation, the NGB and 173 FW will work with your office to adopt procedures that will meet your Tribe's needs and requirements for continued consultation.

In order for the NGB to address your concerns in a timely manner for both the Tribe and the proposed undertaking, please respond to this letter within thirty (30) days of receipt to J. Rocco de Gregory, Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at

NGB.CCA4F.NEPACOMMENTSorg@us.af.mil with the subject titled as ATTN: 173 FW EIS.
We look forward to continuing consultation for the proposed undertaking, and we thank you for
your assistance.

Sincerely,



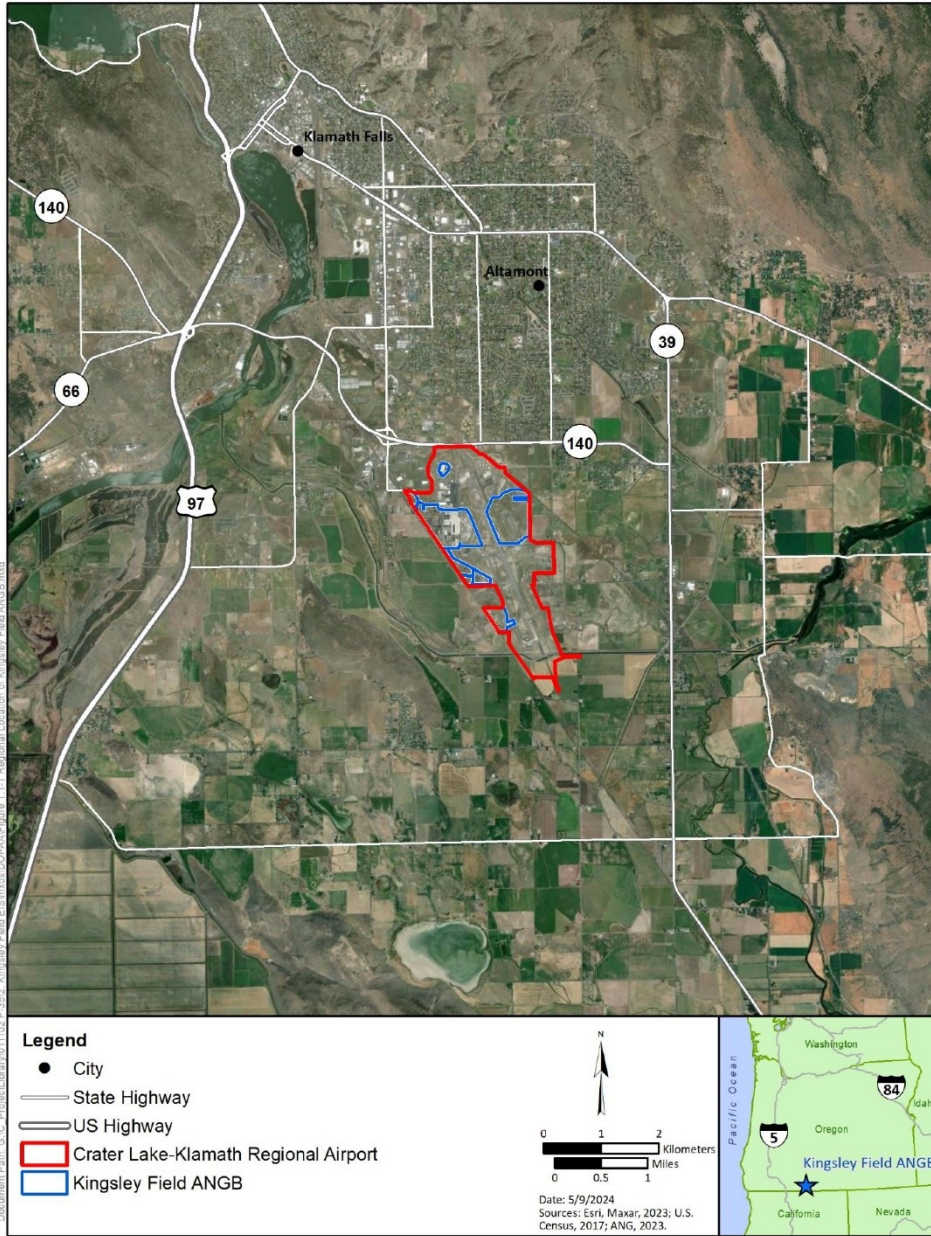
ADAM J. GAUDINSKI, Colonel, ORANG
Commander, 173d Fighter Wing

Attachments:

1. Maps
2. Table of Historic Properties
3. References Cited

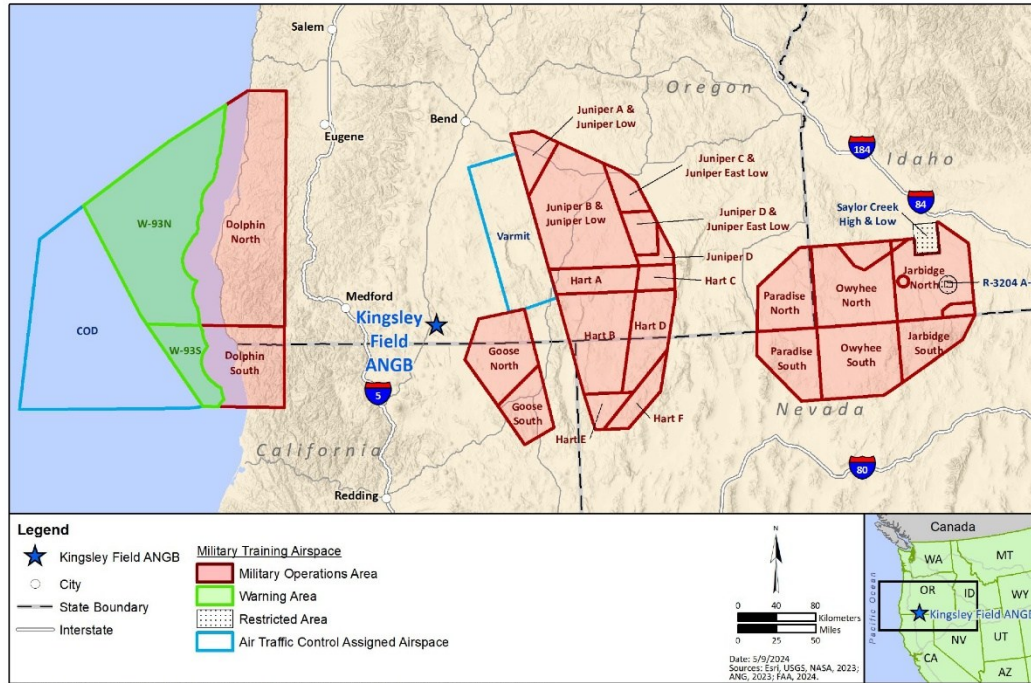
**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB



Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026

Attachment 2 - Kingsley Field ANGB Military Training Airspace



**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 2 – Table of NRHP & State Listed Sites

Resource Name	County	City
<i>Dolphin South MOA</i>		
National Register Listed		
Brother Jonathan (Shipwreck Site)	Del Norte	Crescent City
Crescent City Lighthouse	Del Norte	Crescent City
Ender's Beach Archeological Sites	Del Norte	Crescent City
Gasquet Ranger Station Historic District	Del Norte	Gasquet
Mus-yeh-sait-neh Village and Cultural Landscape Property	Del Norte	Gasquet
Point St. George Site	Del Norte	Crescent City
St. George Reef Light Station	Del Norte	Crescent City
Yontocket Historic District	Del Norte	Fort Dick
State Register Listed		
Battery Point Lighthouse	Del Norte	Crescent City
Brother Jonathan Cemetery	Del Norte	Crescent City
Camp Lincoln	Del Norte	Crescent City
Fort Ter-Wer Site	Del Norte	Klamath Glen
Indian Village Site	Del Norte	Crescent City
Pioneer State Road to Oregon	Del Norte	Crescent City
SS. Emidio	Del Norte	Crescent City
<i>Goose South MOA</i>		
National Register Listed		
Anklin Village Archeological Site	Modoc	Canby
Black Cow Spring	Modoc	Canby
Core Site	Modoc	Canby
Cuppy Cave	Modoc	Canby
Jess Valley Schoolhouse	Modoc	Likely
Mildred Ann Archeological Site	Modoc	Canby
Nelson Springs	Modoc	Likely
Nevada-California-Oregon Railway Depot	Modoc	Alturas
Nevada-California-Oregon Railway Co. General Office Building	Modoc	Alturas
Sacred Heart Catholic Church	Modoc	Alturas
Seven Mile Flat Site	Modoc	Devil's Garden Ranger District
Skull Ridge	Modoc	Canby
Skull Spring	Modoc	Canby
State Register Listed		
Applegate-Lassen Trail	Modoc	Fort Bidwell
Evans and Baily Fight	Modoc	Canby
Infernal Caverns Battleground	Modoc	Likely
Battle of Land's Ranch- 1872	Modoc	Tulelake
<i>Goose North MOA</i>		

Attachment 2 – Table of NRHP & State Listed Sites

Resource Name	County	City
National Register Listed		
Carpenter and Paint Shop (Part of Tule Lake Segregation Center)	Modoc	Newell
Fern Cave Archeological Site*	Modoc	Tule Lake
Petroglyph Point Archeological Site*	Modoc	Tule Lake
State Register Listed		
Fremont's Camp	Modoc	Tule Lake

Notes: *Possibly located within Goose North MOA; address is restricted so we cannot be 100% certain that this site is located beneath the airspace.

Attachment 3 – References Cited

Department of the Air Force (DAF)

2023 Airspace Optimization for Readiness EIS for Mountain Home AFB.

National Park Service (NPS)

2024a National Register of Historic Places Spatial Data. Last updated 19 April 2024.

2024b National Register of Historic Places Spreadsheet of Everything. Last updated 10 July 2024.

NoeHill

2024 List of State Historic Landmarks and Points of Interest. Accessed June 19, 2024 at:

<https://noehill.com/sitemap.asp>.

The sample tribal letter for Invitation to Continue Government-to-Government Consultation for Idaho following was distributed to the list below:

Robert Brunoe, THPO, Confederated Tribes of the Warm Springs Reservation of Oregon, PO Box C,
Warm Springs OR 97761

Brian Mason, Tribal Chairman, Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada, 1036
Idaho State Highway 51, PO Box 219, Owyhee NV 89832-0219

Carolyn Smith, Cultural Resources Coordinator, Shoshone-Bannock Tribes of the Fort Hall Reservation,
PO Box 306. Fort Hall ID 83203

Jonathan Smith, Chairman, Confederated Tribes of the Warm Springs Reservation of Oregon, 1233
Veterans St, Warm Springs OR 97761

Lee Tyler, Chairman, Shoshone-Bannock Tribes of the Fort Hall Reservation, Agency Building 82, 1
Pima Dr, Fort Hall ID 83203



Sample Tribal Letter Idaho
DEPARTMENT OF THE AIR FORCE
173D FIGHTER WING
KINGSLEY FIELD OREGON

26 March 2025

Colonel Adam J. Gaudinski
173 FW/CC
211 Arnold Ave. Building A
Klamath Falls OR 97603

Robert Brunoe
Tribal Historic Preservation Officer
Confederated Tribes of the Warm Springs Reservation of Oregon
P.O. Box C
Warm Springs, OR 97761

**SUBJECT: Invitation to Continue Government-to-Government Consultation Associated
with the Kingsley Field F-35A Lightning II Beddown Environmental Impact Statement**

Dear Mr. Brunoe

The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon (Attachment 1). This proposal also includes the necessary facility improvements and construction required to support the mission. The NGB has determined that the proposed Federal action is an undertaking as defined in 36 Code of Federal Regulations (CFR) Section 800.16(y) and it is a type of activity that has the potential to cause effects on historic properties.

NGB has prepared a Preliminary Draft Environmental Impact Statement (EIS) under the National Environmental Policy Act of 1969 (NEPA), as amended to evaluate potential environmental effects associated with the proposed Federal action alternatives. The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

The NGB is conducting the environmental analysis for the undertaking in accordance with NEPA, as amended. The Preliminary Draft EIS is available upon request and the Draft EIS is expected to become available on the project website in July 2025 (www.kingsleyfieldf35eis.com).

The NGB initiated consultation with your office on 13 June 2024. The purpose of this letter is to continue consultation pursuant to the terms of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations found at 36 CFR Section 800. This letter serves to identify historic properties within the Area of Potential Effects

(APE) for the undertaking and gauge project effects located within the bounds of the proposed undertaking.

The Proposed Undertaking

The purpose of the proposed undertaking is to increase F-35A pilot production in support of the National Defense Strategy. The proposed undertaking would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this proposed undertaking; however, there could be an increase in operations within the airspace.

The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field would occur in Fiscal Year (FY) 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 Primary Aerospace Vehicle Authorized (PAA) (plus 2 Backup Aerospace Vehicle Authorized [BAA]) F-35A aircraft would be based at Kingsley Field.

To provide the training needed to ensure combat readiness, F-35A aircrews would conduct operations in two types of areas: (1) an airfield associated with an installation, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A would use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures.

The No Action Alternative

Under the No Action Alternative, the 173 FW would continue to conduct their current mission using existing F-15C/D aircraft. Any construction and repair projects required for the current mission would be implemented. Implementation of the No Action Alternative would include the interior renovation of Buildings 130 and 302. It would include the interior renovation of Buildings 220, 221, and 234 if alternate options are chosen.

Area of Potential Effects (36 CFR Section 800.4(a)(1))

An APE is defined in 36 CFR Section 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” The NGB has reviewed the undertaking and defined the APE for the proposed undertaking specific to the state of Idaho as the lands located beneath existing military training airspace from surface level to the ceiling of each airspace designation plus a 1-mile horizontal buffer. Attachment 1 includes a map of the APE.

Identification of Listed Historic Properties (36 CFR Section 800.4(b))

Information on cultural resources within the APE was derived from conducting background research using the National Register of Historic Places (NRHP) Information Database to identify NRHP-listed properties beneath the affected airspace that can include national historic landmarks, cultural landscapes, national monuments, historic trails, and historic battlefields within the same area.

Three listed historic properties are located on lands beneath the existing airspace associated with 173 FW in Idaho. These listed historic properties include the Wickahoney Post Office and Stage Station, Camp Three Forks, and the Camas and Pole Creeks Archaeological District (National Park Service [NPS] 2024a, 2024b). Idaho does not have a State Register of Historic Places.

NGB invited 44 federally recognized Tribal Nations who may cultural or historical ties to lands beneath the airspace to consult on this proposed undertaking. Of the 44 Tribal Nations, NGB received responses from 7 Tribal Nations. In accordance with Executive Order (EO) 13175, *Consultation and Coordination with Indian Tribal Governments*; EO 12372, *Intergovernmental Review of Federal Programs*; and Section 106 of the National Historic Preservation Act and its implementation regulations found at 36 CFR parts 800.2, 800.3, and 800.4, the 173 FW and NGB respectfully request your assistance in identifying the following:

- traditional resources or sacred sites that may be located within the current APE;
- historic properties in the APE of which we may not be aware; and/or
- your Tribe’s interest in participating in additional consultation.

Results of Identification and Evaluation (36 CFR Section 800.4(d))

Because the proposed undertaking in Idaho is an airspace action, only those historic properties that would reasonably be affected by visual (overflights, chaff and flares) and noise intrusions are considered. These include architectural resources, archaeological resources with standing buildings or structures, and traditional cultural properties.

Under the Proposed Action, the F-35A would use a very similar altitude profile as the F-15C/D in training; however, the F-35A would utilize altitudes above 20,000 feet mean sea level (MSL) 16 percent more than the F-15C/D currently does. The use of low altitudes (between 500 feet above ground level [AGL] and 10,000 feet MSL) would remain approximately the same as it currently is.

In general, noise from the F-35A would be 3 to 5 decibels (dB) greater in terms of sound exposure level (SEL) and 6 to 8 dB greater in maximum sound level (L_{max}) when compared to the F-15C/D while operating in military power and 400 knots. Overall, there would be an increase in Day-Night Average Sound Level (DNL)/Onset-Rate Adjusted Day-Night Average Sound Level (L_{dnmr}) of 2 to 5 dB across the airspace. Based on noise level calculations for lands beneath the military training airspace, there would be no significant effects on archaeological resources, historic structures, or traditional cultural properties as a result of the implementation of the proposed undertaking.

Due to the high altitude of the overflights, small size of the aircraft, and the high speeds, the aircraft would not be readily visible to observers on the ground. Therefore, visual intrusions would be minimal and would not represent an increase sufficient to cause adverse effects on the settings of cultural resources.

No additional ground disturbance would occur under the airspace and use of ordnance and defensive countermeasures would occur in areas already used for these activities. The 173 FW would adhere to local operating procedures for chaff and flare release to include the Mountain Home Airspace and restricted airspace associated with the Saylor Creek Range (Department of the Air Force [DAF] 2023). Overall, flares are unlikely to adversely affect cultural resources. Therefore, the introduction of material to archaeological sites or standing structures from the use of flares would not have an adverse effect on these resources.

Conclusion

Pursuant to 36 CFR Section 800.4(d)(1), the NGB has reached a preliminary determination of no historic properties affected for the proposed undertaking with respect to historic properties beneath the military training airspace. However, prior to finalizing our effects determination, we would like to solicit input regarding Tribal resources that may be present within the APE.

If you request additional consultation, the NGB and 173 FW will work with your office to adopt procedures that will meet your Tribe's needs and requirements for continued consultation.

In order for the NGB to address your concerns in a timely manner for both the Tribe and the proposed undertaking, please respond to this letter within thirty (30) days of receipt to J. Rocco de Gregory, Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.CCA4F.NEPACOMMENTSOrg@us.af.mil with the subject titled as ATTN: 173 FW EIS. We look forward to continuing consultation for the proposed undertaking, and we thank you for your assistance.

Sincerely,



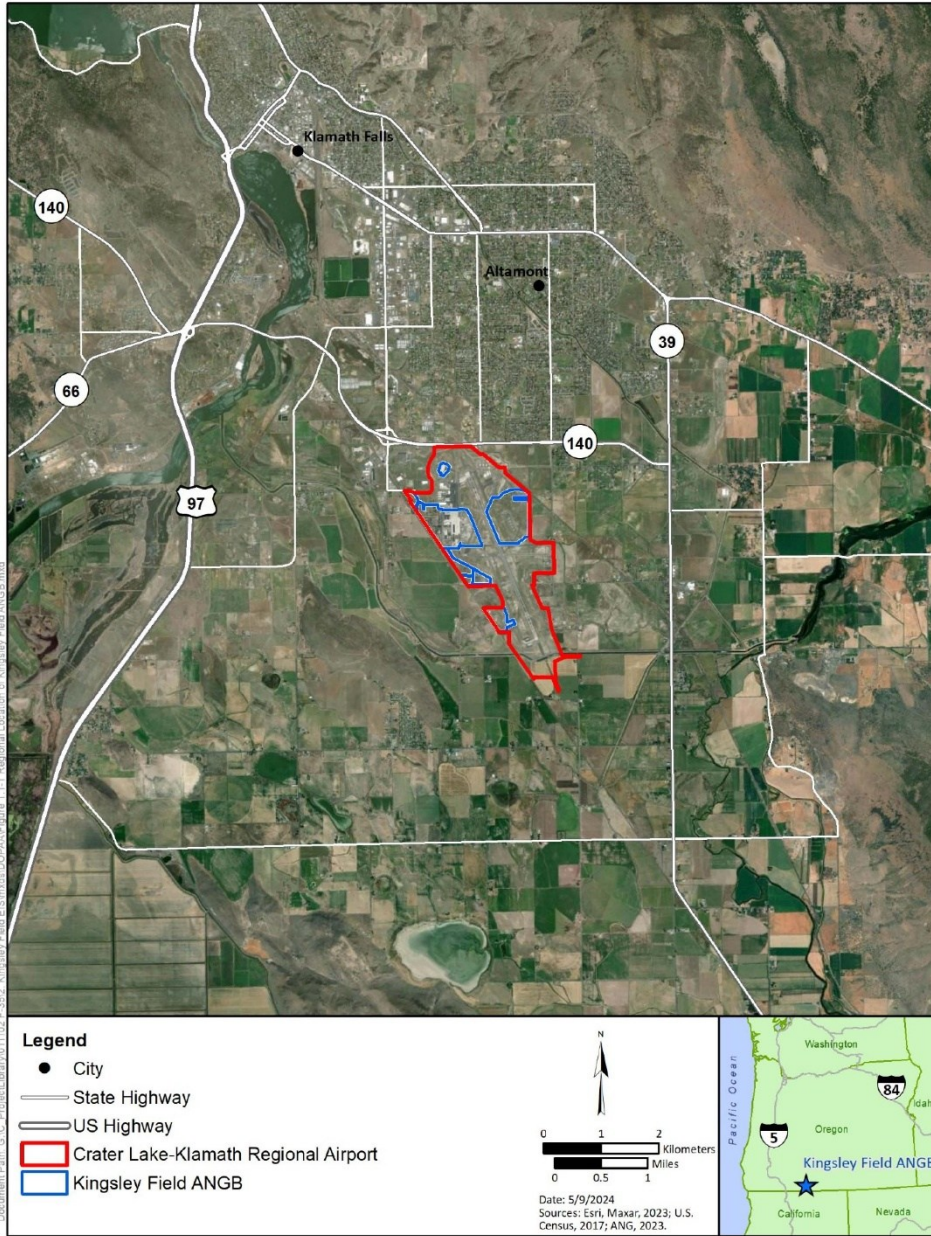
ADAM J. GAUDINSKI, Colonel, ORANG
Commander, 173d Fighter Wing

Attachments:

1. Maps
2. References Cited

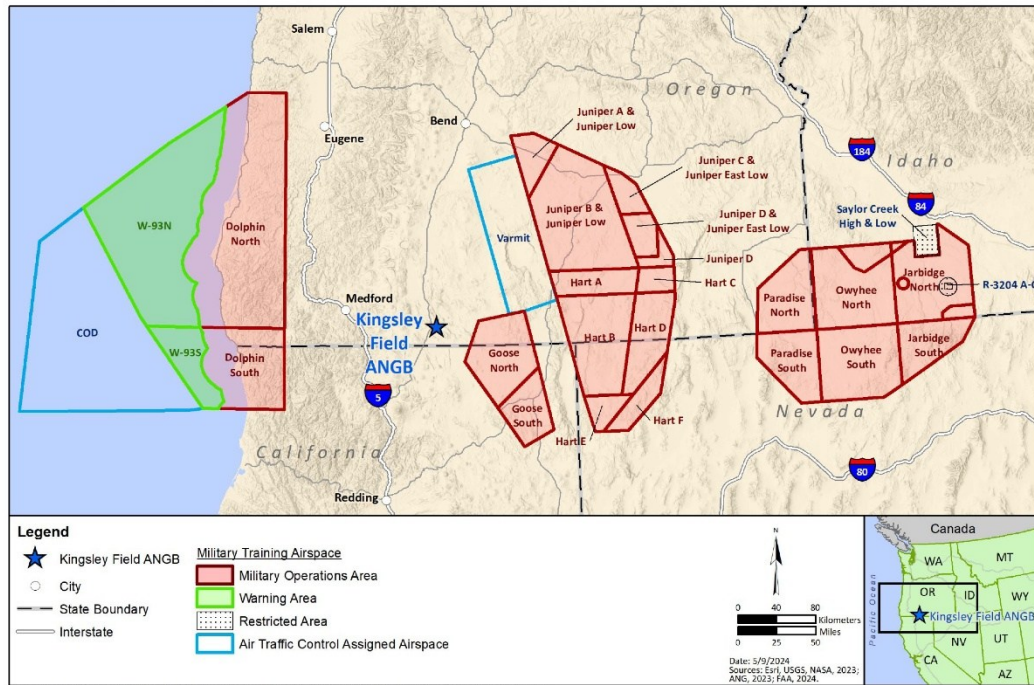
**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB



Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026

Attachment 2 - Kingsley Field ANGB Military Training Airspace



Attachment 2 – References Cited

Department of the Air Force (DAF)

2023 Airspace Optimization for Readiness EIS for Mountain Home AFB.

National Park Service (NPS)

2024a National Register of Historic Places Spatial Data. Last updated 19 April 2024.

2024b National Register of Historic Places Spreadsheet of Everything. Last updated 10 July 2024.

The sample tribal letter for Invitation to Continue Government-to-Government Consultation for Nevada following was distributed to the list below:

Betty Aleck, THPO, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada, 208 Capitol Hill, Nixon NV 89424
Yatch Bamford, Chairman, Pit River Tribe, California, 36970 Park Ave, Burney CA 96013
Gracie Begay, Chairwoman, Wells Band of the Te-Moak Tribe of Western Shoshone Indians, PO Box 809, Wells NV 89835
Darryl Brady, Chairman, Yomba Shoshone Tribe of the Yomba Reservation, Nevada, HC 61, Box 6275, Austin NV 89310
Robert Brunoe, THPO, Confederated Tribes of the Warm Springs Reservation of Oregon, PO Box C, Warm Springs OR 97761
Patrick Burt, THPO, Washoe Tribe of Nevada & California (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community, & Washoe Ranches), Highway 395 South, Gardnerville NV 89410
Arlo Crutcher, Chairman, Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon, 111 N Reservation Rd, McDermitt NV 89421
Kathy Dowd, THPO, Resighini Rancheria, California, PO Box 529, Klamath CA 95548
Michon Eben, THPO, Reno-Sparks Indian Colony, Nevada, 98 Colony Rd, Reno NV 89502
Natalie Forrest-Perez, Interim THPO, Pit River Tribe, California, 36970 Park Ave, Burney CA 96013
Len George, Chairperson, Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada, 565 Rio Vista Drive, Fallon NV 89406-6415
Davis Gonzales, Chairperson, Indians of Nevada (Four constituent bands: Battle Mountain Band; Elko Band; South Fork Band and Wells Band), 525 Sunset St, Elko NV 89801
Ginny Hatch, Chairwoman, Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada, 171 Campbell Lane, Yerington NV 89447
Joseph Holley, Chairman, South Fork Band of the Te-Moak Tribe of Western Shoshone Indians of Nevada, 525 Sunset St, Elko NV 89801
Linda Howard, Chairperson, Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada, 171 Campbell Lane, Yerington NV 89447
Randi Lone Eagle, Chairwoman and THPO, Summit Lake Paiute Tribe of Nevada, 2255 Green Vista Dr, Ste 402, Sparks NV 89431
Eric Magiera, Chairman, Winnemucca Indian Colony of Nevada, 200 South Virginia Street, 8th Floor Winnemucca NV 89501
Joshua Mann, THPO, Eastern Shoshone Tribe of the Wind River Reservation, PO Box 538, Fort Washakie WY 82514
Andrea Martinez, Chairwoman, Walker River Paiute Tribe of the Walker River Reservation, Nevada, PO Box 220, Schurz NV 89427-0220
Brian Mason, Tribal Chairman, Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada, 1036 Idaho State Highway 51, PO Box 219, Owyhee NV 89832-0219
Arlan Melendez, Chairperson, Reno-Sparks Indian Colony, Nevada, 34 Reservation Rd, Reno NV 89502
Amos Murphy, Chairman, Confederated Tribes of Goshute Reservation, Nevada and Utah, HC 61, Box 6104, Ibapah UT 84034
James Phoenix, Chairman, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada, 208 Capitol Hill, Nixon NV 89424
Linzey Scott, Acting THPO, Walker River Paiute Tribe of the Walker River Reservation, Nevada, PO Box 220, Schurz NV 89427-0220
Leilah Shephard, THPO, Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada, 565 Rio Vista Dr, Fallon NV 89406-6415

Carolyn Smith, Cultural Resources Coordinator, Shoshone-Bannock Tribes of the Fort Hall Reservation,
PO Box 306. Fort Hall ID 83203

Jonathan Smith, Chairman, Confederated Tribes of the Warm Springs Reservation of Oregon, 1233
Veterans St, Warm Springs OR 97761

Serrell Smokey, Chairman, Washoe Tribe of Nevada & California (Carson Colony, Dresslerville Colony,
Woodfords Community, Stewart Community, & Washoe Ranches), 919 US Highway 395 North,
Gardnerville NV 89410

John St. Clair, Chairman, Eastern Shoshone Tribe of the Wind River Reservation, PO Box 538, Fort
Washakie WY 82514

Gerald Temoke, Chairperson, Elko Band of the Te-Moak Tribe of Western Shoshone Indians of Nevada,
1745 Silver Eagle Dr, Elko NV 89801

Lee Tyler, Chairman, Shoshone-Bannock Tribes of the Fort Hall Reservation, Agency Building 82, 1
Pima Dr, Fort Hall ID 83203

Catherine Williams-Tuni, Chairwoman, Paiute-Shoshone Tribe of the Fallon Reservation and Colony,
Nevada, 565 Rio Vista Dr, Fallon NV 89406-6415



**Sample Tribal Letter Nevada
DEPARTMENT OF THE AIR FORCE
173D FIGHTER WING
KINGSLEY FIELD OREGON**

26 March 2025

Colonel Adam J. Gaudinski
173 FW/CC
211 Arnold Ave. Building A
Klamath Falls OR 97603

Amos Murphy
Chairman
Confederated Tribes of the Goshute Reservation, Nevada and Utah
HC 61, Box 6104
Ibapah, UT 84034

**SUBJECT: Invitation to Continue Government-to-Government Consultation Associated
with the Kingsley Field F-35A Lightning II Beddown Environmental Impact Statement**

Dear Chairman Murphy

The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon (Attachment 1). This proposal also includes the necessary facility improvements and construction required to support the mission. The NGB has determined that the proposed Federal action is an undertaking as defined in 36 Code of Federal Regulations (CFR) Section 800.16(y) and it is a type of activity that has the potential to cause effects on historic properties.

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(APE) for the undertaking and gauge project effects located within the bounds of the proposed undertaking.

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The purpose of the proposed undertaking is to increase F-35A pilot production in support of the National Defense Strategy. The proposed undertaking would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this proposed undertaking; however, there could be an increase in operations within the airspace.

The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field would occur in Fiscal Year (FY) 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 Primary Aerospace Vehicle Authorized (PAA) (plus 2 Backup Aerospace Vehicle Authorized [BAA]) F-35A aircraft would be based at Kingsley Field.

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Information on cultural resources within the APE was derived from conducting background research using the National Register of Historic Places (NRHP) Information Database to identify NRHP-listed properties beneath the affected airspace that can include national historic landmarks, cultural landscapes, national monuments, historic trails, and historic battlefields within the same area.

Three listed historic properties are located on lands beneath the existing airspace associated with 173 FW in Nevada. The three listed historic properties include Gold Creek Ranger Station, Silver State Flour Mill, and the Applegate-Lassen Trail. The Applegate-Lassen Trail is located beneath three military training airspace units (Hart B Military Operations Area [MOA], Hart E MOA, and Hart F MOA) (National Park Service [NPS] 2024a, 2024b). Four Nevada State Historic Landmarks are located beneath the military training airspace. These historic landmarks are titled: Camp McGarry, Town of Jarbidge, Jarbidge Community Hall, and Fort McDermitt (NoeHill 2024).

NGB invited 44 federally recognized Tribal Nations who may cultural or historical ties to lands beneath the airspace to consult on this proposed undertaking. Of the 44 Tribal Nations, NGB received responses from 7 Tribal Nations. In accordance with Executive Order (EO) 13175, *Consultation and Coordination with Indian Tribal Governments*; EO 12372, *Intergovernmental Review of Federal Programs*; and Section 106 of the National Historic Preservation Act and its implementation regulations found at 36 CFR parts 800.2, 800.3, and 800.4, the 173 FW and NGB respectfully request your assistance in identifying the following:

- traditional resources or sacred sites that may be located within the current APE;
- historic properties in the APE of which we may not be aware; and/or
- your Tribe’s interest in participating in additional consultation.

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Because the proposed undertaking in Nevada is an airspace action, only those historic properties that would reasonably be affected by visual (overflights, chaff and flares) and noise intrusions are considered. These include architectural resources, archaeological resources with standing buildings or structures, and traditional cultural properties.

Under the Proposed Action, the F-35A would use a very similar altitude profile as the F-15C/D in training; however, the F-35A would utilize altitudes above 20,000 feet mean sea level (MSL) 16 percent more than the F-15C/D currently does. The use of low altitudes (between 500 feet above ground level [AGL] and 10,000 feet MSL) would remain approximately the same as it currently is.

In general, noise from the F-35A would be 3 to 5 decibels (dB) greater in terms of sound exposure level (SEL) and 6 to 8 dB greater in maximum sound level (L_{max}) when compared to the F-15C/D while operating in military power and 400 knots. Overall, there would be an increase in Day-Night Average Sound Level (DNL)/Onset-Rate Adjusted Day-Night Average Sound Level (L_{dnmr}) of 2 to 5 dB across the airspace. Based on noise level calculations for lands beneath the military training airspace, there would be no significant effects on archaeological

resources, historic structures, or traditional cultural properties as a result of the implementation of the proposed undertaking.

Due to the high altitude of the overflights, small size of the aircraft, and the high speeds, the aircraft would not be readily visible to observers on the ground. Therefore, visual intrusions would be minimal and would not represent an increase sufficient to cause adverse effects on the settings of cultural resources.

No additional ground disturbance would occur under the airspace and use of ordnance and defensive countermeasures would occur in areas already used for these activities. The 173 FW would adhere to local operating procedures for chaff and flare release to include the Mountain Home Airspace and restricted airspace associated with the Saylor Creek Range (Department of the Air Force [DAF] 2023). Overall, flares are unlikely to adversely affect cultural resources. Therefore, the introduction of material to archaeological sites or standing structures from the use of flares would not have an adverse effect on these resources.

Conclusion

Pursuant to 36 CFR Section 800.4(d)(1), the NGB has reached a preliminary determination of no historic properties affected for the proposed undertaking with respect to historic properties beneath the military training airspace. However, prior to finalizing our effects determination, we would like to solicit input regarding Tribal resources that may be present within the APE.

If you request additional consultation, the NGB and 173 FW will work with your office to adopt procedures that will meet your Tribe's needs and requirements for continued consultation.

In order for the NGB to address your concerns in a timely manner for both the Tribe and the proposed undertaking, please respond to this letter within thirty (30) days of receipt to J. Rocco de Gregory, Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject titled as ATTN: 173 FW EIS. We look forward to continuing consultation for the proposed undertaking, and we thank you for your assistance.

Sincerely,



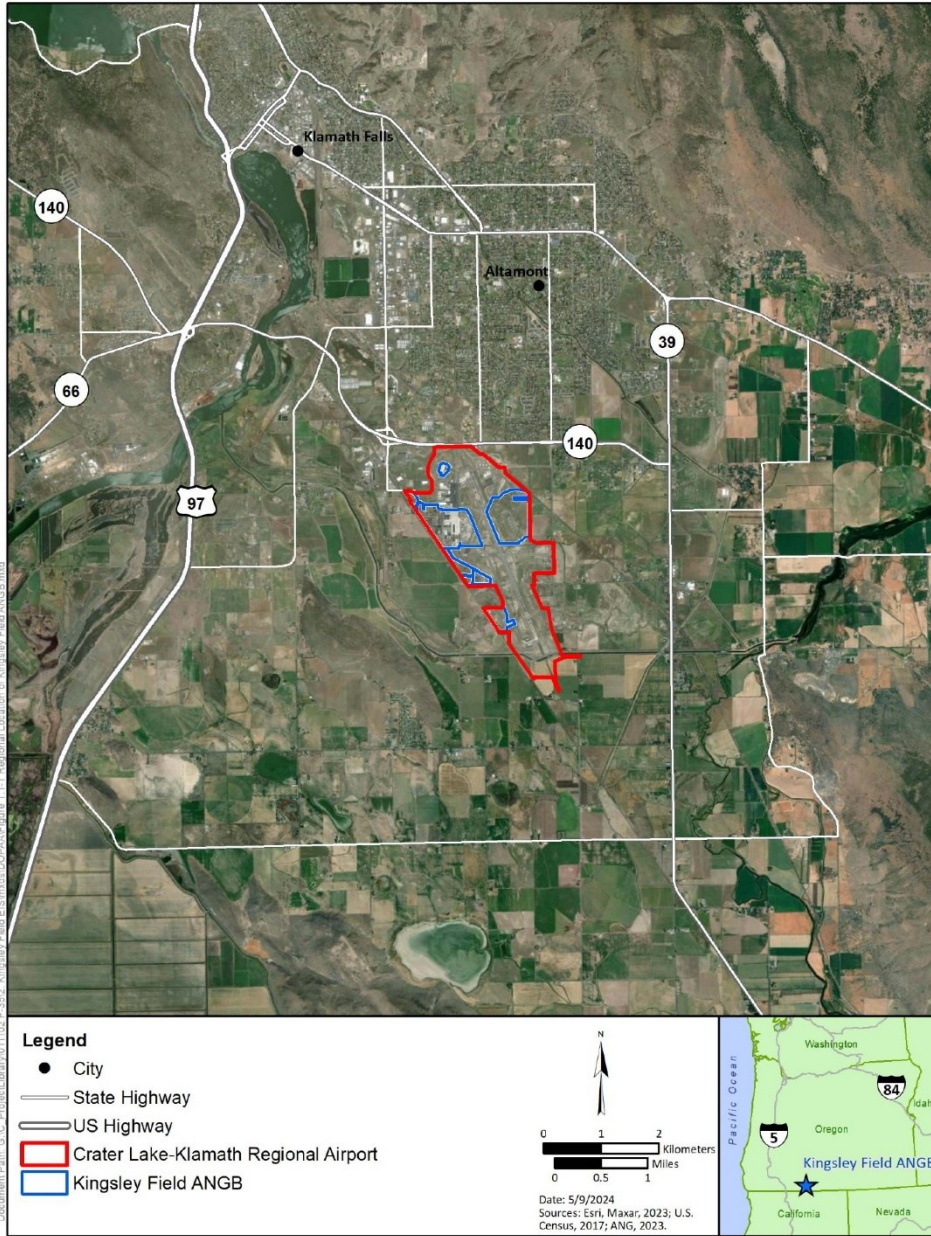
ADAM J. GAUDINSKI, Colonel, ORANG
Commander, 173d Fighter Wing

Attachments:

1. Maps
2. References Cited

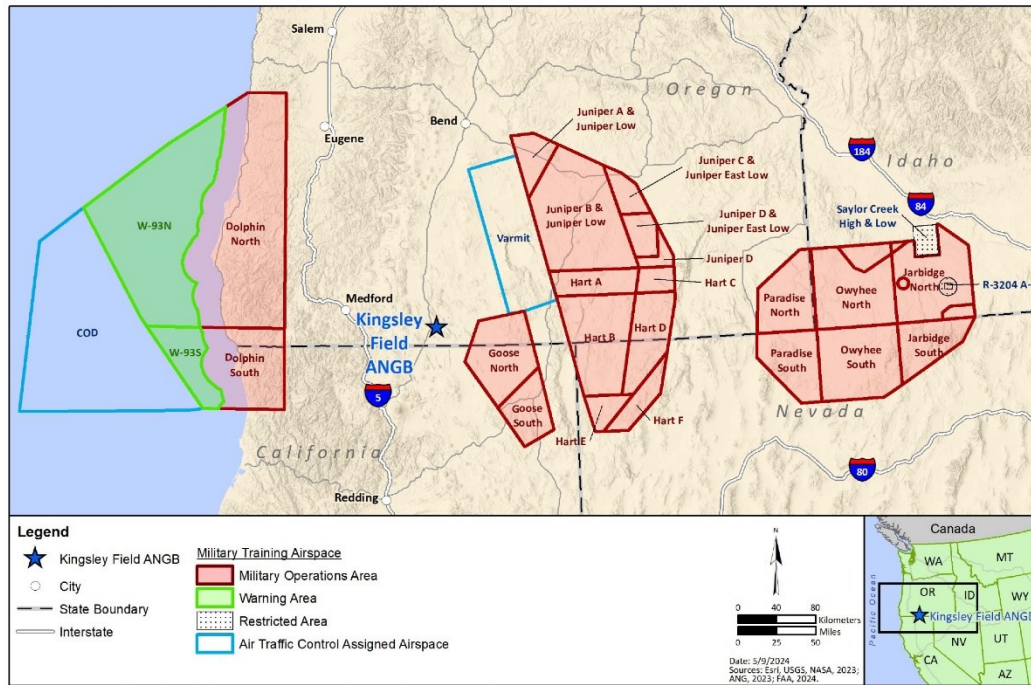
**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB



Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026

Attachment 2 - Kingsley Field ANGB Military Training Airspace



Attachment 2 – References Cited

Department of the Air Force (DAF)

2023 Airspace Optimization for Readiness EIS for Mountain Home AFB.

National Park Service (NPS)

2024a National Register of Historic Places Spatial Data. Last updated 19 April 2024.

2024b National Register of Historic Places Spreadsheet of Everything. Last updated 10 July 2024.

NoeHill

2024 List of State Historic Landmarks and Points of Interest. Accessed June 19, 2024 at:

<https://noehill.com/sitemap.asp>.

The sample tribal letter for Invitation to Continue Government-to-Government Consultation for Oregon following was distributed to the list below:

Betty Aleck, THPO, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada, 208 Capitol Hill, Nixon NV 89424
Yatch Bamford, Chairman, Pit River Tribe, California, 36970 Park Ave, Burney CA 96013
Doug Barrett, Chief, Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, 1245 Fulton Ave, Coos Bay OR 97420
Alan Crawford, Chairman, Confederated Tribes of the Umatilla Indian Reservation, Nixyaawii Governance Center, 46411 Timine Way, Pendleton OR 97801
Arlo Crutcher, Chairman, Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon, 111 N Reservation Rd, McDermitt NV 89421
Kathy Dowd, THPO, Resighini Rancheria, California, PO Box 529, Klamath CA 95548
Michon Eben, THPO, Reno-Sparks Indian Colony, Nevada, 98 Colony Rd, Reno NV 89502
Natalie Forrest-Perez, Interim THPO, Pit River Tribe, California, 36970 Park Ave, Burney CA 96013
Len George, Chairperson, Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada, 565 Rio Vista Drive, Fallon NV 89406-6415
Ginny Hatch, Chairwoman, Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada, 171 Campbell Lane, Yerington NV 89447
Linda Howard, Chairperson, Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada, 171 Campbell Lane, Yerington NV 89447
Courtney Krossman, THPO, Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, 1245 Fulton Ave, Coos Bay OR 97420
Andrea Martinez, Chairwoman, Walker River Paiute Tribe of the Walker River Reservation, Nevada, PO Box 220, Schurz NV 89427-0220
Brian Mason, Tribal Chairman, Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada, 1036 Idaho State Highway 51, PO Box 219, Owyhee NV 89832-0219
Arlan Melendez, Chairperson, Reno-Sparks Indian Colony, Nevada, 34 Reservation Rd, Reno NV 89502
Carey Miller, THPO, Confederated Tribes of the Umatilla Indian Reservation, Nixyaawii Governance Center, 46411 Timine Way, Pendleton OR 97801
James Phoenix, Chairman, Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada, 208 Capitol Hill, Nixon NV 89424
Linzey Scott, Acting THPO, Walker River Paiute Tribe of the Walker River Reservation, Nevada, PO Box 220, Schurz NV 89427-0220
Leilah Shephard, THPO, Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada, 565 Rio Vista Dr, Fallon NV 89406-6415
Charisse Soucie, THPO, Burns Paiute Tribe, 100 Pasigo St, Burns OR 97720
Diane L. Teeman, Chairperson, Burns Paiute Tribe, 100 Pasigo St, Burns OR 97720
Catherine Williams-Tuni, Chairwoman, Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada, 565 Rio Vista Dr, Fallon NV 89406-6415



**Sample Tribal Letter Oregon
DEPARTMENT OF THE AIR FORCE
173D FIGHTER WING
KINGSLEY FIELD OREGON**

26 March 2025

Colonel Adam J. Gaudinski
173 FW/CC
211 Arnold Ave. Building A
Klamath Falls OR 97603

Charisse Soucie
THPO
Burns Paiute Tribe
100 Pasigo St.
Burns, OR 97720

**SUBJECT: Invitation to Continue Government-to-Government Consultation Associated
with the Kingsley Field F-35A Lightning II Beddown Environmental Impact Statement**

Dear Ms. Soucie

The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon (Attachment 1). This proposal also includes the necessary facility improvements and construction required to support the mission. The NGB has determined that the proposed Federal action is an undertaking as defined in 36 Code of Federal Regulations (CFR) Section 800.16(y) and it is a type of activity that has the potential to cause effects on historic properties.

NGB has prepared a Preliminary Draft Environmental Impact Statement (EIS) under the National Environmental Policy Act of 1969 (NEPA), as amended to evaluate potential environmental effects associated with the proposed Federal action alternatives. The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

The NGB is conducting the environmental analysis for the undertaking in accordance with the NEPA, as amended. The Preliminary Draft EIS is available upon request and the Draft EIS is expected to become available on the project website in July 2025 (www.kingsleyfieldf35eis.com).

The NGB initiated consultation with your office on 13 June 2024. The purpose of this letter is to continue consultation pursuant to the terms of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations found at 36 CFR Section 800. This letter serves to identify historic properties within the Area of Potential Effects

(APE) for the undertaking and gauge project effects located within the bounds of the proposed undertaking.

The Proposed Undertaking

The purpose of the proposed undertaking is to increase F-35A pilot production in support of the National Defense Strategy. The proposed undertaking would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this proposed undertaking; however, there could be an increase in operations within the airspace.

The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field would occur in Fiscal Year (FY) 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 Primary Aerospace Vehicle Authorized (PAA) (plus 2 Backup Aerospace Vehicle Authorized [BAA]) F-35A aircraft would be based at Kingsley Field.

To provide the training needed to ensure combat readiness, F-35A aircrews would conduct operations in two types of areas: (1) an airfield associated with the installation, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A would use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures.

The No Action Alternative

Under the No Action Alternative, the 173 FW would continue to conduct their current mission using existing F-15C/D aircraft. Any construction and repair projects required for the current mission would be implemented. Implementation of the No Action Alternative would include the interior renovation of Buildings 130 and 302. It would include the interior renovation of Buildings 220, 221, and 234 if alternate options are chosen.

Area of Potential Effects (36 CFR Section 800.4(a)(1))

An APE is defined in 36 CFR Section 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” The NGB has reviewed the undertaking and defined the airspace APE for the proposed undertaking specific to the state of Oregon as the lands located beneath existing military training airspace from surface level to the ceiling of each airspace designation plus a 1-mile horizontal buffer. Attachment 1 includes a map of the APE.

Identification of Listed Historic Properties (36 CFR Section 800.4(b))

Information on cultural resources within the APE was derived from conducting background research using the National Register of Historic Places (NRHP) Information Database to identify NRHP-listed properties beneath the affected airspace that can include national historic landmarks, cultural landscapes, national monuments, historic trails, and historic battlefields within the same area.

A total of 166 listed historic properties underly the airspace on lands beneath the military training airspace used by 173 FW in Oregon (NPS 2024a, 2024b; Attachment 2). These listed historic properties include 68 archaeological sites, 9 mines, 4 lighthouses, 17 houses, 6 ranger or coast guard stations, 5 hotels, 4 cemetery's, 13 bridges, 6 ditches, 3 ranch/ranch complexes, 2 theatre's, 2 historic districts, 2 banks, 1 library, 2 city hall's, 2 churches, 1 cabin, 8 general buildings, the Siskiyou Smokejumper Base, a life boat station, a river light, an Elks Temple, a printing plant, Tribal Hall of the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians, a shipwreck, Cape Perpetua shelter and parapet, the Allen Gulch townsite, the Wheeler Ridge Japanese Bombing Site, and the Stone Bridge and the Oregon Central Military Wagon Road (NPS 2024a, 2024b). Six Oregon State Historic Landmarks are located beneath the Dolphin North Military Operations Area (MOA). These historic landmarks are titled: Empire City, Spruce Soldiers, Cape San Sebastian, Conflict of Pistol River, Gold Beach, and the location of the Japanese Attack on Oregon (NoeHill 2024).

NGB invited 44 federally recognized Tribal Nations who may cultural or historical ties to lands beneath the airspace to consult on this proposed undertaking. Of the 44 Tribal Nations, NGB received responses from 7 Tribal Nations. In accordance with Executive Order (EO) 13175, *Consultation and Coordination with Indian Tribal Governments*; EO 12372, *Intergovernmental Review of Federal Programs*; and Section 106 of the National Historic Preservation Act and its implementation regulations found at 36 CFR Parts 800.2, 800.3, and 800.4, the 173 FW and NGB respectfully request your assistance in identifying the following:

- traditional resources or sacred sites that may be located within the current APE;
- historic properties in the APE of which we may not be aware;
- and/or your Tribe's interest in participating in additional consultation.

Results of Identification and Evaluation (36 CFR Section 800.4(d))

Because the proposed undertaking includes airspace in Oregon, only those historic properties that would reasonably be affected by visual (overflights, chaff and flares) and noise intrusions are considered. These include architectural resources, archaeological resources with standing buildings or structures, and traditional cultural properties.

U Under the Proposed Action, the F-35A would use a very similar altitude profile as the F-15C/D in training; however, the F-35A would utilize altitudes above 20,000 feet MSL 16 percent more than the F-15C/D currently does. The use of low altitudes (between 500 feet above ground level [AGL] and 10,000 feet MSL) would remain approximately the same as it currently is.

In general, noise from the F-35A would be 3 to 5 dB greater in terms of sound exposure level (SEL) and 6 to 8 dB greater in maximum sound level (L_{max}) when compared to the F-15C/D while operating in military power and 400 knots. The greatest DNL/ Onset-Rate Adjusted Day-Night Average Sound Level (L_{dnmr}) of 49 dB would occur in Juniper Low, Juniper East Low, Goose North, and Goose South MOAs due to a combination of an increase in operations in Goose and the lower airspace floor and lower altitudes in Juniper Low and Juniper East Low MOAs. The remainder of the Juniper and Hart complex outside of the Juniper Low and Juniper East Low areas would experience DNL/ L_{dnmr} of 40 dB. The DNL/ L_{dnmr} in Dolphin North and South MOA would be less than 35 dB due to the relatively small number of sorties spread over a large area with a minimum altitude of 11,000 feet MSL. Overall, there would be an increase in DNL/ L_{dnmr} of 2 to 5 dB across the airspace, except Dolphin North and South MOAs that would experience a negligible change from the No Action Alternative. Based on noise level calculations for lands beneath the military training airspace, there would be no significant effects on archaeological resources, historic structures, or traditional cultural properties as a result of the implementation of the Proposed Action.

Due to the high altitude of the overflights, small size of the aircraft, and the high speeds, the aircraft would not be readily visible to observers on the ground. Therefore, visual intrusions would be minimal and would not represent an increase sufficient to cause adverse effects on the settings of cultural resources.

No additional ground disturbance would occur under the airspace and use of ordnance and defensive countermeasures would occur in areas already used for these activities. The Oregon Air National Guard (ANG) would continue to implement a minimum release altitude of 5,000 feet AGL for flares deployed in ANG-managed Oregon airspace (NGB 2017). The 173 FW would adhere to local operating procedures for chaff and flare release to include the Mountain Home Airspace and restricted airspace associated with the Saylor Creek Range (Department of the Air Force [DAF] 2023). Overall, flares are unlikely to adversely affect cultural resources. Therefore, the introduction of material to archaeological sites or standing structures from the use of flares would not have an adverse effect on these resources.

Conclusion

Pursuant to 36 CFR §800.4(d)(1), the NGB has reached a preliminary determination of no historic properties affected for the proposed undertaking with respect to historic properties beneath the military training airspace in Oregon. However, prior to finalizing our effects determination, we would like to solicit input regarding Tribal resources that may be present within the APE.

If you request additional consultation, the NGB and 173 FW will work with your office to adopt procedures that will meet your Tribe's needs and requirements for continued consultation.

In order for the NGB to address your concerns in a timely manner for both the Tribe and the proposed undertaking, please respond to this letter within thirty (30) days of receipt to J.

Rocco de Gregory, Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS,
3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at
NGB.CCA4F.NEPACOMMENTSOrg@us.af.mil with the subject titled as ATTN: 173 FW EIS.
We look forward to continuing consultation for the proposed undertaking, and we thank you for
your assistance.

Sincerely,



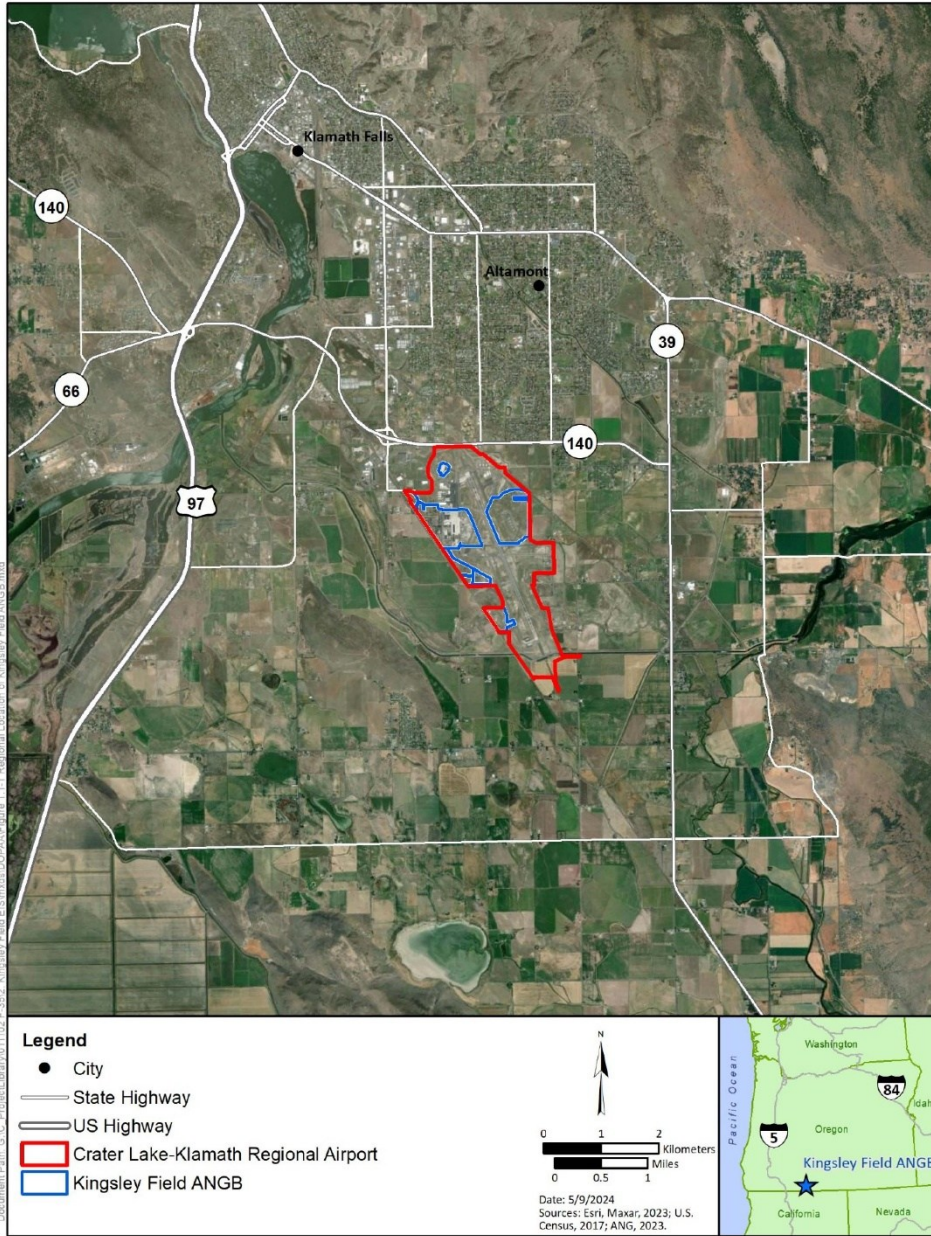
ADAM J. GAUDINSKI, Colonel, ORANG
Commander, 173d Fighter Wing

Attachments:

1. Maps
2. Table of Historic Properties
3. References Cited

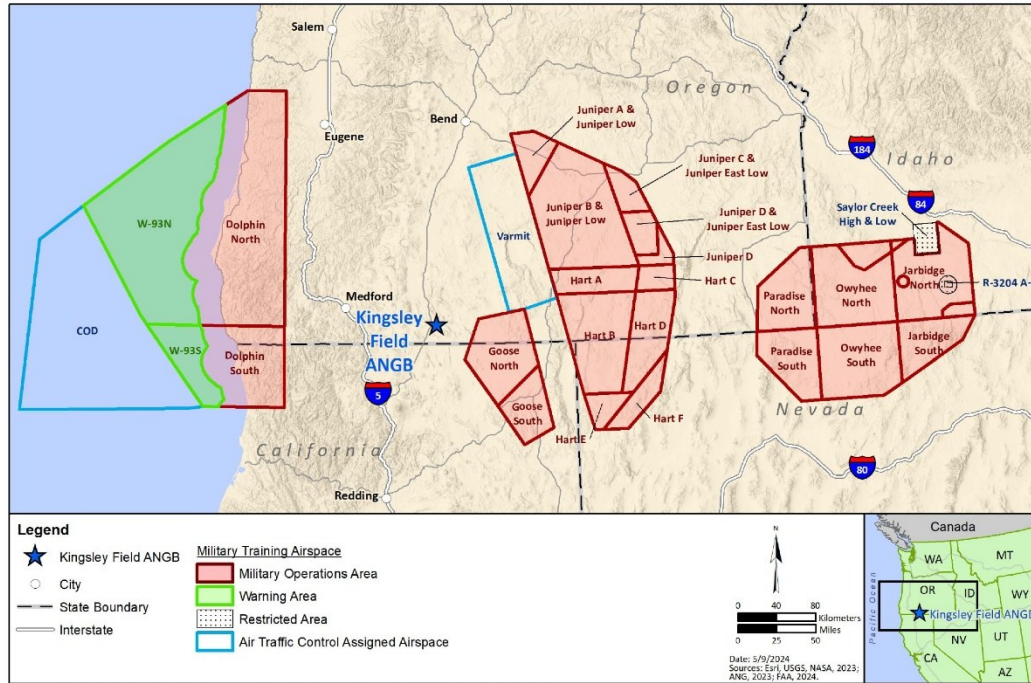
Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026

Attachment 1 - Regional Location Map of Kingsley Field ANGB



Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026

Attachment 2 - Kingsley Field ANGB Military Training Airspace



Attachment 2 – Historic Properties

Historic Properties Located Beneath the Airspace in Oregon		
<i>Resource Name</i>	<i>County</i>	<i>City</i>
Dolphin North MOA		
National Register Listed		
Archeological Site 35CS8	Coos	Bandon
Archeological Site 35CS9	Coos	Bandon
Breuer Building	Coos	Bandon
Bullards Beach Site	Coos	Bandon
Coquille River Life Boat Station	Coos	Bandon
Coquille River Light	Coos	Bandon
First National Bank of Bandon	Coos	Bandon
Philpott Site (35 CS 1)	Coos	Bandon
Running Foxe Midden (35CS131)	Coos	Bandon
Archeological Site 35CS129	Coos	Charleston
Archeological Site 35CS39	Coos	Charleston
Archeological Site 35CS66	Coos	Charleston
Archeological Site 35CS67	Coos	Charleston
Cape Arago Lighthouse	Coos	Charleston
Cape Arago Site (35CS10)	Coos	Charleston
Mussell Reef Village	Coos	Charleston
Samuels Site (35CS138)	Coos	Charleston
Chandler Hotel and Annex	Coos	Coos Bay
Coke, J. S., Building	Coos	Coos Bay
Coos Bay Carnegie Library	Coos	Coos Bay
Coos Bay National Bank Building	Coos	Coos Bay
Egyptian Theatre	Coos	Coos Bay
Hub Department Store Building	Coos	Coos Bay
Koski Building	Coos	Coos Bay
Marshfield City Hall	Coos	Coos Bay
Marshfield Elks Temple	Coos	Coos Bay
Marshfield Hotel	Coos	Coos Bay
Marshfield I.O.O.F. Cemetery	Coos	Coos Bay
Marshfield Sun Printing Plant	Coos	Coos Bay
Myrtle Arms Apartment Building	Coos	Coos Bay
Nasburg--Lockhart House	Coos	Coos Bay
Nerdrum, Hjalte, House	Coos	Coos Bay
Nerdrum--Conrad House	Coos	Coos Bay
Olsson, Captain Bror W., House	Coos	Coos Bay
Seelig--Byler House	Coos	Coos Bay
Tower, Maj. Morton, House	Coos	Coos Bay
Tower-Flanagan House	Coos	Coos Bay

Attachment 2 – Historic Properties

Historic Properties Located Beneath the Airspace in Oregon		
<i>Resource Name</i>	<i>County</i>	<i>City</i>
Tribal Hall of the Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians	Coos	Coos Bay
Cary, Leo J., House	Coos	Coquille
Coquille City Hall	Coos	Coquille
Harlocker, Judge Lintner, House	Coos	Coquille
Paulson, John E. and Christina, House	Coos	Coquille
Sherwood, A. J., House	Coos	Coquille
St. James Episcopal Church	Coos	Coquille
Abernethy, Edwin and Ethel, House	Coos	Myrtle Point
Black, A. H. and Company, Building	Coos	Myrtle Point
Gearhart, John Neal and Dora, House	Coos	Myrtle Point
Reorganized Church of Latter Day Saints	Coos	Myrtle Point
35-CS-130-The Osprey Site	Coos	North Bend
Archeological Site 35CS24	Coos	North Bend
Coos Bay Bridge NO. 01823	Coos	North Bend
Hotel North Bend	Coos	North Bend
Liberty Theatre	Coos	North Bend
Sandy Creek Bridge	Coos	Remote
Rogue River Ranch	Curry	Agness
35-CU-215-High Point Shell Midden	Curry	Carpenterville
Arch Rock	Curry	Carpenterville
Archeological Site 35CU69	Curry	Carpenterville
Indian Sands	Curry	Carpenterville
Khustenete-Hustenete-Xusteneten	Curry	Carpenterville
Miller Creek	Curry	Carpenterville
Sheep Trail Shell Midden (35CU32)	Curry	Carpenterville
Thunder Rock	Curry	Carpenterville
Whale Head	Curry	Carpenterville
Whaleshead Lithic Site (35CU207)	Curry	Carpenterville
Whaleshead South Midden (35CU208)	Curry	Carpenterville
Whaleshead Trail Viewpoint (35CU36)	Curry	Carpenterville
Gold Beach Ranger Station	Curry	Gold Beach
HUME, MARY D.	Curry	Gold Beach
Rogue River Bridge No. 01172	Curry	Gold Beach
Archeological Site 35CU31	Curry	Pistol River
Eagle Rock	Curry	Pistol River
Little Ridge-Cape Sebastian (35CU77)	Curry	Pistol River
Little Ridge-Cape Sebastian (35CU78)	Curry	Pistol River
Pistol River Site-Chetlessentan-Chetleshin-Chetless-chun-dunn	Curry	Pistol River

Attachment 2 – Historic Properties

Historic Properties Located Beneath the Airspace in Oregon		
<i>Resource Name</i>	<i>County</i>	<i>City</i>
Archeological Site 35CU13	Curry	Port Orford
Archeological Site 35CU14	Curry	Port Orford
Archeological Site 35CU142	Curry	Port Orford
Archeological Site 35CU153	Curry	Port Orford
Archeological Site 35CU16	Curry	Port Orford
Blacklock Point Lithic Site	Curry	Port Orford
Blacklock Point Shell Midden	Curry	Port Orford
Cape Blanco Lithic Site	Curry	Port Orford
Lindberg, Peter John, House	Curry	Port Orford
Port Orford Coast Guard Station	Curry	Port Orford
Port Orford Site	Curry	Port Orford
Archeological Site 35CU1	Curry	Sixes
Archeological Site 35CU83	Curry	Sixes
Cape Blanco Lighthouse	Curry	Sixes
Hughes, Patrick, House	Curry	Sixes
Newburgh Lithic Site (35CU209)	Curry	Sixes
Sixes Hotel	Curry	Sixes
Brown, Henry, House	Douglas	Elkton
35-DO-130-Tahkenitch Landing Site	Douglas	Gardiner
Gardiner Historic District	Douglas	Gardiner
Umpqua River Bridge No. 01822	Douglas	Reedsport
Umpqua River Light House	Douglas	Winchester Bay
US Coast Guard Station--Umpqua River, Administration and Equipment Buildings	Douglas	Winchester Bay
Store Gulch Guard Station No. 1020	Josephine	Cave Junction
Nauke, William and Nannie, House	Josephine	Kerby
Whisky Creek Cabin	Josephine	Wolf Creek
Benedict, Edwin E., House	Lane	Florence
Heceta Head Lighthouse and Keepers Quarters	Lane	Florence
Kyle, William, and Sons, Building	Lane	Florence
Siuslaw River Bridge No. 01821	Lane	Florence
Lake Creek Bridge	Lane	Greenleaf
Big Creek Bridge No. 01180	Lane	Heceta Head
Cape Creek Bridge No. 01113	Lane	Heceta Head
Archeological site 35LA1	Lane	Searose Beach
Archeological Site 35LA11	Lane	Searose Beach
Archeological Site 35LA13	Lane	Searose Beach
Archeological Site 35LA16	Lane	Searose Beach
Archeological site 35LA2	Lane	Searose Beach
Archeological Site 35LA227	Lane	Searose Beach

Attachment 2 – Historic Properties

Historic Properties Located Beneath the Airspace in Oregon		
Resource Name	County	City
Archeological site 35LA228	Lane	Searose Beach
Archeological site 35LA4	Lane	Searose Beach
Archeological site 35LA5	Lane	Searose Beach
Archeological site 35LA6	Lane	Searose Beach
Archeological site 35LA7	Lane	Searose Beach
Bob Creek Site 35LA10	Lane	Searose Beach
Devil's Elbow Site (35LA17)	Lane	Searose Beach
Neptune, The, Site (35LA3)	Lane	Searose Beach
Strawberry Hill Site (35LA8)	Lane	Searose Beach
Deadwood Creek Bridge	Lane	Swisshome
Wildcat Creek Bridge	Lane	Walton
Ten Mile Creek Bridge No. 01181	Lane	Yachats
Fisher School Bridge	Lincoln	Fisher
Cape Perpetua Shelter and Parapet	Lincoln	Yachats
North Fork of the Yachats Bridge	Lincoln	Yachats
State Registered		
Empire City	Coos	Coos Bay
Spruce Soldiers	Coos	Coquille
Japanese Attack on Oregon	Curry	Brookings
Cape San Sebastian	Curry	Cape Sebastian State Park
Gold Beach	Curry	Gold Beach
Conflict at Pistol River	Curry	Pistol River State Park
Dolphin South MOA		
Archeological Site 35CU79	Curry	Brookings
Archeological Site 35CU80	Curry	Brookings
Central Building	Curry	Brookings
Harris Park Mound	Curry	Brookings
Indian Sands	Curry	Brookings
Lone Ranch Creek Mound	Curry	Brookings
Wheeler Ridge Japanese Bombing Site	Curry	Brookings
Allen Gulch Townsite	Josephine	Cave Junction
Cameron Mine	Josephine	Cave Junction
Cedar Guard Station No. 1019	Josephine	Cave Junction
Deep Gravel Mine	Josephine	Cave Junction
Esterly Pit No. 2-Llano De Oro Mine	Josephine	Cave Junction
Fry Gulch Mine	Josephine	Cave Junction
High Gravel Mine	Josephine	Cave Junction
Logan Cut	Josephine	Cave Junction

Attachment 2 – Historic Properties

Historic Properties Located Beneath the Airspace in Oregon		
<i>Resource Name</i>	<i>County</i>	<i>City</i>
Logan Drain Ditches	Josephine	Cave Junction
Logan Wash Ditch	Josephine	Cave Junction
Middle Ditch	Josephine	Cave Junction
Old Placer Mine	Josephine	Cave Junction
Oregon Caves Historic District	Josephine	Cave Junction
Osgood Ditch	Josephine	Cave Junction
Plataurica Mine	Josephine	Cave Junction
Siskiyou Smokejumper Base	Josephine	Cave Junction
St. Patrick's Roman Catholic Cemetery	Josephine	Cave Junction
Upper Ditch	Josephine	Cave Junction
Waldo Cemetery	Josephine	Cave Junction
Waldo Chinese Cemetery	Josephine	Cave Junction
Waldo Mine	Josephine	Cave Junction
Wimer Ditch	Josephine	Cave Junction
Juniper D and East Low MOA		
Pictograph Site	Deschutes	Brothers
Frenchglen Hotel	Harney	Frenchglen
Riddle Ranch	Harney	Frenchglen
Hart B MOA		
Greaser Petroglyph Site	Lake	Adel
Shirk, David L., Ranch	Lake	Adel
Stone Bridge and the Oregon Central Military Wagon Road	Lake	Plush
Varmit ATCAA		
Cabin Lake Guard Station	Lake	Bend
Eskelin, Ed, Ranch Comple	Lake	Silver Lake

Attachment 3 – References Cited

Department of the Air Force (DAF)

2023 Airspace Optimization for Readiness EIS for Mountain Home AFB.

National Guard Bureau (NGB)

2017 Proposed Establishment and Modification of Oregon Military Training Airspace Environmental Impact Statement.

National Park Service (NPS)

2024a National Register of Historic Places Spatial Data. Last updated 19 April 2024.

2024b National Register of Historic Places Spreadsheet of Everything. Last updated 10 July 2024.

NoeHill

2024 List of State Historic Landmarks and Points of Interest. Accessed June 19, 2024 at:
<https://noehill.com/sitemap.asp>.

Oregon State Historic Preservation Office (SHPO)

2024a Oregon Archaeological Records Remote Access (OARRA) & Archaeology Bibliographic Database. Accessed 10 July 2024.

2024b Oregon Historic Sites Map. Accessed July 10, 2024 at:

<https://maps.prd.state.or.us/histsites/historicsites.html>.

**APPENDIX B3
STATE HISTORIC PRESERVATION OFFICE (SHPO)
CORRESPONDENCE**

The sample scoping letters following were distributed to the list below:

Tricia Canaday, Deputy State Historic Preservation Officer, Idaho State Historical Society, 2205 Old Penitentiary Rd., Boise ID 83712

Chrissy Curran, Deputy State Historic Preservation Officer, State Historic Preservation Office, Oregon Parks and Recreation Department, 725 Summer St, Ste C, Salem OR 97301

Rebecca Palmer, State Historic Preservation Officer, Nevada State Historic Preservation Office, 901 South Stewart, Suite 5004, Carson City NV 89701

Julianne Polanco, State Historic Preservation Officer, California Office of Historic Preservation, 1725 23rd Street, Suite 100, Sacramento CA 95816

Lisa Sumption, State Historic Preservation Officer, State Historic Preservation Office Oregon Parks and Recreation Department, 725 Summer St, Ste C, Salem OR 97301



Sample Oregon SHPO Letter
NATIONAL GUARD BUREAU
3501 FETCHET AVENUE JOINT BASE ANDREWS 20762-5157

6 June 2024

Michelle Kasunic
Acting Cultural Resources Program Manager
Air National Guard Readiness Center
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Lisa Sumption
State Historic Preservation Officer
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer St, Ste C
Salem OR 97301

Dear Ms. Sumption

The National Guard Bureau (NGB) would like to initiate consultation with your office under Section 106 of the National Historic Preservation Act of 1966 (NHPA), and its implementing regulations (36 Code of Federal Regulations [CFR] § 800) on a proposed undertaking at the 173d Fighter Wing (173 FW) Kingsley Field Air National Guard Base (ANGB) located in Klamath Falls, OR (see Attachment 1). The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

Pursuant to National Environmental Policy Act of 1969 (42 United States Code 4321 et seq.), the NGB is preparing an Environmental Impact Statement (EIS) for the 173 FW that will analyze impacts that could significantly affect the quality of the human environment, including those with the potential to affect historic properties, sacred sites, and traditional cultural properties. The purpose of the Proposed Action is to increase F-35A pilot production in support of the National Defense Strategy. The Proposed Action would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this Proposed Action; however, there could be an increase in operations within the airspace.

As referenced in the attached project list (Attachment 2), the proposed undertaking includes demolition, renovation, and/or repair existing buildings and structures, and new construction projects. The NGB and 173 FW have reviewed previous cultural resources surveys conducted at the installation and have identified thirty (30) buildings at Kingsley Field that will require evaluation for the National Register of Historic Places (NRHP) since reaching historic

age. Of the thirty (30) buildings needing evaluation, nine (9) are currently proposed for demolition. Because of the high number of buildings that have reached historic age since the last survey for Kingsley Field, NGB is proposing to evaluate each resource individually and as a possible historic district. Due to the significant number of new construction projects requiring ground disturbance, and in consideration that the last archaeological investigation for the base occurred in 2002, NGB proposes to evaluate archaeological needs for the undertaking in consultation with the OR State Historic Preservation Office (SHPO).

An Area of Potential Effects (APE) is defined in 36 CFR § 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” The NGB has reviewed the undertaking and defined the APE as the jurisdictional boundary of Kingsley Field ANGB (Attachment 3), areas affected by noise levels of 65 dB DNL and greater from the aircraft operations, and lands located beneath existing military training airspace from surface level to the top of each airspace designation plus a 1-mile horizontal buffer (Attachment 4). As the EIS develops to include results from the noise study, NGB will continue to consult with your office regarding any possible changes to the APE identified in this initial notification letter.

In accordance with 36 CFR § 800.4(a)(1), we are providing your office with this opportunity to comment on our proposed APE for this undertaking. Please respond in writing to the NGB within thirty (30) days. Comments may be addressed to Michelle Kasunic, Acting Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject titled as ATTN: 173 FW EIS. We look forward to continuing consultation for the proposed undertaking, and we thank you for your assistance.

Sincerely,



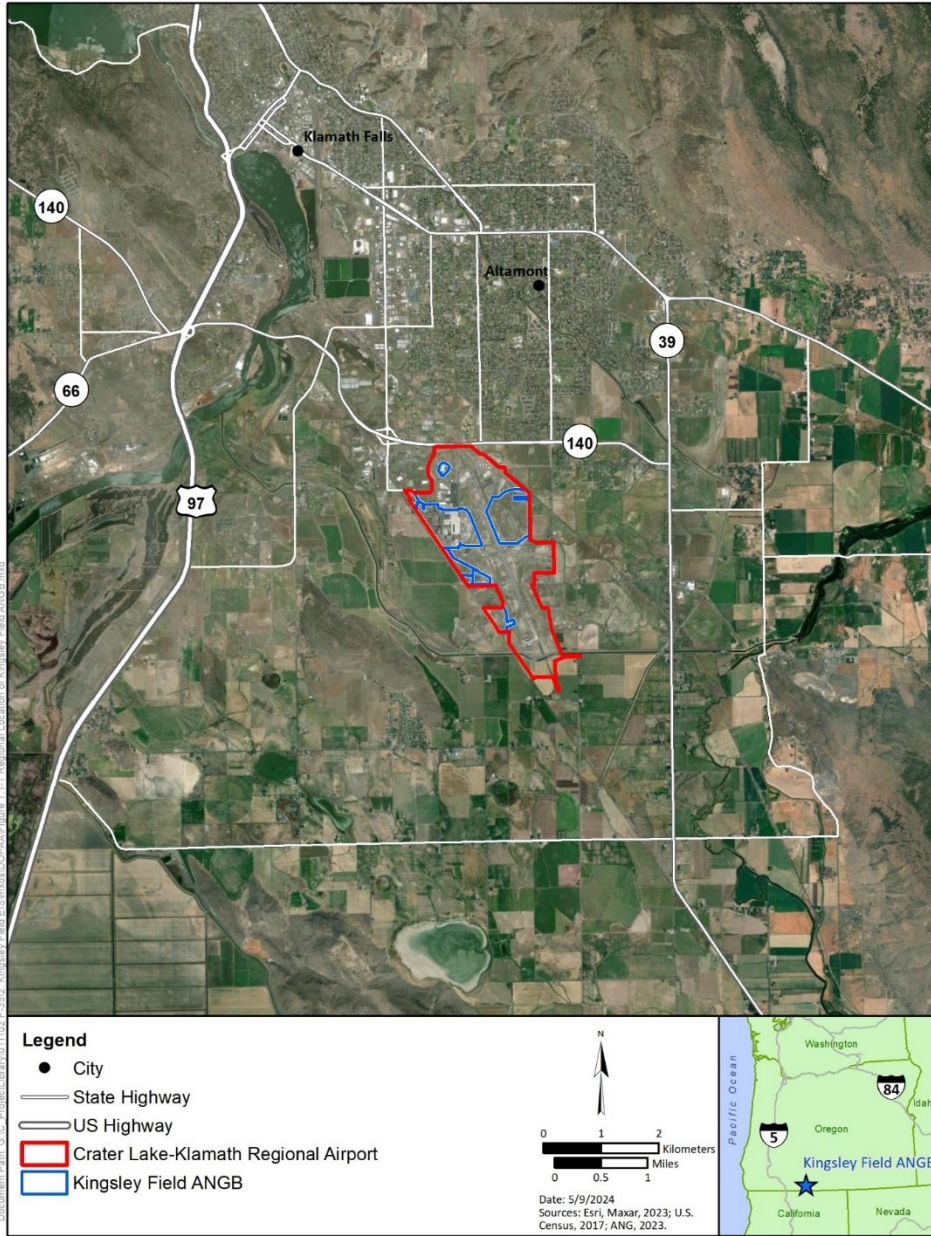
Michelle Kasunic, GS-13, DAF
Acting Cultural Resources Program Manager

Attachments:

1. Regional Location Map of Kingsley Field ANGB
2. Proposed Construction, Renovation, and Demolition Project Table
3. Kingsley Field ANGB Area of Potential Effects
4. Kingsley Field ANGB Military Training Airspace Map

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB



**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 2 – Proposed Construction, Renovation, and Demolition Project Tables

Summary of Construction and Renovation Projects

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
#1 Provide Training Classrooms¹	1a	Modify existing B209 (existing simulator building) to house flight training classrooms (companion to Project 1b/1c).	Alternate	2027	0	0	Yes	No
	1b	Construct addition to B209 to include entire category code (i.e., authorized area) for flight training classrooms (companion to Project 1a/1c).	Alternate	2027	3,500	3,500	Yes	No
	1c	Construct new building containing 4 FMS, 6 MMRT, and contractor support (companion to Project 1a/1b).	Alternate	2027	29,583	29,583	Yes	No
	1d	Construct new building containing flight training classrooms, 4 full motion simulators, 6 MMRT, and contractor support (includes demolition of B242, B230, B231).	Preferred	2027	38,300	23,958	Yes	No
#2 Construct Echo Aircraft Shelter	2	Construct 4-bay, 8 aircraft shelter sized to universal fighter standards.	Preferred	2027	316,000	272,000	Yes	No
#3 Operations Group Facility²	3a	Repair B243 operations group facility to meet F-35 requirements for special access program facilities, office space, and contractor support.	Alternate	2028	0	0	Yes	No
	3b	Construct new operations group facility containing special access program facilities, office space, contractor support (includes demolition of B243).	Alternate	2028	25,200	0	Yes	No

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 2 – Proposed Construction, Renovation, and Demolition Project Tables

<i>Project #/ Project Name.</i>	<i>Project ID</i>	<i>Project Description</i>	<i>Preferred or Alternate Option</i>	<i>Construction Year</i>	<i>Total Area of New Ground Disturbance (SF)</i>	<i>New Impervious Surface (SF)</i>	<i>Proposed Action</i>	<i>No Action Alternative</i>
	3c	Construct new operations group facility combined with maintenance facility containing special access program facilities, office space, contractor support, includes demolition of B243 (companion to Project 9d).	Preferred	2028	25200	0	Yes	No
#4 ASE Facility³	4a	Repair B216 for use as aircraft support equipment facility.	Alternate	2029	0	0	Yes	No
	4b	Construct addition to B332 to accommodate increase requirement for ASE facility	Preferred	2029	1,750	0	Yes	No
	4c	Construct new B332 for use as ASE facility	Alternate	2029	15,000	0	Yes	No
	4d	Repair B213 for use as ASE facility	Alternate	2029	0	0	Yes	No
#5 Engine Shop⁴	5a	Repair B213 engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	0	0	Yes	No
	5b	Construct new engine shop for change in engine system and to include wheel/tire facility.	Alternate	2028	15,000	5,000	Yes	No
#6 Avionics/ Pilot Fitment Facility	6a	Repair B331 to accommodate reduced avionics, battery room, and pilot fitment facility.	Preferred	2029	0	0	Yes	No
	6b	Construct new B331 avionics, battery room, and pilot fitment facility.	Alternate	2028	12,000	0	Yes	No
#7 Loading Dock	7	Repair loading dock for larger load leveler and better space utilization.	Preferred	2026	50,000	4,000	Yes	No
#8 Temporary LAMS Shelters	8	Install temporary LAMS shelters for aircraft on existing pavements.	Preferred	2027	0	0	Yes	No

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#9 Maintenance Hangar and Shops⁵	9a	Repair and reconfigure B219 maintenance hangar and shops to include improvements for seismic, light protection systems, and fire protection systems.	Alternate	2027	0	0	Yes	No
	9b	Construct new 6-aircraft maintenance hangar (Phase 1), includes demolition of east bay B219 (integrates with 9c Phase 2).	Alternate	2028	50,700		Yes	No
	9c	Construct new aircraft maintenance shops (Phase 2), includes demolition of west bay B219 (integrates with 9b Phase 1).	Alternate	2026	36,800		Yes	No
	9d	Construct new combined 6-aircraft maintenance hangar, aircraft maintenance shops, and AMU. Includes demolition of B219.	Preferred	2027	90,000		Yes	No
#10 Munitions Maintenance and Inspection Facility⁶	10a	Repair existing maintenance and inspection facility to meet SCIF needs and update systems.	Preferred	2027	0	0	Yes	No
	10b	Construct new munitions maintenance and inspection facility for 1.1 (mass detonation) and 1.2 (fragmentation) explosives operations to meet minimum explosive standards.	Preferred	2026	3,900	3,900	Yes	No
#11 Munitions Trailer	11	Construct new pull through maintenance facility for large trailers.	Preferred	2026	1,500		Yes	No
#12 Munitions Assembly Pad	12	Construct new munitions assembly pad and inert storage facility.	Preferred	2030	20,000	20,000	Yes	No

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#13 Weapons Facility⁷	13a	Repair B500 weapons release facility to meet standards for F-35 and safety and seismic upgrades.	Alternate	2027	0	0	Yes	No
	13b	Construct new hangar bay for weapons load training and light protection system parking spot	Preferred	2027	15,000	15,000	Yes	No
	13c	Construct new facility attached to weapons load training bay including all shops for associated AMU AFSC's (currently AMXS).	Alternate	2027	22,400	22,400	Yes	No
	13d	Construct new weapons release facility attached to weapons load training facility.	Preferred	2027	18,000	18,000	Yes	No
#14 Fuel Cell Bay⁸	14	Construct additional fuel cell maintenance bay onto existing B333 fuel cell bay, and light protection system parking spot	Preferred	2029	6,800	0	Yes	No
#15 Taxiway A	15	Repair Taxiway A access ramp to B400	Preferred	2026	8,500	0	Yes	No
#16 LRS Covered Parking	16	Construct LRS covered parking for LRS primary vehicles.	Preferred	2030	2,000	2,000	Yes	Yes
#17 Civil Engineering Covered Parking	17	Construct civil engineering covered parking for snow plowing vehicles.	Preferred	2030	4,000	4,000	Yes	Yes
#18 Troop Camp	18a	Repair existing B208 troop camp.	Preferred	2040	0	0	Yes	Yes
	18b	Construct new troop camp.	Alternate	2040	17,489	0	Yes	Yes
#19 Services Facility	19a	Repair B209 services facility.	Preferred	2035	0	0	Yes	Yes
	19b	Construct new services facility.	Alternate	2035	2,950	0	Yes	Yes
#20 Base Exchange/ Starbase	20a	Repair B302 base exchange and starbase facility.	Preferred	2035	0	0	Yes	Yes
	20b	Construct new base exchange and starbase facility.	Alternate	2035	7,860	0	Yes	Yes

**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 2 – Proposed Construction, Renovation, and Demolition Project Tables

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#21 Civil Engineering Shops	21a	Construct new civil engineering combined facility.	Preferred	2030	30,000	25,600	Yes	Yes
	21b	Repair B220 civil engineering shops.	Alternate	2030			Yes	Yes
	21c	Repair B221 civil engineering administration.	Alternate	2030	0	0	Yes	Yes
	21d	Repair B234 civil engineering emergency management and storage.	Alternate	2030	0	0	Yes	Yes
#22 Dining Facility	22a	Repair B130 dining facility.	Preferred	2030	0	0	Yes	Yes
	22b	Construct new dining facility.	Alternate	2030	10,800	0	Yes	Yes
#23 C-17 Ramp	23	Construct C-17 Ramp on the east side of airfield for C-17 movement per the Oregon Cascadia Zone.	Preferred	2026	300,000	300,000	Yes	Yes

Notes: ¹Project 1 would require the choice of Project 1a, 1b, 1c combined or Project 1d alone. Project 1d would require the demolition of B242, B230, and B231.

²Project 3 would require the choice between Project 3a, 3b, or 3c. Project 3c requires selection of Project 9d.

³Project 4 would require the choice between Project 4a, 4b, 4c, or 4d.

⁴Project 5a/5b would not be implemented if the preferred Project 9d is implemented. Implementation of Project 5a or 5b required that Project 9a be implemented.

⁵Project 9 would require the choice of Project 9a, Project 9b/9c, or Project 9d. Implementation of the Project 9c or 9d options would eliminate the need for Project 5a/5b.

Project 9d is the companion to Project 3c. Project 9d would eliminate the need for Project 13c.

⁶Project 10b would require demolition of B540 and B541.

⁷Project 13 would require the choice of the following: 13a/13b, 13b/c, or 13 b/d. Project 13c would not be compatible with 9d.

⁸Project 14 would require demolition of B334.

Legend: AMU = aircraft maintenance unit; AFSC = air force specialty code; AMXS = aircraft maintenance squadron; ASE = aircraft support equipment; B = Building, FMS = full motion simulator; LAMS = large area maintenance shelters; LRS = logistics readiness squadron; MMRT = mobile mission rehearsal trainer; PFF = pilot fitment facility; SCIF = sensitive compartmented information facilities; SF = square feet

Attachment 2 – Proposed Construction, Renovation, and Demolition Project Tables

Proposed Demolition Projects

<i>Building Number</i>	<i>Total Area of Demolition (SF)</i>	<i>Year Building was Constructed</i>	<i>Year Proposed for Demolition</i>
B209	8,717	1989	2030
B213	15,271	1959	2030
B215	2,400	1959	2030
B219	83,305	1959	2026
B230	2,926	1959	2026
B231	2,916	1958	2026
B242	2,830	1961	2026
B243	32,570	1987	2030
B334	3,772	1987	2029
B500	12,112	1957	2030
B540	5,450	1959	2030
B541	5,450	1959	2026
Total SF of Demolition =	177,719		

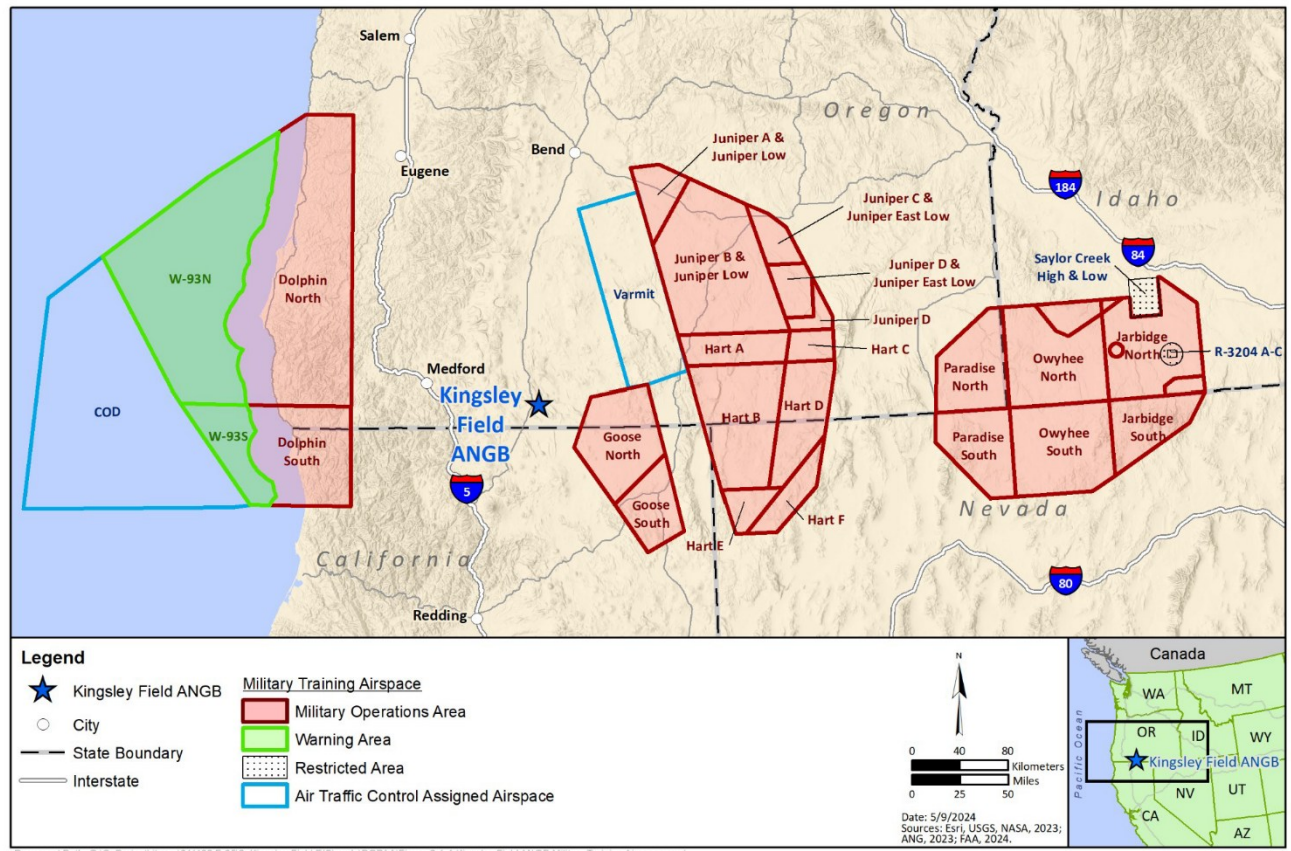
Legend: B = Building; SF = square feet.

Attachment 3 – Kingsley Field ANGB Area of Potential Effects



**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 4 – Kingsley Field ANGB Military Training Airspace





Sample Other SHPO Letter
NATIONAL GUARD BUREAU
3501 FETCHET AVENUE JOINT BASE ANDREWS 20762-5157

6 June 2024

Michelle Kasunic
Acting Cultural Resources Program Manager
Air National Guard Readiness Center
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Tricia Canaday
Deputy State Historic Preservation Officer
Idaho State Historical Society
2205 Old Penitentiary Rd.
Boise ID 83712

Dear Ms. Canaday

The National Guard Bureau (NGB) would like to initiate consultation with your office under Section 106 of the National Historic Preservation Act of 1966 (NHPA), and its implementing regulations (36 Code of Federal Regulations [CFR] § 800) on a proposed undertaking at the 173d Fighter Wing (173 FW) Kingsley Field Air National Guard Base (ANGB) located in Klamath Falls, OR (see Attachment 1). The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

Pursuant to National Environmental Policy Act of 1969 (42 United States Code 4321 et seq.), the NGB is preparing an Environmental Impact Statement (EIS) for the 173 FW that will analyze impacts that could significantly affect the quality of the human environment, including those with the potential to affect historic properties, sacred sites, and traditional cultural properties. The purpose of the Proposed Action is to increase F-35A pilot production in support of the National Defense Strategy. The Proposed Action would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this Proposed Action; however, there could be an increase in operations within the airspace.

An Area of Potential Effects (APE) is defined in 36 CFR § 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” The NGB has reviewed the undertaking and defined the APE as the jurisdictional boundary of Kingsley Field ANGB, areas affected by noise levels of 65 dB DNL

and greater from the aircraft operations, and lands located beneath existing military training airspace from surface level to the top of each airspace designation plus a 1-mile horizontal buffer (Attachment 2). The NGB will consult with the Oregon State Historic Preservation Office on matters pertaining to the undertaking at Kingsley Field ANGB. As the EIS develops to include results from the noise study, NGB will continue to consult with your office regarding any possible changes to the APE identified in this initial notification letter.

In accordance with 36 CFR § 800.4(a)(1), we are providing your office with this opportunity to comment on our proposed APE for this undertaking, that is, the area beneath the airspace overlying Idaho. Please respond in writing to the NGB within thirty (30) days. Comments may be addressed to Michelle Kasunic, Acting Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject titled as ATTN: 173 FW EIS. We look forward to continuing consultation for the proposed undertaking, and we thank you for your assistance.

Sincerely,



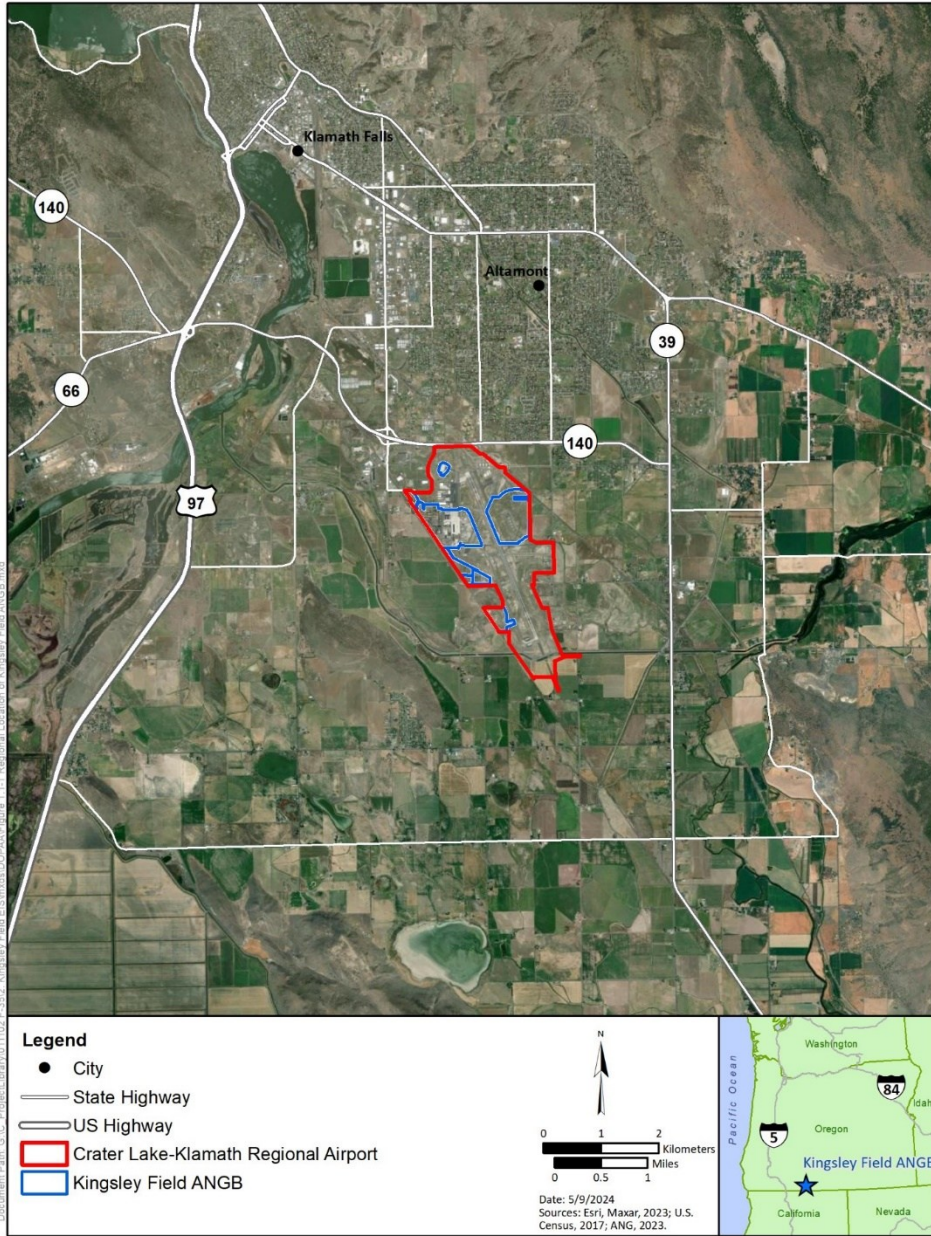
Michelle Kasunic, GS-13, DAF
Acting Cultural Resources Program Manager

Attachments:

1. Regional Location Map of Kingsley Field ANGB
2. Kingsley Field ANGB Military Training Airspace Map

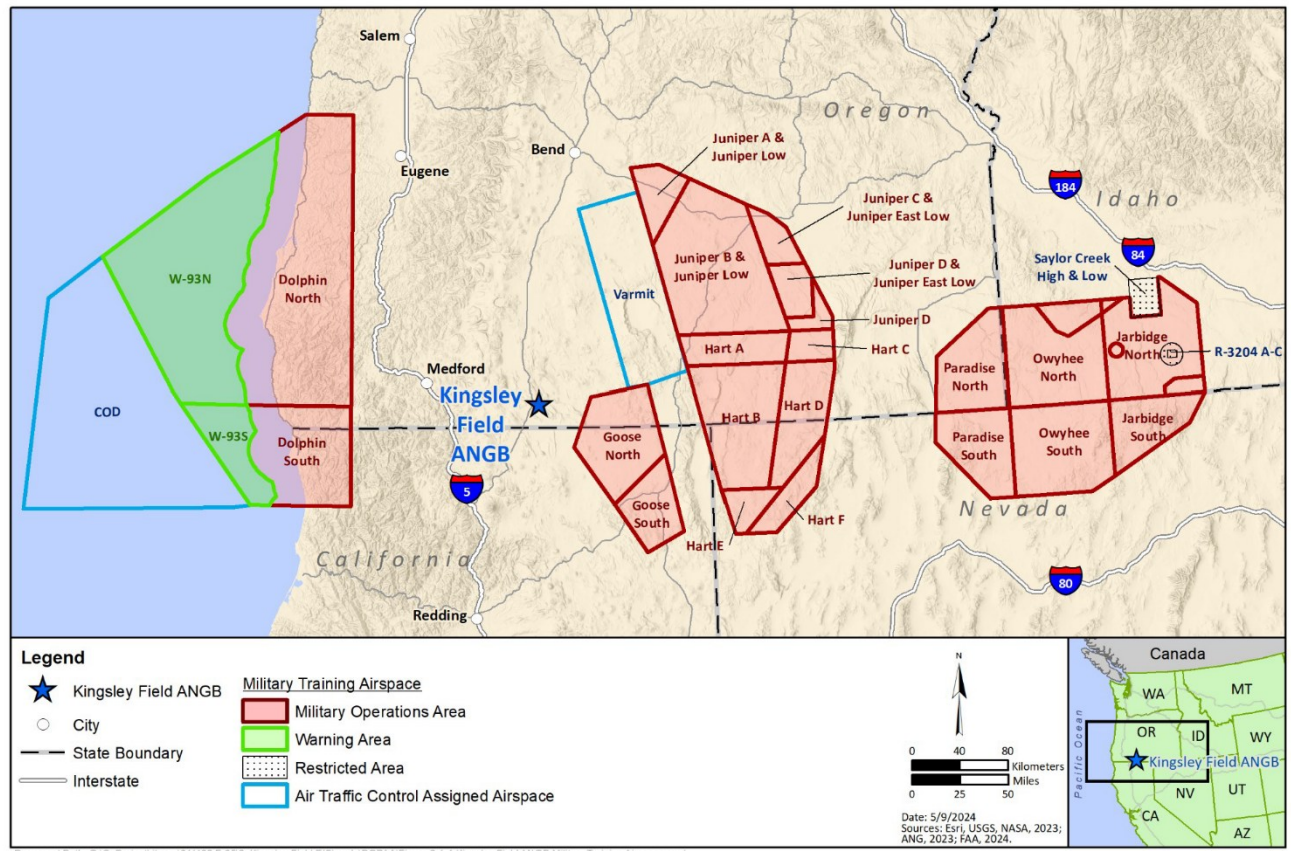
**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB



**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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Attachment 2 - Kingsley Field ANGB Military Training Airspace



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NATIONAL GUARD BUREAU
3501 FETCHET AVENUE JOINT BASE ANDREWS 20762-5157

03 Mar 2025

J. Rocco de Gregory, RPA
Cultural Resources Program Manager
Air National Guard Readiness Center
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Julianne Polanco
State Historic Preservation Officer
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento CA 95816

Subject: Continuing Section 106 Consultation; Draft Environmental Impact Statement for
Basing F-35A Lightning II Formal Training Unit at Kingsley Field Air National Guard
Base, Klamath Falls, Oregon

Dear Ms. Polanco

The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon (Attachment 1). This proposal also includes the necessary facility improvements and construction required to support the mission. The NGB has determined that the proposed Federal action is an undertaking as defined in 36 Code of Federal Regulations (CFR) Section 800.16(y) and it is a type of activity that has the potential to cause effects on historic properties.

NGB has prepared a Preliminary Draft Environmental Impact Statement (EIS) under the National Environmental Policy Act of 1969 (NEPA) to evaluate potential environmental effects associated with the proposed Federal action alternatives. The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

The NGB is conducting the environmental analysis for the undertaking in accordance with NEPA, as amended. The Preliminary Draft EIS is available upon request and the Draft EIS is expected to become available on the project website in July 2025 (www.kingsleyfieldf35eis.com).

The NGB initiated consultation with your office on 6 June 2024. The purpose of this letter is to continue consultation pursuant to the terms of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations found at 36 CFR Section 800. This letter serves to identify historic properties within the Area of Potential Effects (APE) for the undertaking and gauge project effects located within the bounds of the proposed undertaking.

The Proposed Undertaking

The purpose of the proposed undertaking is to increase F-35A pilot production in support of the National Defense Strategy. The proposed undertaking would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this proposed undertaking; however, there could be an increase in operations within the airspace.

The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field would occur in Fiscal Year (FY) 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 Primary Aerospace Vehicle Authorized (PAA) (plus 2 Backup Aerospace Vehicle Authorized [BAA]) F-35A aircraft would be based at Kingsley Field.

To provide the training needed to ensure combat readiness, F-35A aircrews would conduct operations in two types of areas: (1) an airfield associated with the installation, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A would use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures.

The No Action Alternative

Under the No Action Alternative, the 173 FW would continue to conduct their current mission using existing F-15C/D aircraft. Any construction and repair projects required for the current mission would be implemented. Implementation of the No Action Alternative would include the interior renovation of Buildings 130 and 302. It would include the interior renovation of Buildings 220, 221, and 234 if alternate options are chosen.

Area of Potential Effects (36 CFR Section 800.4(a)(1))

An APE is defined in 36 CFR Section 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” The NGB has reviewed the undertaking and defined the APE for the proposed undertaking specific to

the state of California as the lands located beneath existing military training airspace from surface level to the ceiling of each airspace designation plus a 1-mile horizontal buffer. Attachment 1 includes a map of the APE.

Identification of Listed Historic Properties (36 CFR Section 800.4(b))

Information on cultural resources within the APE was derived from conducting background research using the National Register of Historic Places (NRHP) Information Database to identify NRHP-listed properties beneath the affected airspace that can include national historic landmarks, cultural landscapes, national monuments, historic trails, and historic battlefields within the same area.

Twenty-four listed historic properties are located on lands beneath the existing airspace associated with 173 FW in California (Attachment 2). The listed historic properties in California include 15 archaeological sites, a shipwreck, a light station, a lighthouse, Gasquet Ranger Station Historic District, a schoolhouse, a catholic church, a carpenter and paint shop associated with the Tule Lake Segregation Center, the Nevada-California-Oregon Railway Depot, and a Nevada-California-Oregon Railway general office building (National Park Service [NPS] 2024a, 2024b). Twelve California State Historic Landmarks are located beneath the military training airspace (see Attachment 2). These historic landmarks are titled: Applegate-Lassen Trail, Battery Point Lighthouse, Battle of Land's Ranch-1872, Brother Jonathan Cemetery, Camp Lincoln, Evans and Baily Fight, Fort Ter-Wer Site, Fremont's Camp, Indian Village Site, Infernal Caverns Battleground, Pioneer Stage Road to Oregon, and S.S. Emidio (NoeHill 2024).

NGB invited 44 Tribal Nations who may have cultural or historical ties to lands beneath the airspace to consult on this proposed undertaking. Of the 44 Tribal Nations, NGB received responses from 7 Tribal Nations. Government-to-government consultation with associated Tribal Nations is ongoing and will continue throughout the Environmental Impact Analysis Process.

Results of Identification and Evaluation (36 CFR Section 800.4(d))

Because the proposed undertaking in California is an airspace action, only those historic properties that would reasonably be affected by visual (overflights, chaff and flares) and noise intrusions are considered. These include architectural resources, archaeological resources with standing buildings or structures, and traditional cultural properties and sacred sites.

Under the Proposed Action, the F-35A would use a very similar altitude profile as the F-15C/D in training; however, the F-35A would utilize altitudes above 20,000 feet mean sea level (MSL) 16 percent more than the F-15C/D currently does. The use of low altitudes (between 500 feet above ground level [AGL] and 10,000 feet MSL) would remain approximately the same as it currently is.

In general, noise from the F-35A would be 3 to 5 decibels (dB) greater in terms of sound exposure level (SEL) and 6 to 8 dB greater in maximum sound level (L_{max}) when compared to the F-15C/D while operating in military power and 400 knots. The greatest Day-Night Average Sound Level (DNL)/Onset-Rate Adjusted Day-Night Average Sound Level (L_{dnmr}) of 49 dB would occur in Juniper Low, Juniper East Low, Goose North, and Goose South Military Operations Areas (MOAs) due to a combination of an increase in operations in Goose and the lower airspace floor and lower altitudes in Juniper Low and Juniper East Low MOAs. The remainder of the Juniper and Hart complex outside of the Juniper Low and Juniper East Low areas would experience DNL/ L_{dnmr} of 40 dB. The DNL/ L_{dnmr} in Dolphin North and South MOA would be less than 35 dB due to the relatively small number of sorties spread over a large area with a minimum altitude of 11,000 feet MSL. Overall, there would be an increase in DNL/ L_{dnmr} of 2 to 5 dB across the airspace, except Dolphin North and South MOAs that would experience a negligible change from the No Action Alternative. Based on noise level calculations for lands beneath the military training airspace, there would be no significant effects on archaeological resources, historic structures, or traditional cultural properties as a result of the implementation of the proposed undertaking.

Due to the high altitude of the overflights, small size of the aircraft, and the high speeds, the aircraft would not be readily visible to observers on the ground. Therefore, visual intrusions would be minimal and would not represent an increase sufficient to cause adverse effects on the settings of cultural resources.

No additional ground disturbance would occur under the airspace and use of ordnance and defensive countermeasures would occur in areas already used for these activities. The 173 FW would adhere to local operating procedures for chaff and flare release to include the Mountain Home Airspace and restricted airspace associated with the Saylor Creek Range (Department of the Air Force [DAF] 2023). Overall, flares are unlikely to adversely affect cultural resources. Therefore, the introduction of material to archaeological sites or standing structures from the use of flares would not have an adverse effect on these resources.

Conclusion

The NGB has determined that the implementation of the undertaking warrants a finding of *No historic properties affected* per 36 CFR Section 800.4(d)(1) with respect to historic properties located beneath the military training airspace in California. The 173 FW and NGB invite you to comment on our identification of historic properties and our determination of effects. In addition to your office, NGB is consulting with federally recognized Tribal Nations who may have current or historical interests in the area.

Please respond in writing to the NGB within thirty (30) days. Comments may be addressed to J. Rocco de Gregory, Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.CCA4F.NEPACOMMENTSorg@us.af.mil with the subject titled as ATTN: 173 FW EIS. We look forward to continuing consultation for the proposed undertaking, and we thank you for your assistance.

Sincerely,



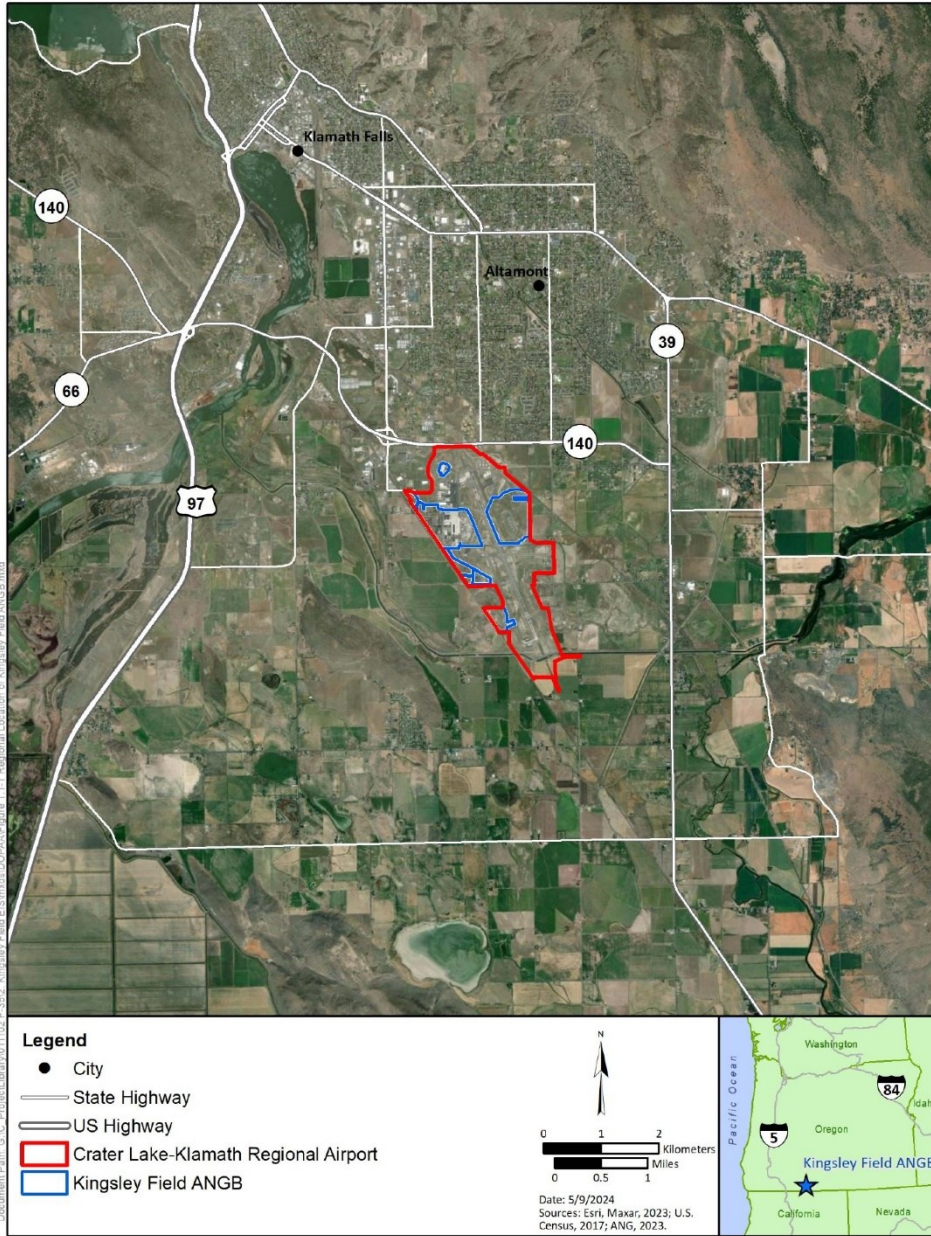
J. Rocco de Gregory, RPA, GS-13, DAF
Cultural Resources Program Manager

Attachments:

1. Maps
2. Table of Historic Properties
3. References Cited

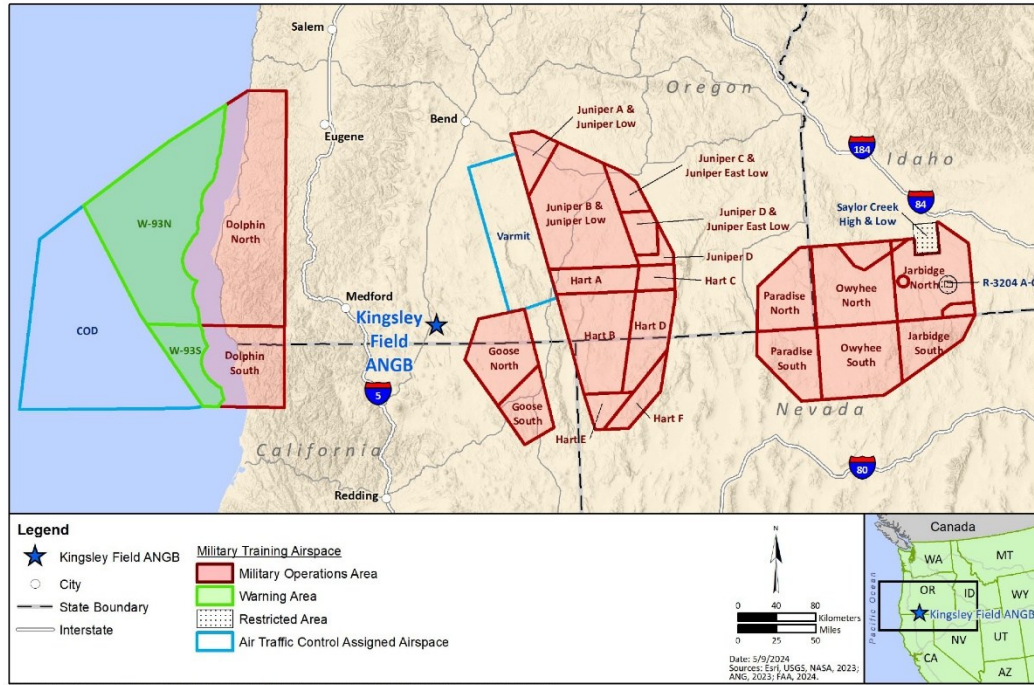
**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB



Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026

Attachment 2 - Kingsley Field ANGB Military Training Airspace



**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 2 – Table of NRHP & State Listed Sites

Resource Name	County	City
<i>Dolphin South MOA</i>		
National Register Listed		
Brother Jonathan (Shipwreck Site)	Del Norte	Crescent City
Crescent City Lighthouse	Del Norte	Crescent City
Endert's Beach Archeological Sites	Del Norte	Crescent City
Gasquet Ranger Station Historic District	Del Norte	Gasquet
Mus-yeh-sait-neh Village and Cultural Landscape Property	Del Norte	Gasquet
Point St. George Site	Del Norte	Crescent City
St. George Reef Light Station	Del Norte	Crescent City
Yontocket Historic District	Del Norte	Fort Dick
State Register Listed		
Battery Point Lighthouse	Del Norte	Crescent City
Brother Jonathan Cemetery	Del Norte	Crescent City
Camp Lincoln	Del Norte	Crescent City
Fort Ter-Wer Site	Del Norte	Klamath Glen
Indian Village Site	Del Norte	Crescent City
Pioneer State Road to Oregon	Del Norte	Crescent City
SS. Emidio	Del Norte	Crescent City
<i>Goose South MOA</i>		
National Register Listed		
Anklin Village Archeological Site	Modoc	Canby
Black Cow Spring	Modoc	Canby
Core Site	Modoc	Canby
Cuppy Cave	Modoc	Canby
Jess Valley Schoolhouse	Modoc	Likely
Mildred Ann Archeological Site	Modoc	Canby
Nelson Springs	Modoc	Likely
Nevada-California-Oregon Railway Depot	Modoc	Alturas
Nevada-California-Oregon Railway Co. General Office Building	Modoc	Alturas
Sacred Heart Catholic Church	Modoc	Alturas
Seven Mile Flat Site	Modoc	Devil's Garden Ranger District
Skull Ridge	Modoc	Canby
Skull Spring	Modoc	Canby
State Register Listed		
Applegate-Lassen Trail	Modoc	Fort Bidwell
Evans and Baily Fight	Modoc	Canby
Infernal Caverns Battleground	Modoc	Likely
Battle of Land's Ranch- 1872	Modoc	Tulelake
<i>Goose North MOA</i>		

Attachment 2 – Table of NRHP & State Listed Sites

Resource Name	County	City
National Register Listed		
Carpenter and Paint Shop (Part of Tule Lake Segregation Center)	Modoc	Newell
Fern Cave Archeological Site*	Modoc	Tule Lake
Petroglyph Point Archeological Site*	Modoc	Tule Lake
State Register Listed		
Fremont's Camp	Modoc	Tule Lake

Notes: *Possibly located within Goose North MOA; address is restricted so we cannot be 100% certain that this site is located beneath the airspace.

Attachment 3 – References Cited

Department of the Air Force (DAF)

2023 Airspace Optimization for Readiness EIS for Mountain Home AFB.

National Park Service (NPS)

2024a National Register of Historic Places Spatial Data. Last updated 19 April 2024.

2024b National Register of Historic Places Spreadsheet of Everything. Last updated 10 July 2024.

NoeHill

2024 List of State Historic Landmarks and Points of Interest. Accessed 19 June 2024 at:

<https://noehill.com/sitemap.asp>.



State of California • Natural Resources Agency

Gavin Newsom, *Governor*

**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

April 24, 2025

Reply in Reference to: USAF_2025_0303_001

J. Rocco de Gregory, RPA
Cultural Resources Program Manager
Air National Guard Readiness Center
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

VIA ELECTRONIC MAIL

Re: Section 106 Consultation for Basing F-35A Lightning II Formal Training Unit at
Kingsley Field Air National Guard Base, Klamath Falls, Oregon

Dear Mr. de Gregory:

The National Guard Bureau (NGB) is initiating consultation with the State Historic Preservation Officer (SHPO) regarding its effort to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. 306108), as amended, and its implementing regulation found at 36 CFR Part 800.

The NGB is proposing to use California airspace in association with F-35A beddown activities in Oregon. Additional details may be found in the NGB's consultation documents. The NGB determined that the "implementation of the undertaking warrants a finding of no historic properties affected per 36 CFR Section 800.4(d)(1) with respect to historic properties located beneath the military training airspace in California." The SHPO does not object to this finding of effect.

This letter is being sent in electronic format only. Please confirm receipt of this letter and notify Ed Carroll, Historian II, at Ed.Carroll@parks.ca.gov or (916) 503-8466 if there are any questions or to request a hard copy of this letter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Julianne Polanco".

Julianne Polanco
State Historic Preservation Officer



NATIONAL GUARD BUREAU
3501 FETCHET AVENUE JOINT BASE ANDREWS 20762-5157

03 Mar 2025

J. Rocco de Gregory, RPA
Cultural Resources Program Manager
Air National Guard Readiness Center
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Tricia Canaday
Deputy State Historic Preservation Officer
Idaho State Historical Society
2205 Old Penitentiary Rd.
Boise ID 83712

Subject: Continuing Section 106 Consultation; Draft Environmental Impact Statement for
Basing F-35A Lightning II Formal Training Unit at Kingsley Field Air National Guard
Base, Klamath Falls, Oregon

Dear Ms. Canaday

The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon (Attachment 1). This proposal also includes the necessary facility improvements and construction required to support the mission. The NGB has determined that the proposed Federal action is an undertaking as defined in 36 Code of Federal Regulations (CFR) Section 800.16(y) and it is a type of activity that has the potential to cause effects on historic properties.

NGB has prepared a Preliminary Draft Environmental Impact Statement (EIS) under the National Environmental Policy Act to evaluate potential environmental effects associated with the proposed Federal action alternatives. The Federal Aviation Administration (FAA) is a cooperating agency because the 173 FW is located on a civilian airfield where the FAA would have a federal action in approving changes to the Airport Layout Plan.

The NGB is conducting the environmental analysis for the undertaking in accordance with NEPA, as amended. The Preliminary Draft EIS is available upon request and the Draft EIS is expected to become available on the project website in July 2025 (www.kingsleyfieldf35eis.com).

The NGB initiated consultation with your office on 6 June 2024. The purpose of this letter is to continue consultation pursuant to the terms of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations found at 36 CFR Section 800. This letter serves to identify historic properties within the Area of Potential Effects (APE) for the undertaking and gauge project effects located within the bounds of the proposed undertaking.

The Proposed Undertaking

The purpose of the proposed undertaking is to increase F-35A pilot production in support of the National Defense Strategy. The proposed undertaking would include the beddown and operation of the F-35A to replace the F-15C/D fleet at the 173 FW, as well as the required facility improvements and construction necessary to support the mission. This beddown action and associated training would ensure availability of combat-ready pilots in the most advanced fighter aircraft in the world. Pilots operating the aircraft would conduct training from the installation and in existing military training airspace associated with the 173 FW installation. There would be no modifications to the existing military training airspace under this proposed undertaking; however, there could be an increase in operations within the airspace.

The beddown process would occur in phases associated with the manufacture and delivery of the F-35A aircraft. Delivery of the first aircraft to Kingsley Field would occur in Fiscal Year (FY) 2027. Delivery of the final aircraft would be expected in FY 2029, at which time the full complement of up to 24 Primary Aerospace Vehicle Authorized (PAA) (plus 2 Backup Aerospace Vehicle Authorized [BAA]) F-35A aircraft would be based at Kingsley Field.

To provide the training needed to ensure combat readiness, F-35A aircrews would conduct operations in two types of areas: (1) an airfield associated with the installation, and (2) training ranges and military training airspace. Additionally, pilots flying the F-35A would use ground-based flight simulators extensively. Simulator training includes all facets of flight operations and comprehensive emergency procedures.

The No Action Alternative

Under the No Action Alternative, the 173 FW would continue to conduct their current mission using existing F-15C/D aircraft. Any construction and repair projects required for the current mission would be implemented. Implementation of the No Action Alternative would include the interior renovation of Buildings 130 and 302. It would include the interior renovation of Buildings 220, 221, and 234 if alternate options are chosen.

Area of Potential Effects (36 CFR Section 800.4(a)(1))

An APE is defined in 36 CFR Section 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” The NGB has reviewed the undertaking and defined the APE for the proposed undertaking specific to

the state of Idaho as the lands located beneath existing military training airspace from surface level to the ceiling of each airspace designation plus a 1-mile horizontal buffer. Attachment 1 includes a map of the APE.

Identification of Listed Historic Properties (36 CFR Section 800.4(b))

Information on cultural resources within the APE was derived from conducting background research using the National Register of Historic Places (NRHP) Information Database to identify NRHP-listed properties beneath the affected airspace that can include national historic landmarks, cultural landscapes, national monuments, historic trails, and historic battlefields within the same area.

Three listed historic properties are located on lands beneath the existing airspace associated with 173 FW in Idaho. These listed historic properties include the Wickahoney Post Office and Stage Station, Camp Three Forks, and the Camas and Pole Creeks Archaeological District (National Park Service [NPS] 2024a, 2024b). Idaho does not have a State Register of Historic Places.

NGB invited 44 Tribal Nations who may have cultural or historical ties to lands beneath the airspace to consult on this proposed undertaking. Of the 44 Tribal Nations, NGB received responses from 7 Tribal Nations. Government-to-government consultation with associated Tribal Nations is ongoing and will continue throughout the Environmental Impact Analysis Process.

Results of Identification and Evaluation (36 CFR Section 800.4(d))

Because the proposed undertaking in Idaho is an airspace action, only those historic properties that would reasonably be affected by visual (overflights, chaff and flares) and noise intrusions are considered. These include architectural resources, archaeological resources with standing buildings or structures, and traditional cultural properties.

Under the Proposed Action, the F-35A would use a very similar altitude profile as the F-15C/D in training; however, the F-35A would utilize altitudes above 20,000 feet mean sea level (MSL) 16 percent more than the F-15C/D currently does. The use of low altitudes (between 500 feet above ground level [AGL] and 10,000 feet MSL) would remain approximately the same as it currently is.

In general, noise from the F-35A would be 3 to 5 decibels (dB) greater in terms of sound exposure level (SEL) and 6 to 8 dB greater in maximum sound level (L_{max}) when compared to the F-15C/D while operating in military power and 400 knots. Overall, there would be an increase in Day-Night Average Sound Level (DNL)/Onset-Rate Adjusted Day-Night Average Sound Level (L_{dnmr}) of 2 to 5 dB across the airspace. Based on noise level calculations for lands beneath the military training airspace, there would be no significant effects on archaeological resources, historic structures, or traditional cultural properties as a result of the implementation of the proposed undertaking.

Due to the high altitude of the overflights, small size of the aircraft, and the high speeds, the aircraft would not be readily visible to observers on the ground. Therefore, visual intrusions would be minimal and would not represent an increase sufficient to cause adverse effects on the settings of cultural resources.

No additional ground disturbance would occur under the airspace and use of ordnance and defensive countermeasures would occur in areas already used for these activities. The 173 FW would adhere to local operating procedures for chaff and flare release to include the Mountain Home Airspace and restricted airspace associated with the Saylor Creek Range (Department of the Air Force [DAF] 2023). Overall, flares are unlikely to adversely affect cultural resources. Therefore, the introduction of material to archaeological sites or standing structures from the use of flares would not have an adverse effect on these resources.

Conclusion

The NGB has determined that the implementation of the undertaking warrants a finding of *No historic properties affected* per 36 CFR Section 800.4(d)(1) with respect to historic properties located beneath the military training airspace in Idaho. The 173 FW and NGB invite you to comment on this undertaking and our determination of effects. In addition to your office, NGB is consulting with federally recognized Tribal Nations who may have current or historical interests in the area.

Please respond in writing to the NGB within thirty (30) days. Comments may be addressed to J. Rocco de Gregory, Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.CCA4F.NEPACOMMENTSOrg@us.af.mil with the subject titled as ATTN: 173 FW EIS. We look forward to continuing consultation for the proposed undertaking, and we thank you for your assistance.

Sincerely,



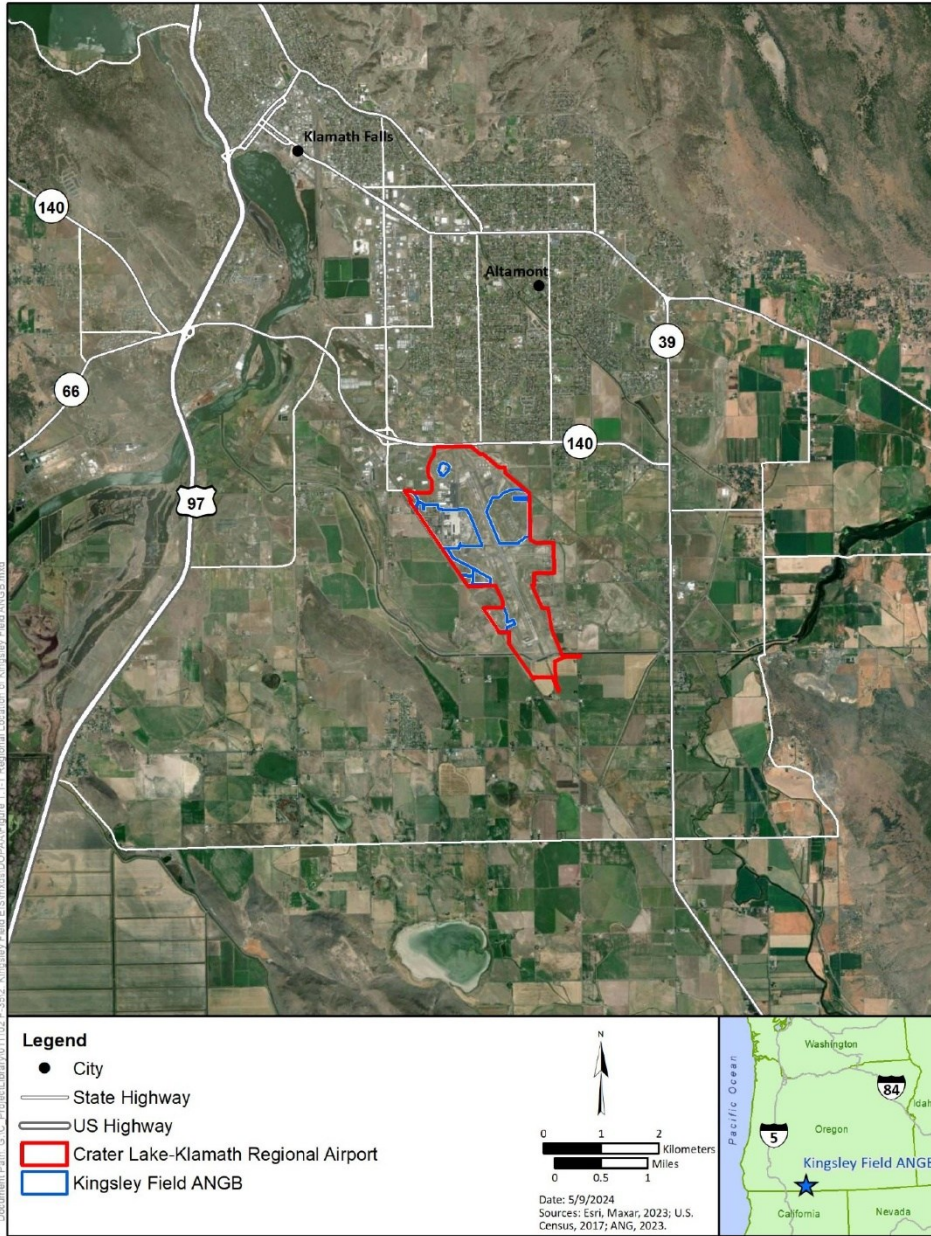
J. Rocco de Gregory, RPA, GS-13, DAF
Cultural Resources Program Manager

Attachments:

1. Maps
2. References Cited

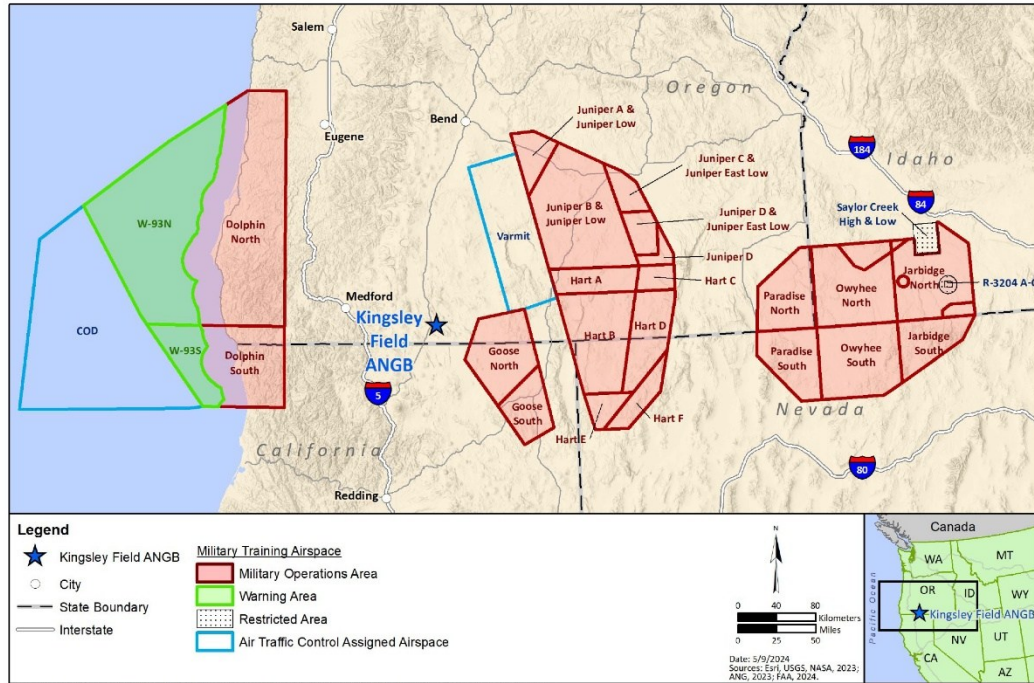
**Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026**

Attachment 1 - Regional Location Map of Kingsley Field ANGB



Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit at Kingsley Field ANGB, Klamath Falls, Oregon
Draft – April 2026

Attachment 2 - Kingsley Field ANGB Military Training Airspace



Attachment 2 – References Cited

Department of the Air Force (DAF)

2023 Airspace Optimization for Readiness EIS for Mountain Home AFB.

National Park Service (NPS)

2024a National Register of Historic Places Spatial Data. Last updated 19 April 2024.

2024b National Register of Historic Places Spreadsheet of Everything. Last updated 10 July 2024.



SHPO Consultation Summary

SHPO Project #2025-469

Any questions please email:

shpo@ishs.idaho.gov

Section 1: Project Information	
Organization Project No(s): 011102	Project Name: EIS for Basing F-35A Lightning II Formal Training Unit at Kingsley Field Air National Guard Base, Klamath Falls, Oregon
Lead Federal Agency: Other Federal Agency	
Project Type:	<input checked="" type="checkbox"/> Federal - Section 106 <input type="checkbox"/> Federal - Section 110 <input type="checkbox"/> CLG Survey <input type="checkbox"/> Determination of Eligibility
Programmatic Agreement Applied:	

Section 2: Lead Agency Reviewer(s)
No Lead Agency Reviewers

Section 3: Additional Organizations
No Secondary Agencies

Section 4: Project Description
The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon. The NGB has reviewed the undertaking and defined the APE for the proposed undertaking specific to the state of Idaho as the lands located beneath existing military training airspace from surface level to the ceiling of each airspace designation plus a 1-mile horizontal buffer.

Section 5: Final Determination(s) of Eligibility for Listing in the National Register of Historic Places
SHPO Count of Resources
No Resources



SHPO Consultation Summary


SHPO Project #2025-469

Any questions please email:

shpo@ishs.idaho.gov

Smithsonian Number(s)	Property Type/Name	SHPO Determination
No Resources		
SHPO Comments:		

Section 6: Agency Finding of Effect
<input checked="" type="checkbox"/> No Historic Properties Affected [36 CFR § 800.4(d)(1)]
<input type="checkbox"/> No Adverse Effect [36 CFR § 800.5(d)(1)]
<input type="checkbox"/> Adverse Effect [36 CFR § 800.5(d)(2)]
Agency Comments/Summary:

Section 7: Official SHPO Response	
The Idaho SHPO has reviewed the documentation and recommendations provided by Other Federal Agency:	
Project Finding of Effect:	
<input checked="" type="checkbox"/> We concur with the finding of effect of No Properties/No Effect and with the conditions of compliance (if applicable). <input type="checkbox"/> We concur with the finding of effect of No Properties/No Effect, given stipulations explained below. <input type="checkbox"/> We disagree with the finding of effect of No Properties/No Effect, as explained below or in the attached letter. <input type="checkbox"/> No Comment	
 Deputy State Historic Preservation Officer	Date 03/14/2025
SHPO Comments:	



NATIONAL GUARD BUREAU
3501 FETCHET AVENUE JOINT BASE ANDREWS 20762-5157

03 Mar 2025

J. Rocco de Gregory, RPA
Cultural Resources Program Manager
Air National Guard Readiness Center
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Rebecca Palmer
State Historic Preservation Officer
Nevada State Historic Preservation Office
901 South Stewart, Suite 5004
Carson City NV 89701

Subject: Continuing Section 106 Consultation; Draft Environmental Impact Statement for
Basing F-35A Lightning II Formal Training Unit at Kingsley Field Air National Guard
Base, Klamath Falls, Oregon

Dear Ms. Palmer

The National Guard Bureau (NGB) is proposing the beddown and operation of F-35A aircraft to replace the aging F-15C/D fleet at the 173rd Fighter Wing (173 FW), Kingsley Field Air National Guard Base (ANGB) in Klamath Falls, Oregon (Attachment 1). This proposal also includes the necessary facility improvements and construction required to support the mission. The NGB has determined that the proposed Federal action is an undertaking as defined in 36 Code of Federal Regulations (CFR) Section 800.16(y) and it is a type of activity that has the potential to cause effects on historic properties.

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(APE) for the undertaking and gauge project effects located within the bounds of the proposed undertaking.

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Three listed historic properties are located on lands beneath the existing airspace associated with 173 FW in Nevada. The three listed historic properties include Gold Creek Ranger Station, Silver State Flour Mill, and the Applegate-Lassen Trail. The Applegate-Lassen Trail is located beneath three military training airspace units (Hart B Military Operations Area [MOA], Hart E MOA, and Hart F MOA) (National Park Service [NPS] 2024a, 2024b). Four Nevada State Historic Landmarks are located beneath the military training airspace. These historic landmarks are titled: Camp McGarry, Town of Jarbidge, Jarbidge Community Hall, and Fort McDermitt (NoeHill 2024).

NGB invited 44 Tribal Nations who may have cultural or historical ties to lands beneath the airspace to consult on this proposed undertaking. Of the 44 Tribal Nations, NGB received responses from 7 Tribal Nations. Government-to-government consultation with associated Tribal Nations is ongoing and will continue throughout the Environmental Impact Analysis Process.

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Conclusion

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Please respond in writing to the NGB within thirty (30) days. Comments may be addressed to J. Rocco de Gregory, Cultural Resources Program Manager (NGB/A4VN), ATTN: 173 FW EIS, 3501 Fetchet Avenue, Joint Base Andrews, MD 20762-5157 or by email at NGB.CCA4F.NEPACOMMENTSorg@us.af.mil with the subject titled as ATTN: 173 FW EIS. We look forward to continuing consultation for the proposed undertaking, and we thank you for your assistance.

Sincerely,



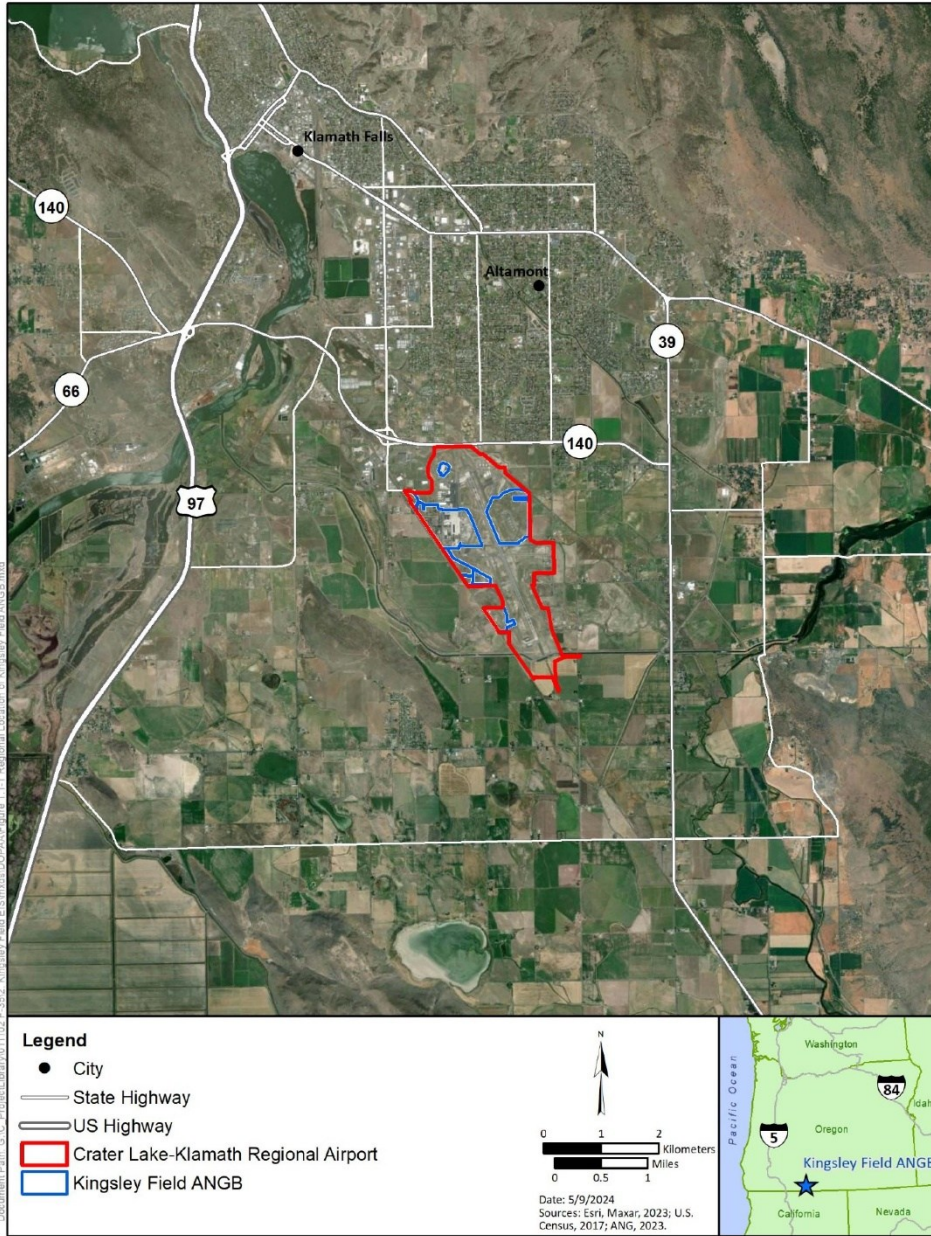
J. Rocco de Gregory, RPA, GS-13, DAF
Cultural Resources Program Manager

Attachments:

1. Maps
2. References Cited

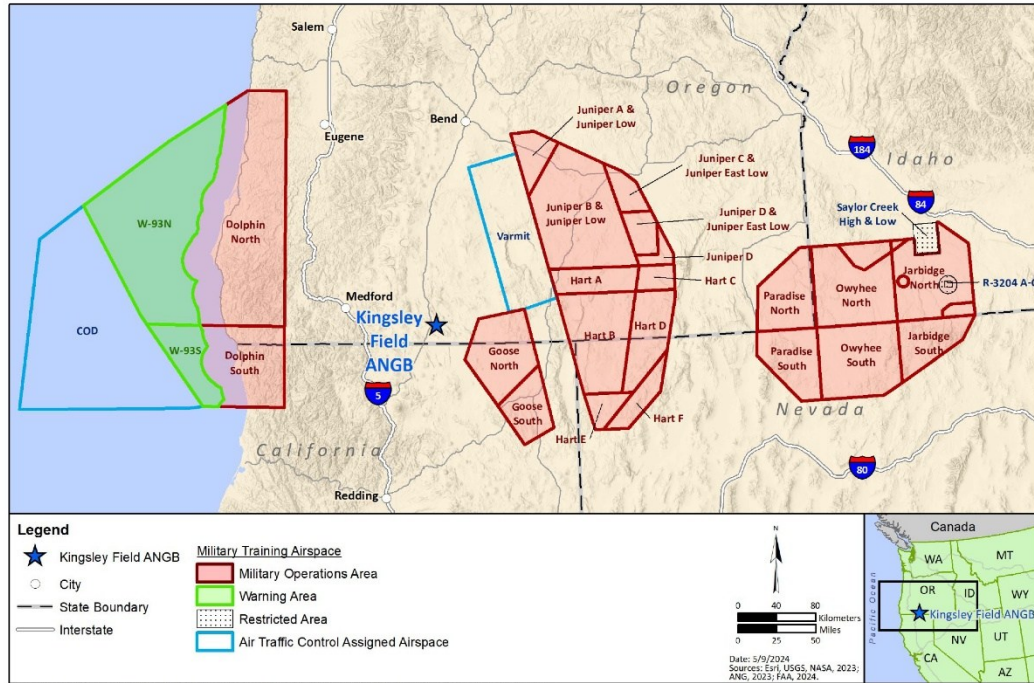
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Attachment 1 - Regional Location Map of Kingsley Field ANGB



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Attachment 2 - Kingsley Field ANGB Military Training Airspace



Attachment 2 – References Cited

Department of the Air Force (DAF)

2023 Airspace Optimization for Readiness EIS for Mountain Home AFB.

National Park Service (NPS)

2024a National Register of Historic Places Spatial Data. Last updated 19 April 2024.

2024b National Register of Historic Places Spreadsheet of Everything. Last updated 10 July 2024.

NoeHill

2024 List of State Historic Landmarks and Points of Interest. Accessed June 19, 2024 at:

<https://noehill.com/sitemap.asp>.

APPENDIX C SCOPING INFORMATION

1.0 SYNOPSIS OF PUBLIC COMMENTS

1.1 OPPORTUNITIES TO COMMENT

The NGB provided several methods for the public to comment on the Proposed Action and any other related issues. The following is a list of methods made available for commenting during the scoping process.

- By mail or email – The NGB invited interested parties to submit comments by mail or email in the Notice of Intent (NOI), agency coordination letters, fact sheet, project website, flyer, press release, newspaper display advertisements, and comment forms.
- Via the project website – The NGB included the project website URL on notifications, the comment form, and the fact sheet. The website included an online submission form and a printable comment form for download.
- Submission at public scoping meetings – The NGB provided printed comment forms at the in-person public scoping meeting, which could be completed and submitted during the meeting or mailed afterwards via mail.

1.2 SCOPING MEETING

An in-person scoping meeting was held at Crater Lake-Klamath Regional Airport, 3000 Airport Way, Klamath Falls, Oregon on June 26, 2024 from 5:00 to 7:00 p.m. Sixty-two people attended the meeting, which was an open house format. Twenty people submitted written comments at the meeting. The NGB received a total of 156 public scoping comments during the official comment submittal period (June 4, 2024 to July 11, 2024).

The City of Klamath Falls, County of Klamath Falls, County of Klamath Falls-Public Health, Klamath Chamber of Commerce, and a representative from Congressman Bentz’ office were in attendance. There was overwhelming support expressed during the public meeting. Of note, all 20 comment letters received at the meeting expressed support for the project, and there were no comment letters received at the meeting that expressed opposition to the project. There were some individuals who did have questions during the meeting; those questions mostly pertained to noise, particularly for residents and businesses near the airfield.

1.3 SUMMARY OF PUBLIC AND AGENCY COMMENTS

The following section provides a summary of the public and agency comments provided to the NGB during the public scoping period.

The NGB received 6 comment submissions from government agencies, listed below.

- Bureau of Land Management, Oregon/Washington State Office
- City of Klamath Falls
- Klamath County Economic Development Association

- Klamath County Planning Commission
- U.S. Environmental Protection Agency
- U.S. Department of the Interior, National Park Service

The NGB received a total of 156 comments from the public and agencies during the official public comment submittal period (June 4, 2024 to July 11, 2024) and no comments were received after this. The method of submission is shown in Table E-1.

Table E-1 Summary of Scoping Comments Received

<i>Submitted via</i>	<i>TOTAL</i>
Website	127
Scoping Meeting	20
Email	9
Mail	0
Total	156

A summary of scoping comment topics can be found in Table E-2 and comments by category can be found in Figure E-1. Table E-3 presents written comments (scoping meeting, mail, online form) submitted to the NGB during the scoping period. The NGB has reviewed all public comments received during the scoping period to ensure that all relevant concerns have been addressed in the Draft EIS.

Table E-2 Summary of Scoping Comment Topics

<i>General Support</i>	<i>General Opposition</i>	<i>Noise</i>	<i>Socioeconomics</i>	<i>Wildlife</i>	<i>Night Skies</i>	<i>Recreation</i>	<i>Airspace</i>	<i>Inadequate Public Involvement</i>	<i>Multiple Environmental Concerns</i>
144	4	3	85	2	1	1	1	1	4

Note: Many comments addressed multiple topics.

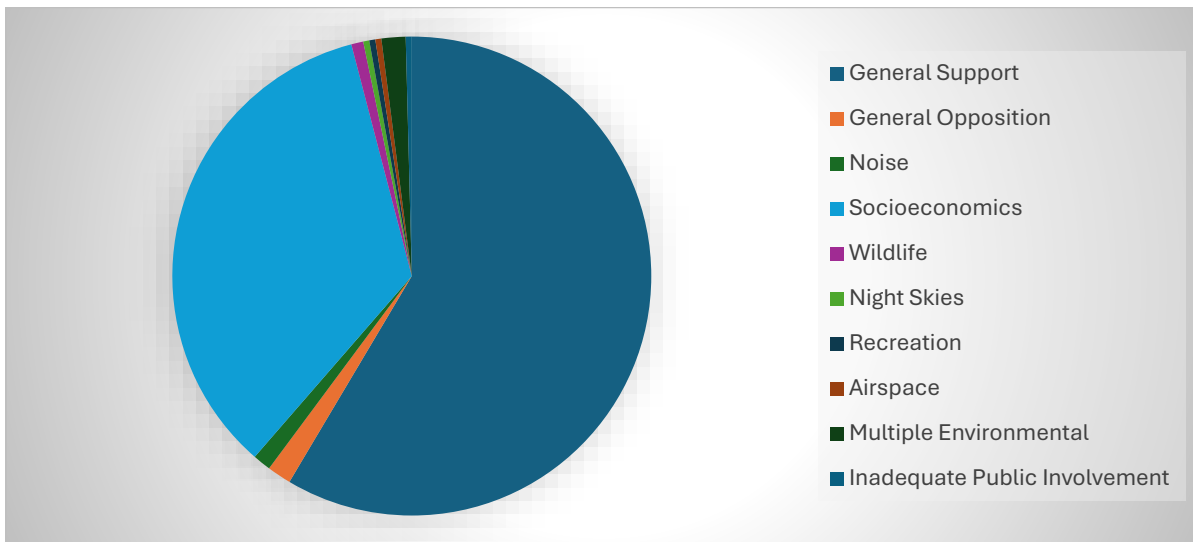


Figure E-1 Comments by Category

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Table E-3 Scoping Comments

Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
<i>Comments Received via the Project Website</i>							
1	Randy L.	Shaw	R&C Shaw Family LLC	Klamath Falls	OR	I am born and raised in Klamath Falls and have been a community involved person for most of my adult life. This community has always had a great relationship with the Air Force. First regular Air Force then later the Air Guard. To be a community that supports and welcomes the U.S. Air Force is something that has come natural for us. The economic impact is of course one of the items that deserves consideration. Really though it's being part of a legacy that the brings chills to my spine. The Fighting 173rd stirs patriotism in all of us hear in Klamath County. We love to say the sound of jets is the SOUND of FREEDOM. Keep us the training center, on the west coast, for F 35. Thank you for your consideration.	General Support, Socioeconomics
2	Tim	Conboy		Bend	OR	I support basing the F-35A Lightning II Formal Training Unit at Kingsley Field ANG installation. This action is important to maintain the Klamath County economy and the readiness of the US armed forces. I am confident that appropriate steps will be taken to avoid and minimize significant adverse environmental and other impacts. I visit the Klamath County region regularly for work and pleasure and this action will not adversely impact any of the reasons I spend time in Klamath County. In fact, I look forward to watching the F-35's as they fly through the skies of the region.	General Support
3	Ken	Fincher	Oregon Tech Foundation Inc	Klamath Falls	OR	I strongly this endeavor. I believe there will be a minimal environmental impact in this community as the base command is very diligent and prudent when making decisions that may affect this community and region. Having been in several meetings with base command I am 100% confident in their leadership and dedication to safety.	General Support
4	Elizabeth	Kidd		Keno	OR	As a resident of Keno in Klamath County, I welcome the proposal of a new training program for the F35 Lightening II jets at Kingsley Field. I've worked under the sound of the F15s for many years and hope to regularly hear the sound of the F35s. It is a key part of America's national defense and I support it.	General Support
5	Shannon	Childs		Klamath Falls	OR	I support our military and this mission. I enjoy hearing the aircraft and always feel an appreciation of freedom when they fly. I trust that this will support the Kingsley mission and keep military families in the basin. I want our base to be supported and stay functioning to support the team, their families and the community.	General Support
6	Larry	Broadfoot	Collins	Wilsonville	OR	Collins is pleased to provide support to this ongoing important project.	General Support

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7	Craig	Huntsman	Knife River	Klamath Falls	OR	I would like to say our company (Knife River) as well as myself are in full support of our troops as well as our 173rd Fighter Wing. Klamath Falls needs the base here to help drive our economy. Without the 173rd fighter wing here in Klamath Falls I believe businesses would close, and the unemployment rate would go up considerably. Eastern Oregon also supply's a great airspace to train our new pilots in. Thumbs up for the F35's. Bring them on.	General Support, Socioeconomics
8	Eric	Rose		Klamath Falls	OR	My family and I fully support the F-35's coming to Klamath Falls. The benefits to the basin's overall financial health and well-being far outweigh the negatives. If you have lived in the basin for any length of time you know the local air base is a vital part of our community! We must all stand in support of the prideful display of patriotism that we experience on the daily in our very own backyard. One would be foolish to not see that the basin would be devastated without the base and the financial benefit to the basin.	General Support, Socioeconomics
9	Jonathan	Moritz	Adkins Engineering & Surveying	Klamath Falls	OR	<ul style="list-style-type: none"> • The base provides an annual economic impact of \$129M into the region. • The proposed mission would add between \$250M-\$500M of capital investment into the economy through new construction projects. These projects would generate supplemental economic benefits, creating a multiplier effect on local industry which would further job creation and enable more investment in the regional economy. • The new mission would allow for base operations to continue for the next 30 years, ensuring the retention of 1,400 employees (nearly all paying local property taxes). • Kingsley Field is deeply tied to the community, especially in education. Oregon provides those who serve on the guard a free education, where as a result, the base has become an ideal training center for a wide range of professional interests (logistics, journalism, engineering, etc.), creating an opportunity that has appealed to young adults and early professionals across the state. As a result, they have become a valued stakeholder in developing a skilled workforce locally. 	General Support, Socioeconomics
10	Randy	Cox	KCEDA	Klamath Falls	OR	Please find Klamath County Economic Development Association support for the F-35 at the Kingsley Field base attached.	General Support, Socioeconomics
11	Randy	Cox	Klamath County Economic Development Association (KCEDA)	Klamath Falls	OR	Please see attached file for written comments.	General Support, Socioeconomics

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Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
12	Bob	Best		Eugene	OR	Good Day, I wish to register my public approval for this F-35 fighter training project. In my opinion, any additional Environmental considerations can be mitigated; there are Too Many Positive aspects to this new program, to refuse it. Thank you. Bob Best	General Support
13	Jeff	Woodwick	Jeff Woodwick	Klamath Falls	OR	My address is near the north end of Kingsley Field's runway. I am in full, enthusiastic support of the base mission of training the next generation of fighter pilots and defending the west coast of our nation. As a patriot and an aviation enthusiast, I love watching them fly. I fly the F-35, F-22, V-22 Osprey, and the "AH-94" in a VR sim.	General Support
14	Christine	McKenzie		Klamath Falls	OR	We support the F35 coming to Klamath Falls! Our community of military veterans and families will be a perfect fit for the unit.	General Support
15	Jeff	Merrill		Klamath Falls	OR	For the good of our town financially and for a sense of civic pride for where we live, I encourage those involved with the transition from the F15 to F35, so that we may continue to thrive as a town.	General Support
16	Alisha	Merrill		Klamath Falls	OR	I am in favor of having an F-35A Formal Training Unit at Kingsley Field Air National Guard Base. I think it would improve our national security as well as the economy of our town.	General Support, Socioeconomics
17	Scott	Souders	n/a	Klamath Falls	OR	My wife and I are in full support of continuing the Kingsley Field mission and we welcome the F-35 to Klamath Falls. I have lived in Klamath Falls my entire life and the base and associated aircraft have always been part of this community. The ANG and Kingsley Field are vital to our economy and the success of Klamath Falls' future.	General Support, Socioeconomics
18	Bevan	York		Klamath Falls	OR	I strongly support the F-35s training program in Klamath Falls because this brings jobs, strong community members, & supports national defense. Thank you.	General Support, Socioeconomics
19	Allison	York		Klamath Falls	OR	I am strongly in support of the F-35A Training Unit at Kingsley Field Air National Guard Base. The base is an integral part of our community, providing excellent jobs, outstanding community members, as well as adding to our overall national defense.	General Support, Socioeconomics

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Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
20	William	Klein	California Pines	Alturas	CA	<p>July 1, 2024</p> <p>EIS Project Manager National Guard Bureau NGB/A4FR Shepperd Hall 3501 Fetchet Ave. Joint Base Andrews MD 20762-5157</p> <p>We are writing to comment on Environmental Impact Statement (EIS) scoping process for Kingsley Feild EIS . After review, it is evident that there are significant deficiencies in compliance with both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA,) as well as Department of Defense (DoD) regulations.</p> <p>Lack of Specific Environmental Assessment: There appears to be no dedicated Environmental Impact Statement or related environmental work completed for the South Goose MOA/TMOA, ever. This oversight violates NEPA requirements, which mandate federal agencies to assess the environmental effects of their proposed actions before making decisions. The absence of a comprehensive EIS for this particular MOA suggests a failure to evaluate potential environmental impacts and consider alternatives adequately. Not one of your environmental analysis nor impact statements have ever considered impacts on South Goose MOA/TMOA.</p> <p>Inadequate Public Involvement: The public involvement process, a cornerstone of NEPA, has been severely lacking. Residents report a lack of public notification for military exercises and potential violations of NEPA and CEQA requirements. This lack of transparency undermines the spirit and intent of environmental protection laws and fails to meet procedural requirements for public notice and involvement. DOD also requires strict attention to NEPA but also your TMOA/MOA public notice and accountability process is broken at best.</p> <p>Safety and Environmental Concerns: Residents have reported aggressive dogfighting maneuvers and flare deployment over this populated area, particularly California Pines and Donovan Reservoir at very low altitudes. These activities, occurring without proper environmental assessment nor public notice, violate both NEPA and</p>	General Opposition, Multiple Environmental, Inadequate Public Involvement, Noise, Airspace

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Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
20 (cont)	William	Klein	California Pines	Alturas	CA	<p>CEQA regulations. Of particular concern is an incident on May 17, 2024, involving dangerous low-altitude maneuvers and flare deployment over our populated area.</p> <p>CEQA (California Environmental Quality Act) Compliance Issues: It is evident that the EIS process has failed to comply with CEQA, which requires public agencies to identify and disclose the potential environmental effects of their discretionary actions. The lack of any environmental study or analysis for the South Goose MOA, despite its significant impact on local communities, indicates a clear evasion of CEQA requirements. There is zero evidence that the «South Goose» MOA and or TMOA or whatever you are calling it today, was ever intentionally analyzed for environmental impact. This also constitutes a violation of DOD laws rules and regulations which require cooperation with local and State governments on environmental matters.</p> <p>Rushed and Biased Process: The hurried nature of this particular EIS scoping period, allowing barely 30 days including holidays, indicates a rushed process that does not allow for adequate public input or thorough environmental analysis. During this public scoping process I spoke with your public affairs and environmental people. I was met with lack of understanding (at best) over a simple and specific environmental documentation request. I received none of the material I requested and had to retrieve it online from public sources on the internet, not from you. This approach appears biased towards military operational interests, is not in good faith, disregarding the concerns and well-being of affected communities; Trying to get away with the bare minimum is typical of what we have experienced here. That is not good faith.</p> <p>Lack of Transparency and Information Access: Despite multiple requests, during the very limited time of this scoping process, relevant environmental reports and analyses have not been made available. The provided database link (https://ar.afcecc-cloud.af.mil/Search) does not contain the requested information.</p> <p>Inconsistencies in Operational Information: There are discrepancies between official statements about flight operations and eyewitness accounts from community members. This raises questions about the accuracy of information being provided to the public and used in environmental assessments. Your previous EIS (2017) justified the expansion</p>	

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20 (cont)	William	Klein	California Pines	Alturas	CA	<p>of Juniper/ Hart (which makes South Goose look like a postage stamp) thus:</p> <p>The latest generation of technologically advanced F-15s employs weapons systems and executes tactics that require much greater vertical and lateral airspace areas than previously required. Greater vertical and lateral dimensions are required to accommodate these current and evolving weapon system changes to include greater radar and missile system standoff capabilities and the need to defend against emerging adversary capabilities.</p> <p>And</p> <p>The proposed airspace should be located and oriented such that overflights of populated, noise-sensitive, and/or environmentally sensitive areas are minimized.</p> <p>If this is so, why have your pilots been performing dogfigts over the populated area of California Pines, a less than 6,000 acre area? (Which is miniscule to even the South Goose MOA/TMOA) It appears your practice does not meet your existing environmental justifications.</p> <p>Inadequate Noise Analysis: Current environmental studies do not adequately address the impact of prolonged aircraft presence (dwell time) over populated areas, nor do they provide sufficient comparison between F-15C/D and F-35 noise levels. We experience dwell time of upto fifteen minutes or more on a regular basis (often on a weekly basis.. None of your environmental documents deal with this kind of dwell time over populated areas.</p> <p>In light of these significant issues, we strongly recommend the following actions:</p>	

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Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
20 (cont)	William	Klein	California Pines	Alturas	CA	<p>Specifically address the South Goose MOA, ensuring thorough assessment of environmental impacts and compliance with both NEPA and CEQA.</p> <p>Enhance public involvement by providing ample opportunity for public comment and ensuring transparency throughout the process.</p> <p>Address safety concerns by evaluating and mitigating the risks associated with military exercises over populated areas.</p> <p>Ensure strict adherence to the procedural and substantive requirements of NEPA and CEQA to protect the environment and public health.</p> <p>Provide full disclosure of all relevant environmental reports and analyses.</p> <p>Conduct a thorough noise impact study that includes analysis of aircraft dwell time and accurate comparisons between different aircraft types.</p> <p>Establish clear protocols for timely public notification before conducting high-risk military exercises in or near civilian areas. Currently, we receive zero notification and your Base, according to the FAA, does not publish NOTAMs in South Goose either. Currently there is zero public notice nor accountability.</p> <p>Finally, we need a lot more information on the alternatives you intend to study. Your scoping document does not deal with any other alternatives other than the proposed «replacement» and the «no action» alternative. What about the transition period? What about the newer F-15EX? Do you really know what the fleet mix and size will be? You must deal with transitioning and the possibility of many more sorties than existent. You don't know nor control what will happen in this regard. Right now, Congress doesn't know either. We demand that realistic alternatives be studied not just the theoretical, especially as it concerns California Pines, Modoc County, and South Goose MOA/TMOA.</p>	

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Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
20 (cont)	William	Klein	California Pines	Alturas	CA	<p>We urge you to address these deficiencies promptly to bring the process into compliance with federal and state environmental regulations, ensuring better environmental stewardship and community relations. The community stands ready to engage constructively in this process to ensure that military training needs are balanced with environmental protection and public safety.</p> <p>Sincerely,</p> <p>Dr. William F Klein, AICP 801 Lake View Drive California Pines Alturas, CA 96101</p> <p>Carla L Klein, MA 801 Lake View Drive California Pines Alturas, CA 96101</p>	
21	Lori	Stiehr	Woodsy Kitchen	Klamath Falls	OR	We are 100% behind the Air National Guard and the F35. We support all military functions and airmen in our community.	General Support
22	Vincent	Hilgeman		Klamath Falls	OR	I support the plan to bring in the F35 to our community. I hope the mission grows in the future and we in Klamath Falls can be part of this growth.	General Support
23	Charles	Massie	Klamath Community College	Klamath Falls	OR	None	N/A
24	Janet	Buckalew		Klamath Falls	OR	I am in support of the F-35 mission at Kingsley which will help our local economy, provide airspace to practice safely, and keep with the history of our community of having an airbase. I live here when my father was stationed at Kingsley. We need the support F-35 & F-15 Pilots and crew 100%	General Support, Socioeconomics
25	Kathy	Pattersin		Klamath Falls	OR	I support Kingsley field air base and the and the F-35A training unit.	General Support
26	Charles	Bland	Veteran	Klamath Falls	OR	173d presence within the Klamath Basin is an invaluable contribution that ensure longevity and relevance for all who call the Basin home. The transition to the F-35 ensures the continued tradition and heritage of the Air Defense community that has existed in the Klamath Basin for over 70 years and is as much a part of the environmental culture and nd cherished way of life as Agriculture, Education, small business, corporate industry, Healthcare and services. One would no more remove the school districts or SkyLakes than they would Kingsley Field and its Local, State, and Federal missions.	General Support
27	Jeffery	Southern		Klamath Falls	OR	It will be awesome to have the F-35 program come to Kingsley Field. It will help with job opportunities, keep Kingsley Field open, and keep supporting the state for Oregon and the US Air Force with training pilots.	General Support
28	Tim	Hamblin		Klamath Falls	OR	This town needs Kingsley to remain a training facility in the future. Let's not let a EIS be another nail in the coffin for Klamath county.	General Support

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29	Martin	Sherin		Klamath Falls	OR	The importance of this facility in preparing our military to be the best they can be and the importance of the economic presence will make the transfer from the 15s to the 35s a new chapter in the distinguished history of Kingsley.	General Support
30	Paul	Baker	550FS	Medford	OR	I would like to see the F-35 FTU come to Kingsley Field. The mission is essentially important to the National Defense Strategy of the United States and would be great to have that impact and visibility in our local community.	General Support
31	Jared	Andrade		Klamath Falls	OR	I do not think that the F-35 is the right choice for the Land of No Slack	General Opposition
32	Karen	Johnson		Salyer	CA	I am in Klamath Falls quite often to visit family and am always glad to see the aircraft from Kingsley flying; makes me feel a sense of great security for not only our side of the United States but for the whole United States. I grew up next to Hill Air Force Base in Ogden, Utah and watched the jets every day flying overhead, feeling that same sense of security. Our Air Bases are very important to the security of our country and the fact that Kingsley houses the F15s and soon the F35s is such a wonderful thing in my estimation. I am 80 years old and want to see our country remain militarily strong.	General Support
33	Dane	Sherin		Klamath Falls	OR	Klamath county depends on Kingsley Field and their training mission financially. The amount of money that the base members spend in the local community is significant and it would be catastrophic if the mission was gone. The community, in whole is very supportive of the base and enjoys the base personnel because they are true members of this community. The fact that Kingsley has amazing airspace and overwhelming support from the community, I'd like to see the mission grow and opportunities for multiple units to be stood up at Kingsley in the future.	General Support, Socioeconomics
34	David	Smith				Kingsley Field is a vital part of the economy and culture of Klamath Falls. Aside from the nearly 1000 full time jobs, many Kingsley families are actively involved in schools and community activities. With no planned alternative to the F-35 conversion, Klamath would lose those families that make up 1/10th of the community. The economic effects would be disastrous, as 20% of the city already lives below the poverty line, some 20,000 people. The F-35 and its associated infrastructure would retain stable, well paying jobs to an area that depends on them.	General Support, Socioeconomics
35	Rodney	Clark	Military	Klamath Falls	OR	Gaining the F-35 to our basin is a huge addition to the economy and life of Klamath falls. We already struggle to gain employers, commerce and life to the area. Please allow the opportunity for the basin, the base and our community to thrive and grow.	General Support, Socioeconomics

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Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
36	Derek	Larman		Klamath Falls	OR	Bringing the F-35 to Kingsley is essential for our community. The Air Base brings jobs and resources that make great contributions to our city. Having the F-35 established at Kingsley will bring longevity to not only the base but to our town as a whole.	General Support, Socioeconomics
37	David	Beanland		Klamath Falls	OR	I'm in full support of the F35's coming to Klamath. The influx of revenue and growth will be a huge benefit for the Klamath basin. The air base is the number one employer in town and if we don't bring in these planes and its crew our community will not grow and in turn begin to die. With the F15 leaving or being decommissioned the base will no longer be used and destroy this economy.	General Support, Socioeconomics
38	Joe	Young	Klamath County Planning Commission	Klamath Falls	OR	why aren't you studying for 2 squadrons worth of aircraft? I heard that someday the base will grow. wouldn't doing a little extra work now, save alot of time later down the road?	General Support
39	Linda	Mott		Klamath Falls	OR	I've lived here many years. First the F16's were here, then transitioned over to the F15's. The military must keep upgrading and for us to be a training base for pilots.of the F35's is a wonderful opportunity.	General Support
40	Harrison	Walker				I think the formation of an F-35 FTU in Klamath falls would be a wonderful addition to the rich history of Kingsley field. while continuing the availability of jobs in the local area. it will further the relevance of Klamath falls and Kingsley field in the future	General Support, Socioeconomics
41	Kelley	Minty	Klamath county	Klamath falls	OR	Enthusiastically support this new mission! This is a huge development for Klamath County	General Support, Socioeconomics
42	Darren	Bennett	173d FW	Klamath Falls	OR	The Basin needs the F35 Formal Training Unit! Kingsley Field will not survive without this mission, and without Kingsley Field, Klamath Falls will not survive. Kinglsey Field offers so much opportunity to the citizens of Klamath Falls, to include high paying jobs, pride, purpose, and a future for our children. We all need this mission!	General Support, Socioeconomics
43	Nathan	Atwood		Klamath Falls	OR	I support the F-35 formal training unit coming to Kingsley Field. The base is a great support to the community and the community I feel loves to support the base as much as they can.	General Support

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44	Collin	Grandy		Klamath Falls	OR	<p>Bringing the F-35 student training mission to Kingsley Field in Klamath Falls promises significant benefits to both the base and the local community. Here are several compelling arguments in support of this initiative:</p> <p>Job Creation and Economic Boost: The arrival of the F-35 mission will create numerous job opportunities directly and indirectly related to the base. Military personnel, civilian contractors, and support staff will all be needed to accommodate and maintain the new aircraft and infrastructure. This influx of jobs will not only benefit current residents but also attract new residents seeking employment opportunities, thereby stimulating the local economy.</p> <p>Increased Revenue and Business Opportunities: With more personnel stationed at Kingsley Field, local businesses, including restaurants, shops, and service providers, will experience increased patronage. This uptick in consumer spending can lead to the expansion of existing businesses and the emergence of new ones, further diversifying the local economy.</p> <p>Infrastructure Development: The need to support the F-35 mission will likely spur infrastructure development projects in Klamath Falls. This could include upgrades to roads, utilities, and housing to accommodate the growing population associated with the base. Such improvements not only benefit the military but also enhance the overall quality of life for residents.</p> <p>Educational Opportunities: Kingsley Field's partnership with the F-35 program could create educational opportunities for local students interested in aviation, technology, and related fields. Collaborative programs with nearby educational institutions could provide specialized training and potentially lead to internships or job placements at the base, fostering a skilled workforce pipeline.</p> <p>Community Support and Pride: Military bases often foster a strong sense of community pride and support. The presence of the F-35 mission at Kingsley Field could strengthen community ties through events, outreach programs, and volunteer opportunities. Additionally, military families often become involved in local activities and organizations, enriching the community fabric.</p>	General Support, Socioeconomics

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44 (cont)	Collin	Grandy		Klamath Falls	OR	In conclusion, the F-35 student training mission at Kingsley Field offers a multitude of benefits for Klamath Falls, ranging from economic growth and job creation to enhanced community engagement and national defense contributions. Supporting this initiative not only secures the base's future but also positions the local community for sustained prosperity and development. National Defense Contribution: By hosting the F-35 training mission, Kingsley Field plays a crucial role in national defense. This mission enhances the base's strategic importance and reinforces its long-term viability, ensuring continued federal investment in its operations and infrastructure.	
45	MICHAEL	MCKOEN		MERRILL	OR	I fully support Kingsley Field ANB transitioning to a F-35A Formal Training Unit. This is incredibly important to our national security and our local economy. It is ridiculous that we taxpayers are funding an EIS for this.	General Support, Socioeconomics
46	Mackenzie	Phelps		Klamath Falls	OR	The F-35s will be a huge asset to the Basin. Kingsley Field recently updated its lease with the City of Klamath Falls for the next 75 Years. Having the F-35s here will cover at least half that amount and continue stability in the local economy for the foreseeable future.	General Support, Socioeconomics
47	JOHN	DEY	KLAMATH AIRSHOWS DIRECTOR	NATIONAL CITY	CA	I CANNOT IMAGINE AN AIRBASE AND COMMUNITY BETTER SUITED FOR THIS MISSION. WE HAVE AVAILABLE AIR AND GROUND SPACE. WE HAVE BEEN THE SCHOOLHOUSE FOR THE AIR-TO-AIR VERSION OF THE F-15 FOR MANY YEARS. VISITING AIRMEN HAVE ALWAYS LEFT SUPER IMPRESSED BY THE QUALITY OF PEOPLE AND FACILITIES HERE. PLEASE LET ME KNOW HOW I CAN FURTHER ASSIST IN MAKING THIS HAPPEN! JOHN DEY	General Support
48	Courtney	Shaw	Coldwell Banker Holman Premier Realty	Klamath Falls	OR	As a lifetime resident of Klamath Falls, I am in full support of the F-35A Formal Training Unit at Kingsley Field Air National Guard Base EIS . I have been in Real Estate for almost 12 years and have always considered the sound of jets "the sound of freedom". I love to hear them in our skies and filling our community. I think feel that this is a very important piece to the successful growth and development of Klamath Falls. Without these advancements in training and the 173rd Fighter Wing in our community so much revenue and contributions to the community are lost. I am in full support of this training.	General Support, Socioeconomics
49	Nathaniel	Tolbert		Klamath Falls	OR	I'm excited for the grow and opportunities this new air craft will offer for klamath falls, as well as the longevity in which it will keep our base open running and employing our community for years to come.	General Support, Socioeconomics
50	Dena	Hadwick		Klamath Falls	OR	This is good for jobs in our community. We love our base and everything about it. Thank you all for all you do.	General Support, Socioeconomics

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51	Hali	Lingren				I believe that Kingsley Field acquiring the F-35A Lightning II would be a great opportunity for not only the base but also the community. Bringing in new features, jobs, technology and other helpful economic growth opportunities to Klamath Falls is something that all could benefit from.	General Support, Socioeconomics
52	Corey	Lingren		Klamath Falls	OR	The arrival of the F35 fighter jet to kingsley field seems to be a fantastic opportunity for not only Kingsley Field but also Klamath Falls. The personnel and money that will be put back into the community through purchases is vital for the survival and expansion of Klamath Falls!	General Support, Socioeconomics
53	Joel	Scott				The 173FW, Oregon Air National Guard, and US Air Force provide a significant impact to Klamath Falls and the Surrounding area. The wing offers well-paying jobs with career opportunities. Long term employees buy homes, pay property taxes, enroll children in schools. They support local businesses, volunteer with charitable organizations, and coach youth sports. A continued mission for the 173d is vital for the health of this community and the F-35 FTU is that mission.	General Support, Socioeconomics
54	Adam	Gaudinski	Concerned citizen / Local resident			With nearly \$500 million of investment into the base, the local community will surely benefit. The F-35A is a welcomed asset into this community!	General Support, Socioeconomics
55	Adam	Gaudinski	Concerned citizen / Local resident			<p>The F-35 coming to Klamath County, Klamath Falls, and Kingsley Field is a great thing. As a local resident, I am extremely supportive of this endeavor. This new aircraft does a ton to support the following:</p> <ul style="list-style-type: none"> -America's combat projection and power -Jobs -Economic impact -Housing development -Support local communities and business owners -Oregon does not have any Active Duty military units. This F-35 supports the Active Duty pilot training shortfalls while members are able to support the State mission. -A lack of flying mission at Kingsley would be detrimental to the community. Kingsley is either the #1 or #2 employer depending on how the census is obtained. -Kingsley Field does so much to support the local community. Parades, flybys, memorial dedications, school events, coaches, church congregations, etc. -Kingsley Field is a great steward in the community. They execute noise abatement procedures, comply with flying restrictions, use chaff/flare only in certain season to avoid wildfire danger, etc. <p>Please bring the F-35 to our community!</p>	General Support, Socioeconomics

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56	Nicki	Strain	Klamath Falls	Klamath Falls	OR	I am writing in support of the F-35 Formal Training Unit coming to Kingsley Field here in Klamath Falls. Kingsley Field is a vital part of our community and employs a large number of our citizens. This training is imperative to the defense of our Country as well.	General Support, Socioeconomics
57	Kalen	Larson		klamath falls	OR	I am excited to see the F35 flying around Klamath Fall. Kingsley Field is a great part of the basin. It supports so many families and local business. If we loose Kingsley Field I think it would be a huge loss to the community and local businesses and could drastically affect the housing market.	General Support, Socioeconomics
58	carol	mick	Mick Insurance Agency, Inc.	Klamath Falls	OR	I would like to voice my support of the Kingsley Field F35 Training program.	General Support
59	Nikki	Elbert		Bonanza	OR	I am in full support of Kingsley Field and the F=35 project.	General Support
60	Anna	Fowler				Kingsley Field plays a HUGE role in Klamath County's economic infrastructure. The base offers many civilian jobs for our community. Base personnel bring families to the area and are consumers of local goods and services. Kingsley Field is also a great resource and industry partner to Oregon Tech, Oregon's polytechnic university located in Klamath Falls. Any improvements and advancement to Kingsley Field is by default and improvement and advancement to the communities of Klamath County. The positive economic impacts vastly outweigh any other impacts on our area.	General Support, Socioeconomics
61	Christie	Murphy		Klamath Falls	OR	I am beyond thrilled that Kingsley Field is being considered for the F-35 air frame. Please bring those fantastic jets to Klamath Falls! Thank you so much!	General Support
62	Chad	Elbert	Self Employed at Rudius Quest Coaching / Elbert Consulting	BONANZ A	OR	Kingsley field is a valuable part of the Klamath Basin. I fully support the new mission for the F35.	General Support
63	Aaron	Spahn	ORANG	Klamath Falls	OR	With the addition of a F-35 training unit added to Kingsley Field it will add the opportunity for growth in the community by creating more jobs and stimulate the local economy with more disposable income. It will also create more events that will include not only military members but the entire community. It is a great opportunity for growth in the Klamath Basin in a positive direction.	General Support, Socioeconomics
64	Ryan	Manfull		Klamath Falls	OR	Securing the F-35 at Kingsley Field is a huge win for the community. The base provides much needed economic stability to the area, and is a huge supporter to the local area in terms of volunteerism and contributions to community organizations. Without the security for the future the new aircraft provides, we would be at risk of losing this valuable contributor to the area. I am in full support of the induction of the F-35.	General Support, Socioeconomics

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65	Nathaniel	Morehouse		Klamath Falls	OR	This new F-35 mission will be good for our community. Kingsley Field has been a prominent part of this area for many decades now and the economic benefit of having this organization here is truly immense. This new mission will ensure that benefit continues and grows for the next several decades.	General Support, Socioeconomics
66	Kyle	Hood		Klamath Falls	OR	Bringing the F-35's to Kingsley Field is going to be a great upgrade to the Klamath Basin. I'm excited to see the personnel influx that happens which will continue to sales of real estate. Aside from the base, Walmart and the railroad, there doesn't seem to be much major employment companies for the area so, keeping the base up and running will sustain the Klamath basin's influx of money.	General Support, Socioeconomics
67	Cassandra	Patterson		Klamath Falls	OR	The potential for the new Aircraft means the sustainability of the guard base for years to come. Giving future generations opportunity and supporting the Klamath Basin with job security and providing freedom!	General Support, Socioeconomics
68	Jen	Schuster	Business owner	Klamath Falls	OR	Integrating the F-35A at Kingsley Field will bring significant economic benefits to our community. The transition from the retiring F-15 to the F-35A will secure current jobs and create new opportunities, supporting local businesses and families. Our community's established experience with the F-15 makes us uniquely qualified to handle the F-35A, ensuring a smooth and efficient transition.	General Support, Socioeconomics
69	Danielle	Anderson	Teacher	Klamath Falls	OR	Any military training that benefits our future as Americans is 100% welcome here in my opinion. I love to hear the jets fly... IT'S THE SOUND OF FREEDOM!!! THANK YOU TO ALL THAT HAVE SERVED. I'M TRULY GRATEFUL!!!	General Support
70	Kay	Rutledge				They remind me of the sound of freedom. I welcome them and proudly support them being here in our community!	General Support
71	Cheryl	Olguin				I love the idea that the mission will extend Kingsley's presence in our community for another 20 to 30 years. As the second largest employer in the community, it would be a crushing blow to our area to lose it. I'm very proud that we have Kingsley here.	General Support, Socioeconomics
72	Jason	Morrow		Klamath Falls	OR	I approve the F-35 coming to Klamath Falls. Welcome more jobs to Klamath and a boost to the economy!! I appreciate the military and Klamath would be a great training facility.	General Support, Socioeconomics
73	Pamela	Redding	DPRedding Inc.	Klamath Falls	OR	I would like to see the program come to Klamath Falls. It would be a good thing for our city and our businesses.	General Support, Socioeconomics
74	Caroline	Riblett				Having lived in Klamath Falls all of my life (except for college,) I am thankful and excited to see the mission of Kingsley Field continue--training pilots for combat-ready jets.	General Support
75	Daniel	Minchk				I fully support the F-35's mission in Klamath Falls. I believe Kingsley field and the service member that work there are a back bone to the commerce and community of Klamath Falls.	General Support

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76	Randy L.	Shaw	Klamath Basin Behavioral Health	Klamath Falls	OR	<p>I am born and raised in Klamath County and have been a fan of the Air Force (Guard) since the early 70's. The base has a positive affect on the economic well being of this community and is a tremendous partner in helping support other community events.</p> <p>I am also proud of our heritage concerning Kingsley Field and when I hear the jets performing it is music to my ears. I like to say it is the sound of freedom.</p> <p>We have, for years been a strident supporter of Kingsley and what the people working and serving there bring to our community. Please continue this tremendous relationship with our community and the people that live here.</p>	General Support, Socioeconomics
77	Kellie	Myrick	LBS Express Cleaning, LLC	Klamath Falls	OR	I love our air base and I am so excited for the bringing in of the F35's. We love you all and support Kingsley Field 100% on this mission!	General Support
78	jesse	conner		klamath falls	OR	Kingsley field is imperative for the wellbeing of Klamath Falls. They pump millions of dollars into the economy and provide upstanding community members. The F-35 would guarantee the continued and increasing prosperity of Klamath Falls.	General Support, Socioeconomics
79	Darrell	Burkhart	Oregon Army National Guard			As it pertains to the construction of the infrastructure required for operation of the F-35, will local (Klamath County) Contractors be used? Or will the powers that be go non-local like every time they have "enhanced" Kingsley Field in previous attempts ?	Socioeconomics
80	Lori	Worthington		Klamath Falls	OR	Kingsley Field is a gem for our community! Without it, Klamath would be nothing. To say that we are proud to tell others that it is here as a training facility is an understatement. We are blessed that we have this facility - the jet roars are truly the sound of freedom!	General Support
81	Dack	Brophy	173rd FW	Klamath Falls	OR	I look forward to seeing F-35's at Kingsley Field. It will be an awesome new addition to the community. It will secure our future and our kid's future if they decide to follow in our footsteps.	General Support
82	Malea	Hunt				Please focus on housing and infrastructural improvements to make the F35 program a successful one. Existing population continues to struggle with good housing, how will it work with program influx? There is also a severe lack of clothing oriented business. Our community needs to grow well and quickly to support this program and make it a successful one.	Socioeconomics

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83	George	Ormsbee		Klamath falls	OR	As a past President of the board for Klamath County Chamber of Commerce, I feel very strongly that adding the F35 mission to Kingsley Field would be a huge benefit to the Klamath Falls business community. That will bring more support staff to our existing staff and help keep jobs and financial support in this community. The base and the support it gives the community has always been at the highest levels and is necessary for continued growth in our Klamath Community. I believe there are more supporters of a contined relationship that benefits our businesses and serves as a mutual positive experience moving forward. Thank you for this consideration.	General Support, Socioeconomics
84	Brandon	Fowler		Chiloquin	OR	Dear Kingsley Field Leadership, I am writing to express my strong support for the F-35 aircraft training mission at Kingsley Field in Klamath Falls. As a Klamath County resident, I understand the importance of Kingsley Field to our region and its significant role in national defense. The F-35 aircraft training mission not only enhances the readiness of our armed forces but also contributes to the local economy and community. Kingsley Field has a long-standing history of excellence in training pilots and providing crucial support to our national defense strategy. The introduction of the F-35 further solidifies Kingsley Field's position as a cornerstone of military readiness and capability. I believe that supporting the F-35 mission at Kingsley Field is vital for several reasons: 1. National Security: The F-35 is a state-of-the-art aircraft that plays a critical role in maintaining air superiority and ensuring the safety of our nation and its allies. 2. Economic Impact: Kingsley Field provides significant economic benefits to the Klamath Falls area, supporting jobs and stimulating local businesses. 3. Community Partnership: The presence of Kingsley Field fosters a strong bond between the military and the local community, promoting collaboration and mutual support. 4. Training Excellence: The expertise and training facilities at Kingsley Field are unparalleled, making it an ideal location for F-35 pilot training.	General Support, Socioeconomics

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84 (cont)	Brandon	Fowler		Chiloquin	OR	<p>I am confident that the F-35 mission will not only uphold but enhance Kingsley Field's reputation as a center of excellence in military aviation training. The continued investment in Kingsley Field's infrastructure and capabilities will ensure its readiness to meet future challenges and opportunities.</p> <p>Please know that you have my full support in advocating for the F-35 aircraft training mission at Kingsley Field. I urge decision-makers to recognize the benefits and strategic importance of this mission for our national defense and local community.</p> <p>Thank you for your dedication to serving our country and for your commitment to Kingsley Field's mission. I look forward to seeing the continued success and growth of Kingsley Field as a premier training facility for our armed forces.</p> <p>Sincerely,</p> <p>Brandon Fowler</p>	General Support, Socioeconomics
85	Blane	Rings	Desert Lake Technologies	Klamath Falls	OR	<p>Can't wait to hear the "sound of freedom" fly over Southern Oregon.</p> <p>Just a quick PS, My brother Capt Dr. Matt Rings USN, helped design the optic display on the helmet of the F-35.</p> <p>Blane</p>	General Support
86	Nathaniel	Dean	Chamber of Commerce	klamath falls	OR	<p>I'd like to express my support the F35 mission at Kingsley Field. The future of our nation needs to be in the right hands. Kingsley Field has kept the aging F15 fleet not just operational, but ready to defend our nation. There is no better place to put the trust of our national defense. Our crews are experienced, capable, and ready. Bring the F35 to Kingsely Field and ensure the defense of our flag, our freedom, and our nation.</p>	General Support
87	Cynthia	Smith	None	Klamath Falls	OR	<p>I support the growth the F-35A would bring our community.</p>	General Support, Socioeconomics
88	Kendra	Santiago	SmithBates Marcomm Solutions	Klamath Falls	OR	<p>We are excited to see a continued presence of the military in Klamath County.</p>	General Support

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89	Zachary	Vaughan		Klamath Falls	OR	The presence of F-35's in our town not only strengthens national security but also brings significant economic growth and strategic benefits to our community. Their state-of-the-art technology and unmatched capabilities ensure that we remain at the forefront of defense, deterring any potential threats. Additionally, the operations and maintenance of these aircraft will create jobs, boost local businesses, and attract further investment in our town, fostering growth and stability.	General Support, Socioeconomics
90	Andrew	Nichols		Klamath Falls	OR	Grow Kingsley, Klamath County welcome a more robust military footprint.	General Support
91	James	Dreyer	173MXG/ ORANG	Klamath Falls	OR	I feel that a F-35A FTU for the Klamath Falls community would be an outstanding way to provide employment and career opportunities to so many residence and their families! Just seeing how Kingsley Field supports Klamath Falls now, with the opportunities available for a new airframe (F-35A), the sky is the limit. Also, with all the new regulations and stringent requirements that come with new FTU missions and with one of the most advanced Air Force Fighter Aircraft, the Klamath community will be well protected environmentally which is best for the residence of this community!	General Support, Socioeconomics
92	Jeffrey	Jones		Klamath Falls	OR	Having the F-35 at Kingsley is a huge benefit for the community.	General Support, Socioeconomics
93	Ashlyn	Hartman		Klamath Falls	OR	Kingsley Field has been the home for our F-15's. The basin needs the base to help with jobs in Klamath Falls. Now that the 15's are aging out, we need a replacement aircraft to keep the base and jobs going. The airspace is perfect for the F35's. The community loves the base and the sound of freedom flying overhead every day.	General Support, Socioeconomics
94	Peggy	Roberts		Klamath falls	OR	Would like to be informed.	N/A
95	James	Mossett		Klamath Falls	OR	Bringing the F-35 and a Formal Training Unit to Kingsley Field will have a positive impact for the OR ANG and Klamath Falls community. With the addition of new aircraft and a future mission, Kingsley Field could see an increase in Military and civilian personnel who would help rejuvenate the economy by supporting Local Restaurants and Businesses and building projects. I'm talking about career jobs. Not just minimum wage, fast food and vape shops. Our local economy would see a significant increase in business opportunities from the constructions project alone. An F-35 FTU would help keep Kingsley Field open, providing jobs for generations.	General Support, Socioeconomics

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95 (cont)	James	Mossett		Klamath Falls	OR	Without a new airframe and mission, Kingsley Field could be closed under the BRAC program, which could jeopardize the entire Basin. Just Imagine 400+ families trying to sell their home and move out of the Basin. The housing market would tank at the slightest whispers of Kingsley Field closing. Restaurants and local businesses would struggle next, followed by every other industry that is supported by the 400+ Airmen that work on that base. Kingsley Field needs Klamath Falls, just as much as Klamath Falls needs Kingsley Field.	General Support, Socioeconomics
96	Kevin	Harter		Klamath Falls	OR	<p>The Kingsley F35 mission is crucial to the economy for several reasons. Firstly, it stimulates economic activity through investment in research, development, and production of advanced aerospace technologies. This creates high-skilled jobs, boosts local economies near production facilities, and enhances national technological competitiveness globally. Additionally, military contracts like the F35 sustain a vast network of suppliers, ranging from small businesses to large corporations, thereby supporting a diverse economic ecosystem.</p> <p>Furthermore, the F35 program involves substantial exports, generating revenue from international sales and fostering positive trade balances. These funds circulate back into the economy, contributing to growth and stability. Moreover, defense contracts often lead to innovations with civilian applications, benefiting sectors such as telecommunications, materials science, and manufacturing.</p> <p>The Kingsley F35 mission is crucial to the economy for several reasons. Firstly, it stimulates economic activity through investment in research, development, and production of advanced aerospace technologies. This creates high-skilled jobs, boosts local economies near production facilities, and enhances national technological competitiveness globally. Additionally, military contracts like the F35 sustain a vast network of suppliers, ranging from small businesses to large corporations, thereby supporting a diverse economic ecosystem.</p> <p>Furthermore, the F35 program involves substantial exports, generating revenue from international sales and fostering positive trade balances. These funds circulate back into the economy, contributing to growth and stability. Moreover, defense contracts often lead to innovations with civilian applications, benefiting sectors such as telecommunications, materials science, and manufacturing.</p>	General Support, Socioeconomics

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96 (cont)	Kevin	Harter		Klamath Falls	OR	<p>Regarding environmental impact, stringent regulations and advancements in aerospace technology ensure that modern military aircraft like the F35 are designed with sustainability in mind. These include measures to minimize emissions, noise pollution, and resource consumption during both manufacturing and operational phases. Additionally, aerospace companies increasingly invest in eco-friendly practices and technologies, such as lightweight materials and fuel-efficient engines, further reducing environmental footprint.</p> <p>Moreover, the defense industry's commitment to environmental stewardship extends to remediation efforts and sustainability initiatives in local communities affected by defense operations. Comprehensive environmental assessments and adherence to international standards ensure that the production and operation of military aircraft like the F35 have minimal adverse effects on surrounding ecosystems.</p> <p>In conclusion, the Kingsley F35 mission is vital to the economy due to its significant contributions to technological advancement, job creation, export earnings, and industrial innovation. Simultaneously, rigorous environmental standards and advancements in aerospace technology mitigate potential negative impacts on the environment, ensuring sustainable development alongside economic benefits.</p>	General Support, Socioeconomics
97	Joshua	Neely		Klamath Falls	OR	<p>Kingsley field is responsible for a majority of new money introduced to Klamath Falls each month. A vast majority of other employers do not bring fresh outside funds into the local economy, they simply recirculate existing funds. A local economy only on existing funds will not flourish, it will slowly collapse. With the retirement of the F-15, Klamath Falls needs a new Air National Guard mission to keep the town alive. What better opportunity than the F-35. A mission that wouldn't only come with neutral income, but will actually bring in more contract workers, and larger backing from the Air Force with available funds. Both of these things will provide more money and security to the local economy for not only our children, but their children's future. This is not only a nicety for the community, but also a necessity to keep the town alive. Without a mission, Klamath Falls will collapse. In the 24 years I have lived in this town, I've never experienced an area with so much support of a military unit. There are only a few people who do not support it, most of those people do not hold jobs in this town, and are not invested into it's future. They are surviving off of government</p>	General Support, Socioeconomics

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97 (cont)	Joshua	Neely		Klamath Falls	OR	subsidies and could care less about actual economic survival. Those few are anti military, anti government, anti anything that is above and beyond the bare minimum. Fortunately, those few opinions do not represent the masses, they are so far and few between that I would venture to say they don't make up 5%.	General Support, Socioeconomics
98	Deanna	FRANKS		Klamath Falls	OR	In full support. The base is well run, with solid leadership, and the new program is welcome in Klamath Falls. Thank you for your service.	General Support
99	Jeremy	Riblett		Klamath falls	OR	I can't wait to have the F-35 at Kingsley Field!	General Support
100	Darin	Masoner		Klamath Falls	OR	The F-35 is a great asset to have in Klamath Falls. Not only will it help with our national defense but, it will also have a positive econmic impact on our community.	General Support, Socioeconomics
101	Michael	Angeli	Klamath Falls Downtown Association	Klamath Falls	OR	I am a proud citizen, business owner and community supporter. The missions of the ANG 173rd at Kingsley Field are not only incredibly important for the nation, but us as a community as well. We love, support and promote all that is Kingsley Field. The essential relationships created and maintained by the Wing and its families are the lifeblood of our community and its prosperity. The sound of freedom (the roar of each and every model flown) in and out of our airport just solidifies and reminds us of the things that we take for granted each day. Our hard won victories and tremendous losses that have paved our way for freedom and prosperity. We, as a patriotic community of 40,000 plus, support the missions of Kingsley Field and look forward to the F-35 and any future components to our region wholeheartedly! Respectfully, Michael Angeli	General Support
102	Casey	Rietdyk		Klamath Falls	OR	The city of Klamath Falls would continue to prosper with the F-35 being stationed here. It will support the community and solidify future growth.	General Support
103	Eric	Harris		Klamath Falls	OR	F-35's will be a great and lasting investment into Klamath county. Long term income and money coming back into the community.	General Support, Socioeconomics

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104	Brian	Horne				I strongly advocate for establishing the F-35A formal training unit at Kingsley Field Air National Guard base. This initiative presents a significant opportunity for the future of Klamath Falls and promises enduring benefits for generations of Klamath families. The personnel stationed at the base are integral members of our community, contributing not only as service members but also as active participants in local life. They raise their families here, with some being native to Klamath Falls, actively supporting local businesses, owning homes, and engaging in community activities such as coaching local sports teams and helping out at local churches. Many long-serving members of Kingsley Field have deep ties to the region, with their children completing their education from kindergarten through college locally, while their spouses contribute to the civilian workforce. The base's symbiotic relationship with the community is evident in the overwhelming support it receives from locals, who are staunch advocates of our military presence.	General Support, Socioeconomics
105	Holly	Loomis	USAF Veteran Spouse	Klamath Falls	OR	The addition of the F35 squadron(s) provides economic support & stability for our community and supports the overall mission for Kingsley Field and the USAF. It is a no brainer to say YES. I pray the citizens of Klamath Falls and surrounding communities step up mightily to show our support. It's a Yes from me for so many reasons.	General Support
106	Jody	Carter	Windermere Real Estate	Klamath Falls	OR	I fully support the F-35A Lightning II Formal Training Unit at Kingsley Field ANG installation in Klamath Falls, Oregon. I strongly feel it will only do great things and be only positive for our community.	General Support
107	Tara	Bryson		Klamath Falls	OR	BRING ON THE F35s!!! This is an awesome opportunity for our community! Not only would I be proud to have the training site in my town, but I believe this would provide economic growth to Klamath Falls also due to the families that could be living here as a result. I am 100% in agreement with this!!!	General Support, Socioeconomics
108	Mike	Christie		Klamath Falls	OR	The F-35 coming to Klamath Falls will have a great and positive impact for the community.	General Support
109	Shawna	Damrow		Klamath Falls	OR	I would like to continue to see Kingsley field train pilots in order to protect our freedom and country.	General Support
110	Howard	Davis				As a 11 year Klamath Falls resident, I feel like the Kingsley mission is vital to this community and to the training of these excellent pilots in their mission to protect our way of life!	General Support

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111	Ben	Ebner		Klamath Falls	OR	As a resident of Klamath Falls, I fully support Kingsley Field's continued operation as a training base, both in its current capacity (with F-15 aircraft) and in the future as an F-35A training base. It's hard to imagine the environmental impact of F-35 training will be much different than that of the current F-15 training. Regardless, whether it is or not, I fully support Kingsley Field becoming an F-35A training base.	General Support
112	Greg	Davis		Klamath Falls	OR	<p>The Klamath Falls community and the state of Oregon both benefit greatly from the Kingsley Field mission. Kingsley Field not only provides jobs, tax revenue, community sustainability, partnerships and opportunities for our local families, it also affords us the ability to support our country's national security at the local and state level.</p> <p>Kingsley Field military members often have deep rooted connections within our community which gives them the opportunity to foster trust, understanding and collaboration with many of our local businesses and community leaders. As our military advances its technology and moves into the future it's critical we have communities like Klamath Falls throughout our country that support our military efforts and desire to build a strong economic future.</p>	General Support, Socioeconomics
113	Alex	Huntsman	173FW OSS	Klamath falls	OR	<p>The F35 would be great for the future of Klamath falls. Our jets are old and need to be replaced with the 5th gen fighter! It would give younger kids the option to join the ANG to serve our country and work with one of the most advanced fighters in the world. Kingsley brings active duty people to the community which brings money to all the small businesses.</p> <p>Great idea! Let's get these jets here and start training the worlds best fighter pilots</p>	General Support
114	Grace	Barrett	Family of active duty AF	Klamath Falls	OR	Another great addition to our community!!	General Support
115	Arthur	Petersen		Klamath Falls	OR	Having the F-35 in Klamath Falls will be a great thing for the community. Any negative environmental impacts will be far exceeded by the positive impacts. There is a huge economic impact that will bring millions of dollars to this area. The talent and Leadership of people at the base and association with the F-35 is a tremendous asset to this community. I live where I can see the runway and rejoice every time I see the Jets jump into the air. I love the sound. I love the security that comes from these airplanes.	General Support, Socioeconomics

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116	Matthew	Amuchastegui	Lincoln Homes Incorporated	Klamath Falls	OR	I believe having the F35 training unit here at Kingsley will be beneficial to our community. I think it will bring more good families to our community, which will in turn help our local businesses. Aside from the economic benefit, as a patriot myself, I believe it will add to the excitement we get to experience already by watching this awesome aircraft fly over head in our skies above. Everything I see a jet fly it reminds me of our great country, our freedom, and what we stand for. Proud to support this and proud to be an American!	General Support, Socioeconomics
117	BRAD	Mortenson				Having been born and raised in Klamath Falls, I have always and will always enjoy the sights, sounds, and pride of having our United States Air Force training and practicing in our airspace. This training center brings tremendous benefit for the members of our community. It increases opportunities for skill and knowledge development, it provides stable economic benefits, it engenders local and national confidence.	General Support, Socioeconomics
118	Geoff	Jensen				I am please to hear of the F-35s coming to Kingsley Field. This new aircraft will provide long term stability to the community and greatly benefit the region.	General Support
119	James	Dean	retired AF	Klamath Falls	OR	I think this community needs Kingsley Field and the F-35 training mission here! For those that wish it to go away, they have no idea how much revenue Kingsley brings to the Basin. Shame on those for thinking of only themselves!!!!!!	General Support
120	Gregory	Davis Sr	Senior Citizen Retired	Klamath Falls	OR	We need to support our local training air national guard base. Every day I hear the true sounds of freedom fly over my house and recognize how our country and community are truly working to keep us free, strong and safe from our enemies in the world we live!!!!!!!!!!	General Support
121	Alexis	Rainville		Klamath Falls	OR	As I am from a military family I believe that the new F-35's will be good for the community. It will bring more people which in return will bring in more jobs. I think that the F-35's will help the community grow in a good way.	General Support, Socioeconomics
122	Jamie	Rainville				Our community relies on Kingsley field to provide jobs and support families. Bringing a new aircraft will only support the growth of our community and keep families here.	General Support, Socioeconomics
123	Ryan	Rainville		Klamath Falls	OR	This community is a military community, and without the base Klamath Falls would collapse. There is no other major industry that could sustain this city. We are extremely excited and fortunate to have Kingsley Field and also the the men and women of the Air Force here. Having the F-35 is extremely exciting, and we are looking forward to having it stationed here. Showcasing what we can do as a community with the help of the F-35 being here is a great way forward for Klamath Falls and the Air Force. Hopefully the F-35 gets here sooner then later.	General Support, Socioeconomics

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124	Richard	Schuster		Klamath Falls	OR	We are very excited about the new F-35s being stationed in Klamath Falls. The buzz around town is palpable and you can't ask for a more supporting community. What a great continuing tradition for our small town! We are REALLY looking forward to the new change!	General Support
125	Emily	McIntire	State Representative	Eagle Point	OR	Greetings! I am in full support of the beddown, operation, and associated infrastructure construction of one FTU squadron of F-35A aircraft at the 173 FW. The Kingsley Field Airforce Base is neck and neck to be the largest employer in the Klamath Basin. They not only take care of their own, but they are embedded in the community as coaches, board members, and volunteers. On my visits to Kingsley Field I am always amazed at the organization, the attention to detail and the pride they have in their service to our country. I know that this mission will be handed in the same way. For many of us in this state, to have a flyover on Memorial Day and the 4th of July is the highlight of the day- the beauty of Kingsley Field in Klamath Falls is this community gets to see our Armed Forces at work each day. I look forward to seeing this project move forward and am confident it will be executed in the most efficient, considerate, clear, successful way possible. The people operating Kingsley Field don't do lazy. They do plans and they follow through. Thank you for your time and consideration. Blessings.	General Support, Socioeconomics
126	Tyler	Cox				I strongly support the F-35 coming to the Klamath Basin, it bolsters our local economy and greatly enhances the safety and security of our community, state, and nation.	General Support, Socioeconomics
127	Adam	Stacey		Klamath Falls	OR	Klamath Falls is on the brink of an economic boom. We are growing! Bringing the F-35 FTU mission to Klamath Falls would continue our upward trajectory and make our spot on the map even more valuable. Not only that, Kingsley Field brings in MILLIONS of dollars to the community every year. Securing the F-35 FTU mission would continue the longstanding bond between Klamath Falls and its military families. This will impact generations for the better - securing their prosperity.	General Support, Socioeconomics
Comments Received via Email							
128	Adam	Stacey	173 MXG/MXMC P	Klamath Falls	OR	To whom it may concern – The F-35 FTU mission in Klamath Falls will be extremely beneficial to the community. Let's make it happen! This will positively impact the basin for generations!	General Support, Socioeconomics

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129	Hazleton	April				I live in this area, and I do not want low level flyovers interrupting my recreational activities. I enjoy the calm nature of my area. If I wanted to here jets and such flying overhead, I would move closer to the city. My horses will not appreciate this either. She freaks and runs through fences when there are any loud unnatural noises. It will also disturb the wildlife in this area. This area is also a tourist attraction due to its natural beauty. If you do this it will ruin it. Sincerely, April Hazelton	General Opposition, Noise, Wildlife
130	Jessica	Ashley		Klamath Falls	OR	Sir or Ma'am, Klamath County Emergency Department have received your letter and invitation to attend the meeting on June 26. Please add three to your list of attendees.	N/A
131	Miki and David	Barnes		Banks	OR	Topic: Statement in Opposition to F-35 Training at Kingsley Field Kingsley Field, where the military is proposing F-35 training is 4 miles from Klamath Falls (population 21,000) and an hour away from Crater Lake National Park, the only national park in Oregon. In addition, Kingsley Field is located close to the Fremont-Winema and Umpqua national forests. All are areas that need to be treasured and preserved for current and future generations as well as the residents, wildlife, flora and fauna that live there. The impact of F-35 training over this area would contribute to a significant increase in noise levels, environmental pollution, ecological degradation and global warming. For these reasons and those elucidated by Code Pink (discussed below), we urge you to forgo efforts to engage in F-35 flight training at this location or any other location in Oregon. According to a petition brought forward by Code Pink, over 220 global organizations are calling for a complete cancellation of the F-35 program for a number of reasons including “the harm caused abroad, cost of the program to the taxpayer, inefficiencies and failures, the environmental impact of F-35s, and the effects training has on local communities.” Click on the link below for details. https://www.codepink.org/groundthef35 Below are excerpts from the Code Pink petition. HARM CAUSED THROUGH MILITARISM The F-35 is a weapon of war. Although not ready for full-scale production, the U.S. intends on producing countless F-35s to sell around the world that will without a doubt be used to harm people living in the Global South. F-35s have the capacity to carry nuclear weapons, and the deployment of these jets only aids nuclear proliferation. The U.S. already makes up 40% of the global arms trade, aiding and abetting war crimes all over the world. Israel is	General Opposition, Multiple Environmental
		Barnes		Banks	OR		

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131 (cont)	Miki and David					<p>procuring F-35’s from the United States which have already been used to launch airstrikes on Gaza to further Israel’s goals of ethnic cleansing and displacement in Palestine. Saudi Arabia has expressed interest in F-35s as well as the UAE while both countries wage a brutal war on Yemen. The F-35 is a disaster of a project, but also a potential disaster for humanity.</p> <p>INEFFICIENCIES AND FAILURES The F-35 spending is becoming impossible for important members of Congress to justify. The Chair of the House Armed Services Committee, Rep. Adam Smith called the F-35 a “rathole.” Another member of HASC, Rep. John Garamendi had some scathing comments about the F-35 in a HASC subcommittee hearing in May: “For the contractors out there, what are you doing? Why can’t you give us a piece of equipment that actually works? You should never have a contract. And for Lockheed, you want a five-year maintenance contract? You can’t do what you’re doing today. Come on. What are we thinking? If I have not adequately expressed my frustration, I would assume that my frustration is less than the frustration of the pilots and the maintainers out there. ... The primary maintenance responsibility on this is Lockheed and you gentlemen.” The Government Accountability Office said the F-35 “continues to fall short of prescribed mission-capable rates and is consistently missing reliability targets”. According to the GAO, the F-35A in 2021 was fully mission capable 50% of the time, while the F-35B was fully mission capable less than 20 percent of the time. The F-35c was only capable 9.5% of the time. The signatories call attention to the failures of the program to address harmful projects seeing never ending investment while programs that protect people such as universal healthcare never see the light of day.</p> <p>COST TO THE TAXPAYER The failures of the program make the spending impossible to justify, even from a militaristic standpoint. The F-35 program is the Department of Defense’s most expensive weapon system program. As of now, the F-35’s projected total cost is \$1.7 trillion, which includes \$1.3 trillion in estimated operations and sustainment over 66 years. The F-35 is horribly behind schedule, experiencing massive cost overruns with maintenance costs doubling. The F-35 is not ready for full scale production. According to the GAO, “if DOD moves forward as planned, it will have bought a third of all F-35s before determining that the aircraft is ready to move into full-rate production.” Spending billions to trillions of dollars on a plane that is not yet up to speed with what the government has requested is poor fiscal policy.</p>	General Opposition, Multiple Environmental

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131 (cont)	Miki and David	Barnes		Banks	OR	<p>ENVIRONMENTAL IMPACT F-35s also have a significant impact on the environment with their high carbon emissions and pollution on local bases. The F-35 uses a significant amount of fuel – about 2.37 gallons of fuel for every mile traveled and around 1,340 gallons of fuel per hour. This is particularly egregious compared to the F-35’s predecessor, the F-16, which used at least 415 gallons of fuel per hour less. One single F-35 tank of gas produces the equivalent of 28 metric tons of carbon dioxide. These emissions heavily pollute air and water sources in basing locations in the U.S. and abroad. Base site construction for F-35 training in the U.S. has also disregarded the need for environmental remediation of pre-existing contaminants such as PFAS, risking further pollution of surrounding communities. F35 pollution is an environmental justice issue, as they are disproportionately tested, trained, and deployed in low-income communities of color. These environmental impacts do not even account for the role of the plane in active combat. As they’re deployed around the world, we see Lockheed Martin’s jets subjecting communities globally to egregious noise levels, environmental contamination, and the risk of nuclear warfare. The F-35 is also a part of the U.S. strategic nuclear bomber force, possessing the capability to carry and deploy the B61-12 guided nuclear bomb. If deployed, this bomb - and all other nuclear weapons - would have catastrophic long-term environmental consequences.</p> <p>EFFECT ON U.S. LOCALS Currently, F-35 training in Vermont disrupts the lives of working-class people. The training is irregular and Vermonters go without warning of when these trainings will take place. The noise caused by the F-35 hits 115 decibels which especially hurts and injures infants and children, the elderly, and the disabled. The F-35 has 300 to 600 takeoffs and landings a month. Let’s consider the City of Winooski, VT. More than half the city is within the US Air Force designated 5.2 mile by 1.2 mile oval-shaped F-35 noise target zone centered on the runway. Winooski is a working-class city, the most densely populated in Vermont, with the state’s most ethnic diversity. As reported by the US Air Force itself in 2013, repeated exposure to military aircraft noise at the level of the F-35, can damage hearing.</p> <p>The Air Force also reported that the much lower aircraft noise level produced by civilian aircraft was still sufficient to impair the learning and cognitive development of children living in the flight path of heavily used commercial airports. The US Air Force identified the entire oval-shaped noise target zone as an area “generally considered unsuitable for residential use.” So it was no secret for the state’s political and military leaders that locating the F-35 at [BTV Burlington International Airport] would cause pain and injury to</p>	General Opposition, Multiple Environmental

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131 (cont)	Miki and David	Barnes		Banks	OR	<p>children and adults on a mass scale. In Madison, where the F-35's are likely to end up starting in the next few years, [Update - F35's began flying out of Truax Field in 2023] Physicians for Social Responsibility Wisconsin has identified the following risks to children as a result of loud noise and air pollution:</p> <ul style="list-style-type: none"> • Preterm or low birth weights • Delayed speech development • Hearing loss • Interference with concentration, long term memory, reading and math comprehension <p>In addition, adults as well as children would face increased risk of:</p> <ul style="list-style-type: none"> • Stress hormones that cause sleep disturbances • Anxiety • PTSD • Asthma • Cancer • Heart disease • Strokes <p>The costs of this program to the taxpayer, the environment, local communities, and the communities upon which the US and its allies will wage war are too high to justify. It is time for the government to prioritize the welfare of human beings and the planet over military superiority and the weapons industry's profits.</p> <p>For all of the reasons stated above, we oppose F-35 training at Kingsley Field as well as all other locations in Oregon.</p> <p>SOURCES Ground the F-35. Code Pink. Make or Break Time for the F-35. (5-20-2021). Air and Space Forces Association. Blistering Highlights from the Latest F-35 Sustainment Hearing. (5-9-2022). The Warzone. F-35 Sustainment: Costs Continue to Rise While Planned Use and Availability Has Decreased. (4-15-2024). Government Accountability Office (GAO). GAO-24-106703.</p>	General Opposition, Multiple Environmental

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132	Rose Marie	Varnum		Klamath Falls	OR	<p>Dear Sir or Madam,</p> <p>I am writing this in support of transitioning the old F15C/D to the new F35A fighter pilot training at Kingsley Field. By transitioning to the newer F35A planes at Kingsley Field the Air National Guard's 173 Fighter Wing can continue to offer the quality of training that is needed to keep their mission to maintain well-trained and well-equipped units for prompt mobilization during combat times and to aid during national emergencies. Bringing in the new planes will require some additional infrastructure, but the Guard has assured me that the additional shops and hangars will not extend beyond their current base footprint, therefore they will not be using any additional land.</p> <p>By transitioning to the newer planes, fighter pilots are guaranteed that their training will be the same high quality that has been given to previous pilots at Kingsley Field in Southern Oregon.</p> <p>The training at Kingsley Field is available without having to compete with incoming and departing commercial flights as there is no commercial passenger service currently at Crater Lake-Klamath Regional Airport. Pilots are given an opportunity to train over a very diverse geographical area within a short distance of Kingsley Field. There is the Cascade Mountain Range to the west and the Pacific Ocean just a short distance by jet from the base where pilots can train in heavily forested areas with mountains. Just a short distance north and east you will find a high desert area that is sparse in vegetation and population, giving the pilots the unique opportunity to train in those climates as well.</p> <p>As you can see from the points I have made above there is a positive reason to bring the Formal Training Unit to Kingsley Field. As there will be no need to bring in more personnel, I am not stating this support from the perspective of adding additional monies to the local economy. I am in support of this proposal because it makes good sense to maintain the quality of training that is given to fighter pilots, preparing them to defend our country against invasion if need be.</p> <p>Sincerely, <i>Rose Marie Varnum</i></p>	General Support
133	Udom	Hong	Bureau of Land Management, Oregon/Washington State Office			<p>Hello,</p> <p>BLM Oregon/Washington has reviewed this USAF NOI and has no comments or concerns to submit at this time.</p> <p>Thank you!</p>	N/A

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134	Martha	Crucius	United States Department of the Interior, National Park Service	San Francisco	CA	See attached letter.	Recreation, Noise, Wildlife, Nite Skies, Multiple Environmental
135	Carol	Westfall	Mayor, City of Klamath Falls	Klamath Falls	OR	See attached Resolution #24-12	General Support
136	Caitlin	Roesler	United States Environmental Protection Agency, Region 10	Seattle	WA	See attached letter.	Multiple Environmental
Comments Received During the Public Scoping Meeting – June 26, 2024							
137	Anonymous					I strongly advocate for establishing the F-35A Formal Training unit at Kingsley Field ANG. This initiative presents a significant opportunity for the future of Klamath Falls and promises enduring benefits for generations of Klamath families. The personnel stationed at the base are integral members of our community, contributing not only as service members but also as active participants in real life. They raise their families here, with some being native to Klamath falls, actively supporting local businesses owning homes, empowering community activities such as coaching local sports teams. Many long service members of Kingsley Field have deep trust to the region, with their children completing their education from young to college locally, while their spouses contribute to the civilian workforce. The base’s symbiotic relationship with the community is evident in the overwhelming support it receives from locals, who are staunch advocates of our military presence.	General Support
138	Dwane	Hardenburger	D&D Cattle Co, LLC	Klamath Falls,	OR	The EIS presentation was very informative and well attended. Subject matter expertise were available to address salient questions. Hopefully, funding, et al, will fall into step to accommodate getting the F-35’s operational at Kingsley Air National Guard Base.	General Support
139	Anonymous					If we do not get the F35 what is the economic impact on the city of Klamath Falls?	Socioeconomics
140	Brandon	McGraw				I do not see any alternative to F35s being stationed at Kingsley Field. Kingsley Field and its members are the life blood of the Klamath Falls Community. Without an aircraft change at Kingsley Field, the 173 Fighter Wing risks losing a mission and with that potential losing a thousand plus members and millions of dollars into the community and other outlying communities. We can not risk Kingsley’s next mission!	General Support, Socioeconomics

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141	Adam	Stacey	Custom Jiu Jitsu	Klamath Falls	OR	What economic impact does the 173 FW bring to the community? Millions? Billions? Will the F-35 mission solidify the continued economic benefit to the basin? I believe the future of Klamath looks bright. Solidifying the mission would in my opinion bring a possible wave of economic growth. Long short: I fully endorse the F-35 FTU mission in Klamath falls.	General Support, Socioeconomics
142	Cally					I don't have many concerns. I feel the pros in the mission outweigh the cons. I am an advocate for moving forward.	General Support
143	Elaine	Bries		Klamath Falls	OR	Kingsley Field has a substantially greater impact on the community than any other business or organization in the basin. The noise complaints are few and far between and the good outweigh the bad. Kingsley brings in substantial revenue in the form of people moving to Klamath to serve and be a part of something bigger than themselves. Our members are so deeply embedded in this community to make it better. Our members are coaches and police officers, fireman, EMTs, etc. The mission and these incredible aircraft bring a tent of safety and security. I've lived by the base for 28 years and never have more of a sense of safety than when they fly. Our children watch the aircraft and get excited to serve their country. Kingsley members are out doing community service, building relations, and overall making Klamath + Oregon a better place. Bringing in the F35s is going to continue the great mission and make everything continue to grow and develop in Klamath Falls. Not having 35s and stopping the mission would take jobs and money away from the community.	General Support, Socioeconomics
144	Martin	Balalas				1 squadron is awesome, but we need two! Push to attain additional aircraft soonest!	General Support
145	Joesph	Odette-Spillner				Staging a training base here is a great idea. Due to our ailing economy, this base is one of the biggest sources of employment and town revenue. Due to the potential explosive hazard of the F-35 in lightning, we should invest heavily into lightning protection, especially before next fire season.	General Support, Socioeconomics
146	William	Brow	173 FW	Klamath Falls	OR	I support this new training mission and the potential for what it offers the community: Jobs, financial support for the community. Kingsley Field is a huge supporter of the local community with its members and their involvement helps support the greater Klamath Basin.	General Support, Socioeconomics
147	Jacob	Z.		Klamath Falls	OR	Hi my name is Jacob. I think the F-35 is cool and helps our military families.	General Support
148	Corey	Lingren		Klamath Falls	OR	I believe that this F-35 mission will truly have a beneficial effect on Klamath Falls. The benefits seem to outweigh any negatives.	General Support, Socioeconomics

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149	Christopher	Memer		Klamath Falls	OR	Kingsley Field not only excels in training fighter pilots, but also serves as a cornerstone of our community, fostering economic growth and providing invaluable support. Their dedication not only strengthens our national defense, but also enriches our local area with opportunities and pride.	General Support, Socioeconomics
150	Robert	Kingzett	Retired JELD WEN Administrator			<p>Dear EIS Project Manager,</p> <p>This letter is being written with the strongest possible support for this EIS study evaluating the posting of an F-35 squadron of planes at Klamath Falls, Kingsley Field in the near future. In my 46 years in Klamath Falls, I have been blessed to work on a number of very significant projects. Some projects are truly vital and incredibly meaningful to one’s community and region and the F-35 project is at the top of that list for Klamath Falls and the basin.</p> <p>Kingsley has been a US Airforce and National Guard base in Klamath Falls (at various sizes and levels) for over 70 years. For the last 25 years our primary aircraft has been the reliable/remarkable F-15. And now if all process matters conclude successfully, F-35s would be at Kingsley in the matter of months, and this development is projected to extend the life of Kingsley by at least 30 years. In measuring the importance of Kingsley Field to the Klamath Basin, Kingsley has a direct positive economic impact of over \$100 million per year. The base has the biggest workforce in the Basin with over 1,400 men and women. With the F035 wing, Kingsley is projecting an amazing half billion dollars of spending to upgrade facilities and runway structures associated with getting the F-35 squadron and other upgrade priorities.</p> <p>I am not that familiar with how extensive and diverse the EIS considerations are for a project such as this one but will make a couple of comments. In terms of any waste, debris or negative sight images, Kingsley is meticulous about how the property is looked after and cared for. When machinery, airplanes or parts are at the end of their service life they are properly disposed of, in-other-words Kingsley has demonstrated being excellent environmental stewards.</p> <p>With the operation of jets, there is noise associated with their flight operations. The Klamath Basin is an incredibly strong supporter of the military. We love our national guard, its personnel and Kingsley Field. The noises associated with flying jets is the noise of freedom, and something we respect and support. Kingsley schedules its flying hours to respect the public and only occasionally has night flights and when people would be resting or at sleep.</p> <p>Thanks for all your efforts to conduct a thorough EIS study on this matter and we fully expect the results will be positive and we will be seeing a magnificent F-35 flying our skies later this year for decades to come.</p> <p>Respectfully submitted.</p>	General Support, Socioeconomics
151	Nicholas	Ramsey	173 FW	Klamath Falls	OR	I look forward to the F35 coming to Klamath Falls. I think it will help sustain and boost the local economy for years to come. I hate to think what would happen to the town if the F-35 didn’t come here and the F-15 aged out of service.	General Support, Socioeconomics

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Entry ID	First Name	Last Name	Organization/ Affiliation (if any)	City	State	Comment	Comment Category
152	Scott	Siracusa	Running Y Resort	Klamath Falls	OR	The F-35A mission is extremely important to the Klamath Falls Community. We value not only the economic impact but also the relationship we have with the men and women who serve. The value they bring is vital to our community. From a personal perspective, as one of the owners of the Running y Resort, we enjoy the economic impact each time a military member stays with us, we also truly value the relationships we share. The guests from Kingsley are always extremely respectful of our staff and guests alike. From my business partner, Bill Lynch, and I, our staff, and our community we fully support this mission.	General Support, Socioeconomics
153	Tom	Howars	Kingsley Field ANG			I feel this is a great opportunity for Klamath Falls to grow in the right direction. This will bring more growth with employment throughout the community. From Kingsley field to restaurants, construction, medical, the list goes on. I think as a community this is a chance that we can't afford to pass up. Thank you.	General Support, Socioeconomics
154	Lucas	Zoll	173 FW	Klamath Falls	OR	The opportunity for Kingsley Field to accept a new airframe is instrumental for Klamath Falls. Continuing the mission at Kingsley Field allows the community to have job availability, income, and community support. The best thing that could happen for Kingsley and Klamath is for the EIS to move faster than scheduled. The vast majority of the community love the base and love what we do, training fighter pilots. I believe that Klamath County will need more resources to complete this project but with neighboring larger counties, I don't see this being an issue. The 173 FW has great leaders motivated to continue our mission and I hope the community and the Air Force support us as we make this conversion.	General Support, Socioeconomics
155	Kent	Pom Padilla	Legacy Furniture/ Bedroom Gallery			We fully support the vital mission that 173 brings to the community. As the community grows, we think its important for the base mission to grow as well. Basing F-35A Lightening 2 formal training unit as Kingsley Field will be good for the community and good for the air force.	General Support, Socioeconomics
156	Mike	Shirar	Kingsley Field	Klamath Falls	OR	I fully support the 173 FW conversion to the F-35. I believe the community benefits greatly from its longstanding relationship with the base and I feel that this conversion will help continue to the mutual benefit of all parties. The basin fully supports Kingsley Field and will continue to benefit from the jobs, revenue, and economic benefit from this association. I have zero concerns or reservations regarding the environmental impact or any change in the eco-footprint which already exists.	General Support, Socioeconomics

Note: Blank cell indicates no information was provided in the comment.

Legend: cont = continued

**APPENDIX D SPECIES OF CONCERN AT KINGSLEY FIELD
AND UNDER THE ASSOCIATED AIRSPACE**

Table D-1 Federal and State Listed Species Potentially Occurring on Kingsley Field ANGB and Under the Military Training Airspace

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status</i>	<i>Potential Occurrence on Kingsley Field ANGB</i>	<i>Potential Occurrence Under the Airspace*</i>
Birds				
Western snowy plover	<i>Charadrius nivosus</i>	ST, T	-	P
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	T	P	P
Northern spotted owl	<i>Strix occidentalis caurina</i>	ST, T	-	P
Hawaiian petrel	<i>Pterodroma sandwichensis</i>	E	-	P
Marbled murrelet	<i>Brachyramphus marmoratus</i>	SE, T	-	P
Short-tailed albatross	<i>Phoebastria albatrus</i>	SE, E	-	P
Fish				
Shortnose sucker	<i>Chasmistes brevirostris</i>	SE, E	P	P
Lost River sucker	<i>Deltistes luxatus</i>	SE, E	P	P
Bull trout	<i>Salvelinus confluentus</i>	T	-	P
Hutton Tui chub	<i>Gila bicolor</i> ssp.	ST, T	-	P
Tidewater goby	<i>Eucyclogobius newberryi</i>	E	-	P
Warner sucker	<i>Catostomus warnerensis</i>	ST, T	-	P
Desert dace	<i>Eremichthys across</i>	T	-	P
Lahontan cutthroat trout	<i>Oncorhynchus clarkia henshawi</i>	ST, T	-	P
Reptiles				
Leatherback sea turtle	<i>Dermochelys coriacea</i>	SE, E	-	P
Loggerhead sea turtle	<i>Caretta caretta</i>	ST, E	-	P
Northwestern pond turtle	<i>Actinemys marmorata</i>	PT	-	P
Olive ridley sea turtle	<i>Lepidochelys olivacea</i>	ST, T	-	P
Mammals				
Gray wolf	<i>Canis lupus</i>	E	P	P
North American wolverine	<i>Gulo gulo luscus</i>	ST, T	P	P
Pacific marten (Coastal Distinct Population Segment)	<i>Martes caurina</i>	T	-	P
Snails				
Bruneau hot springsnail	<i>Pyrgulopsis bruneauensis</i>	E	-	P
Insects				
Monarch butterfly	<i>Danaus plexippus</i>	C	P	P
Franklin's bumble bee	<i>Bombus franklini</i>	E	-	P
Oregon silverspot butterfly	<i>Speyeria zerene hippolyta</i>	T	-	P
Crustaceans				
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	E	-	P

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Common Name	Scientific Name	Status	Potential Occurrence on Kingsley Field ANGB	Potential Occurrence Under the Airspace*
Shasta crayfish	<i>Pacifastacus fortis</i>	E	-	P
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	-	P
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E	-	P
Plants				
Applegate’s milk-vetch	<i>Astragalus applegatei</i>	SE, E	O	
Whitebark pine	<i>Pinus albicaulis</i>	ST, T	-	P
Cook’s lomatium	<i>Lomatium cookii</i>	SE, E	-	P
Gentner’s fritillary	<i>Fritillaria gentneri</i>	SE, E	-	P
Greene’s tuctoria	<i>Tuctoria greenei</i>	E	-	P
Kincaid’s lupine	<i>Lupinus sulphureus</i> ssp. <i>kincaidii</i>	ST, T	-	P
Lassics lupine	<i>Lupinus constancei</i>	E	-	P
McDonald’s rock-cress	<i>Arabis macdonaldiana</i>	SE, E	-	P
Slender Orcutt grass	<i>Orcuttia tenuis</i>	T	-	P
Slickspot peppergrass	<i>Lepidium papilliferum</i>	T	-	P
Western lily	<i>Lilium occidentale</i>	SE, E	-	P

Legend: ANGB = Air National Guard Base; E = Federally Endangered; T = Federally Threatened; C = Federal Candidate; PT = Proposed Federally Threatened; SE = State Endangered; ST = State Threatened; NA = Not applicable as plant and insect species under the airspace are not being analyzed; O = Observed; P=Potential.

Source: NGB 2023, 2024; ODFW 2024; Oregon Department of Agriculture 2024; USFWS 2024a, 2024b.

Table D-2 Potentially Occurring Migratory Birds of Conservation Concern at Kingsley Field ANGB and Under the Military Training Airspace

<i>Common Name</i>	<i>Scientific Name</i>	<i>Potential Occurrence on the Installation</i>	<i>Potential Occurrence Under the Airspace</i>	<i>Seasonal Occurrence</i>
Allen’s hummingbird	<i>Selasphorus sasin</i>	-	P	Breeding
American avocet	<i>Recurvirostra americana</i>	P	P	Breeding
American white pelican	<i>Pelecanus erythrorhynchos</i>	P	P	Breeding
Ancient murrelet	<i>Synthliboramphus antiquus</i>	-	P	Year-round
Ashy storm-petrel	<i>Hydrobates homochroa</i>	-	P	Year-round
Bald eagle	<i>Haliaeetus leucocephalus</i>	P	P	Year-round
Black oystercatcher	<i>Haematopus bachmani</i>	-	P	Year-round
Black scoter	<i>Melanitta nigra</i>	-	P	Year-round
Black swift	<i>Cypseloides niger</i>	-	P	Breeding
Black tern	<i>Chlidonias niger surinamensis</i>	P	P	Breeding
Black turnstone	<i>Arenaria melanocephala</i>	-	P	Year-round
Black-footed albatross	<i>Phoebastria nigripes</i>	-	P	Year-round
Black-legged kittiwake	<i>Rissa tridactyla</i>	-	P	Non-breeding
Black-vented Shearwater	<i>Puffinus opisthomelas</i>	-	P	Year-round
Bobolink	<i>Dolichonyx oryzivorus</i>	-	P	Breeding
Brandt’s cormorant	<i>Urile penicillatus</i>	-	P	Year-round
Broad-tailed hummingbird	<i>Selasphorus platycercus</i>	-	P	Breeding
Brown pelican	<i>Pelicanus occidentalis</i>	-	P	Year-round
Buller’s shearwater	<i>Ardenna bulleri</i>	-	P	Year-round
California gull	<i>Larus californicus</i>	P	P	Year-round
Calliope Hummingbird	<i>Selasphorus calliope</i>	-	P	Breeding
Cassin’s auklet	<i>Ptychoramphus aleuticus</i>	-	P	Year-round
Cassin’s finch	<i>Haemorhous cassinii</i>	-	P	Year-round
Chestnut-backed chickadee	<i>Poecile rufescens rufescens</i>	-	P	Year-round
Clark’s grebe	<i>Aechmophorus clarkii</i>	P	P	Year-round
Common eider	<i>Somateria mollissima</i>	-	P	Non-breeding
Common loon	<i>Gavia immer</i>	-	P	Year-round
Common murre	<i>Uria aalge</i>	-	P	Year-round
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	-	P	Year-round
Evening grosbeak	<i>Coccothraustes vespertinus</i>	-	P	Year-round
Flammulated owl	<i>Psilosops flammeolus</i>	-	P	Breeding
Forster’s tern	<i>Sterna forsteri</i>	P	P	Breeding
Franklin’s gull	<i>Leucophaeus pipixcan</i>	P	P	Breeding
Golden eagle	<i>Aquila chrysaetos</i>	P	P	Year-round
Great shearwater	<i>Puffinus gravis</i>	-	P	Non-breeding
Laysan albatross	<i>Phoebastria immutabilis</i>	-	P	Year-round

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Common Name	Scientific Name	Potential Occurrence on the Installation	Potential Occurrence Under the Airspace	Seasonal Occurrence
Lesser yellowlegs	<i>Tringa flavipes</i>	P	P	Migration
Lewis’s woodpecker	<i>Melanerpes lewis</i>	P	P	Year-round
Long-eared owl	<i>Asio otus</i>	-	P	Year-round
Long-tailed duck	<i>Clangula hyemalis</i>	-	P	Year-round
Manx shearwater	<i>Puffinus puffinus</i>	-	P	Year-round
Marbled godwit	<i>Limosa fedoa</i>	-	P	Year-round
Mountain plover	<i>Charadrius montanus</i>	-	P	Non-breeding
Murphy’s petrel	<i>Pterodroma ultima</i>	-	P	Non-breeding
Northern harrier	<i>Circus hudsonius</i>	P	P	Year-round
Oak titmouse	<i>Baeolophus inornatus</i>	-	P	Year-round
Olive-sided flycatcher	<i>Contopus cooperi</i>	P	P	Breeding
Oregon vesper sparrow	<i>Pooecetes gramineus affinis</i>	-	P	Breeding
Pectoral sandpiper	<i>Calidris melanotos</i>	P	P	Migration
Pink-footed shearwater	<i>Ardenna creatopus</i>	-	P	Migration
Pinyon jay	<i>Gymnorhinus cyanocephalus</i>	-	P	Year-round
Pomarine jaeger	<i>Stercorarius pomarinus</i>	-	P	Year-round
Red knot	<i>Calidris canutus roselaari</i>	-	P	Year-round
Red phalarope	<i>Phalaropus fulicarius</i>	-	P	Year-round
Red-breasted merganser	<i>Mergus serrator</i>	-	P	Year-round
Red-necked phalarope	<i>Phalaropus lobatus</i>	-	P	Migration
Red-throated loon	<i>Gavia stellata</i>	-	P	Year-round
Ring-billed gull	<i>Larus delawarensis</i>	-	P	Year-round
Rufous hummingbird	<i>Selasphorus rufus</i>	-	P	Breeding
Sage thrasher	<i>Oreoscoptes montanus</i>	P	P	Breeding
Scripps’s murrelet	<i>Synthliboramphus scrippsi</i>	-	P	Year-round
Short-billed dowitcher	<i>Limnodromus griseus</i>	-	P	Year-round
Sooty shearwater	<i>Ardenna grisea</i>	-	P	Year-round
South Polar skua	<i>Stercorarius maccormicki</i>	-	P	Year-round
Surf scoter	<i>Melanitta perspicillata</i>	-	P	Year-round
Thick-billed longspur	<i>Phynchophanes mccownii</i>	-	P	Year-round
Tufted puffin	<i>Fratercula cirrhata</i>	-	P	Breeding
Virginia’s warbler	<i>Leiothlypis virginiae</i>	-	P	Breeding
Western grebe	<i>Aechmophorus occidentalis</i>	P	P	Year-round
Western gull	<i>Larus occidentalis</i>	-	P	Year-round
Western screech-owl	<i>Megascops kennicottii cardonensis</i>	-	P	Year-round
White-winged scoter	<i>Melanitta fusca</i>	-	P	Year-round
Willet	<i>Tringa semipalmata</i>	P	P	Breeding
Williamson’s sapsucker	<i>Sphyrapicus thyroideus nataliae</i>	-	P	Year-round
Wrentit	<i>Chamaea fasciata</i>	-	P	Year-round

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<i>Common Name</i>	<i>Scientific Name</i>	<i>Potential Occurrence on the Installation</i>	<i>Potential Occurrence Under the Airspace</i>	<i>Seasonal Occurrence</i>
Yellow rail	<i>Coturnicops noveboracensis</i>	-	P	Breeding

Legend: ANGB = Air National Guard Base; P= Potential.

Sources: Cornell University 2024; NGB 2023, 2024; USFWS 2024a, 2024b

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APPENDIX E LIST OF PREPARERS

***Environmental Impact Statement for Basing F-35A Lightning II Formal Training Unit
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<i>Name/Organization</i>	<i>Experience</i>	<i>Years of Experience</i>
Alyssa Andrews Stantec GS	B.S., Environmental Studies, 2023	1
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Katie Briscoe (RPA) Stantec GS	M.S., Historic Preservation, 2012 M.A., Archaeology, 2010 B.A., History, 2008	5
Raul Castillo Stantec GS	M.S., Urban Planning, 2019 B.S., Business Administration, 2016	6
Christine Chaplin (GISP) Stantec GS	B.S., Natural Resources and Environmental Management, 2005	17
Scott Coombs Stantec GS	M.S., Marine Sciences, 2006 B.S., Hydrological/Geological Sciences, 1997	25
Chris Davis (AICP, PMP) Stantec GS	M.S., Environmental Management, 2000 B.S., Environmental Studies, 1998	26
Carolyn Dunmire Stantec GS	M.S., Engineering Economic Systems, 1989 B.S., Chemical Engineering, 1983	35
Lesley Hamilton Stantec GS	B.A., Chemistry, 1988	34
Yuri Innis Stantec GS	M.S., Aeronautics, 2014 B.S., Professional Aeronautics, 2009	24
Patrick Kester Stantec GS	B.S., Mechanical Engineering, 2006	13
Leah McCormick (AICP) Stantec GS	M.S., Environmental Science and Management, 2017 B.S., Environmental Systems and Earth Sciences, 2014	10
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Geoff Olander Stantec GS	B.S., Mechanical Engineering, 1990	32
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Ashley Thompson Stantec GS	B.S., Environmental Science, 2023	1
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