DRAFT
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

ENVIRONMENTAL ASSESSMENT FOR BASING F-15EX EAGLE II FIRST OPERATIONAL COMBAT SQUADRON AT PORTLAND AIR NATIONAL GUARD INSTALLATION, PORTLAND, OREGON

The Department of the Air Force (DAF) proposes to base one squadron of F-15EX "Eagle II" aircraft (hereafter referred to as F-15EX) at Portland Air National Guard (ANG) installation in Portland, Oregon. The squadron would consist of either 20 (18 Primary Aerospace Vehicles Authorized [PAA] and 2 Backup Aerospace Vehicles Authorized [BAA]) or 24 (21 PAA, 2 BAA, and 1 Attrition Reserve) F-15EX aircraft that would replace the existing 20 F-15C aircraft currently based at Portland ANG installation. PAA is the number of aircraft authorized to a unit in order to perform its operational mission, while BAA and Attrition Reserve are the aircraft that would be used only if one of the PAA aircraft is out of commission.

The National Guard Bureau (NGB) is the lead agency for the Proposed Action and is responsible for the scope and content of the Draft Environmental Assessment (EA). The Federal Aviation Administration (FAA) is serving as a cooperating agency for this EA pursuant to 40 Code of Federal Regulations (CFR) § 1501.8. The FAA has jurisdiction by law and special expertise relating to the NGB F-15EX basing proposal at Portland International Airport (PDX) where the ANG is a tenant. FAA's authorities and special expertise is based on its statutory responsibilities under the Airport and Airway Improvement Act of 1982 (49 United States Code [USC] § 47101) and Section 163 of the 2018 FAA Reauthorization Act 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 United States (U.S.), with due consideration for economics, the environment, local proprietary 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's Office of Airports is the lead within the FAA for the development of this EA and coordinated internally to address all resources of concern under the FAA's jurisdiction to ensure that the environmental review under the National Environmental Policy Act (NEPA) and other regulatory processes are efficient and completed in a timely manner.

PURPOSE: The purpose of the Proposed Action is to maintain combat capability and mission readiness efficiently and effectively in the full spectrum of DAF aircraft as the ANG faces deployments for conflicts abroad, while also providing for homeland defense. The need is to replace an aging fighter attack aircraft inventory and aging infrastructure.

The F-15C fleet is reaching the end of its service life. The DAF determines the service life of a fleet based on capability and structural integrity of the aircraft constrained by economic reality. Theoretically, with unlimited funding, it would be possible to fly an aircraft forever, but eventually it is more cost and capability effective to replace older aircraft with newer aircraft. The DAF has decided it is not economically feasible to retain the F-15C aircraft beyond fiscal year (FY) 2026 and has already begun to retire aircraft that are reaching the end of their service life.

PROPOSED ACTION: Three alternatives are considered in the EA:

Alternative 1. Alternative 1 would entail the full replacement of the F-15C aircraft with one squadron of F-15EX aircraft, to include 20 aircraft (18 PAA and 2 BAA) and associated personnel, including the specifically itemized construction and structural improvement projects necessary to facilitate the multi-role (air-to-air and air-to-ground) mission conversion requirements efficiently and effectively. Backup aircraft such as BAA are assigned to allow for the execution of normally forecast assigned mission activities during scheduled and unscheduled depot level maintenance on PAA.

Alternative 1 would result in an increase of approximately 110 personnel (including a mix of officers and enlisted personnel) due to the requirement for a second aircrew member (i.e., Combat Systems Officer [CSO]) for the added air-to-ground mission. The allocation and use of defensive countermeasures is not expected to change from the current usage with the F-15EX. They would be used for Aerospace Control Alert (ACA) missions and would also be used in training. The unit would continue to receive the same allocation of chaff and flares that they currently receive. They would be used at the same rates in the same places, subject to the same restrictions that exist now. Total annual operations at PDX or within the associated airspace would be slightly higher than existing conditions/No Action Alternative, with 446 more annual operations, which equals a 9 percent increase from existing conditions/No Action Alternative.

Renovation, demolition, and new construction of multiple facilities would be required under Alternative 1. Proposed numbers of aircraft and personnel were used to define facility requirements, which were estimated using planning factors. Table 2.1-1 of the EA details the proposed construction projects requiring interior renovations only and Table 2.1-2 of the EA lists the proposed demolition and new construction projects for the Proposed Action. Construction projects were assumed to begin in the years listed in the tables and be complete within the same year (e.g., if a project is planned for 2025, the construction is assumed to occur between January and December 2025), even though some projects would last longer than 12 months. Under Alternative 1, new construction would result in up to 182,044 square feet (SF) of new facilities, and up to 214,802 SF of new impervious surface. The total construction footprint analyzed represents the largest possible footprint of each of the options.

Alternative 2. Alternative 2 would be the same as described for Alternative 1 with the primary difference being the replacement squadron of F-15EX would include a total of 24 aircraft (21 PAA, 2 BAA, and 1 Attrition Reserve). This is four more aircraft total than Alternative 1 – three PAA and one Attrition Reserve. Attrition Reserve is an additional category of backup aircraft that are planned to be provided as new production aircraft are available above PAA and BAA requirements. The additional aircraft would also result in an increase of 1,328 annual operations at PDX or within the associated airspace, which equals a 27 percent increase relative to existing conditions/No Action Alternative, and 17 percent more than Alternative 1. The renovation and construction/demolition projects are the same as those that would be implemented for Alternative 1.

Alternative 3. Alternative 3 would include the existing F-15C flying mission remaining in place at the Portland ANG installation until the projected end of the airframe mission or future required mission change proposals are presented. Under Alternative 3, no additional personnel would be added. Any previously planned construction and repair projects required for current mission sustainment would be implemented resulting in up to 40,504 SF of new facilities, and up to 19,904 SF of new impervious surface.

NO ACTION ALTERNATIVE: The Council on Environmental Quality (CEQ) regulation 40 CFR § 1502.14(d) specifically requires analysis of the "No Action" alternative in all NEPA documents. Under the No Action Alternative, no F-15EX operational aircraft would be based at the Portland ANG installation, no personnel changes or construction (even construction for the F-15C aircraft) would be performed, and no training activities by the F-15EX operational aircraft would be conducted in the airspace. Under the No Action Alternative, the NGB would continue to conduct their current mission using existing, legacy aircraft with multiple configurations and existing infrastructure.

SUMMARY OF FINDINGS:

Noise. Noise levels modeled and evaluated represent the combination of military and civilian aircraft with military aircraft accounting for between 2 and 3 percent of total aircraft operations at PDX. The current civil operations were temporarily depressed due to COVID-19, so existing conditions were based upon a pre-COVID 3-year average that operations are estimated to return to. Because this existing condition projects civil operations to 2025 through 2030 and military operations would remain relatively constant during that period, the No Action condition coinciding with the implementation timeline proposed for the action alternatives is the same as the existing conditions. Therefore, comparison of the action alternatives to either existing conditions or the No Action Alternative is the same.

The results of the noise analysis found that the F-15EX climbs quicker on departure than the F-15C, resulting in lower maximum sound level (L_{max}) and lower Sound Exposure Level (SEL) noise that would be experienced at ground level along portions of departure flight tracks. The noise levels that would occur due to Alternative 1, 2, or 3 would remain well below the threshold at which land use restrictions for noise sensitive uses begins (65 decibels [dB] Day-Night Average Sound Level [DNL]/Onset-Rate Adjusted Day-Night Average Sound Level [L_{dnmr}]) for aircraft operations and no noise sensitive locations would be subjected to significant increases in noise. Therefore, implementation of the action alternatives would not be expected to result in significant long-term noise impacts under either the Department of Defense (DoD) or FAA criteria.

Airspace. No new airspace or reconfigurations are proposed to support the F-15EX. The F-15EX is a model upgrade to the already existing F-15C airframe and would operate within the existing Special Use Airspace (SUA). There would be an increase from the current seven F-15C sorties to an average of eight (Alternative 1) or nine (Alternative 2) F-15EX sorties per day that would utilize the existing SUA. The small addition of aircraft sorties would not result in significant impacts to the National Airspace System and/or SUA. There would be no change to the number of sorties under Alternative 3, as the existing F-15C aircraft would remain and continue flying the allotted sorties while utilizing existing airspace under their current mission. Therefore, no significant airspace impacts would occur with implementation of the action alternatives.

Air Quality. The net change in emissions of criteria pollutants under Alternatives 1, 2, or 3 would be well below the 250 tons per year comparative threshold for the criteria pollutants, for all years of activity. Even though there is an increase in total operations in the airspace under Alternative 1 (9 percent) and Alternative 2 (27 percent), the amount of time spent flying below the mixing height is anticipated to decrease slightly overall, and the emissions from the F-15EX operations in the airspace are also anticipated to be less than baseline emissions from the F-15C. Therefore, the action alternatives would not be expected to result in a significant impact on air quality.

Water Resources. In compliance with Energy Independence and Security Act Section 438, construction projects offset new impervious surface areas with stormwater management options (including Low Impact Development) that retain stormwater on the installation thereby reducing runoff and preserving groundwater hydrologic processes. Under Alternatives 1 and 2, there would be an additional 110 personnel stationed at the Portland ANG installation but this would not be expected to impact the regional groundwater demand. There would be no additional personnel under Alternative 3. Additionally, none of the action alternatives would have projects located within the 100-year floodplain and all projects would be located in areas with reduced flood risk due to the levee system of the Columbia Slough. Therefore, implementation of the action alternatives would not result in significant impacts to water resources.

Geological Resources. Ground-disturbing activities associated with the proposed projects under all action alternatives would be localized and would not have impacts on sensitive or regionally significant geologic or physiographic features. The proposed projects would be consistent with Unified Facilities Criteria 3-310-04 and all relevant construction and erosion control best management practices (BMPs) would be implemented. Therefore, impacts to geological resources (including geology, topography, soils, and farmland) under the action alternatives would not be significant.

Cultural Resources. Under the action alternatives no impacts on archaeological resources, traditional cultural properties, or architectural resources are anticipated. Under Alternatives 1 and 2, three buildings: Building 240 (Warehouse built in 1967), Building 275 (Munitions loading crew training built in 1968), and Building 491 (Recreation Center built in 1965) have reached 50 years of age since the last architectural evaluation at the installation and require evaluation for eligibility under standard National Register of Historic Places (NRHP) criteria. The NGB is coordinating with the Oregon State Historic Preservation Office (SHPO) to evaluate the eligibility of these buildings, and required mitigation if any building is determined eligible, prior to any planned demolition of these structures. This would include the development of a Memorandum of Agreement between the 142nd Wing (142 WG), NGB, the Advisory Council on Historic Preservation, the SHPO, Tribal Nations, and other consulting parties. Impacts to architectural resources under Alternative 3 would be similar to that under Alternatives 1 and 2 with some exceptions: no additions are proposed to Buildings 210 and 400, and no demolition is proposed for Buildings 160, 255, 265, and 275.

It is not expected that undiscovered archaeological resources would be found during implementation of any action alternative at the Portland ANG installation. However, due to the location of the installation near the Columbia River and the use of fill from the Columbia River, there is a high probability of subsurface archaeological resources; therefore, an archaeological monitor will be onsite during all ground-disturbing activities. If an unanticipated discovery of cultural artifacts occurs or the discovery of unmarked burial(s), including Native American burials or cemeteries from which headstones were relocated but not the physical remains, the activity in the immediate vicinity will cease until an assessment of the materials can be made. The unit commander/supervisor will be notified immediately so the Environmental Manager can be contacted. Protocols found in Standard Operating Procedure No. 6, *Inadvertent Discovery of Cultural Materials* and Standard Operating Procedure No. 7, *Inadvertent Discovery of Unmarked Burials* within the Integrated Cultural Resources Management Plan will be followed.

Under Alternatives 1 and 2, the noise level at the airfield would increase slightly (approximately 1 to 2 dB DNL). Despite the slight increase in noise levels, there would be no adverse effects to NRHP-eligible or -listed archaeological resources, architectural resources, or traditional cultural properties. Based on noise level calculations for lands beneath the SUA, there would be no adverse

effect to cultural resources, historic structures, or traditional cultural properties as a result of the implementation of the action alternatives. The NGB is consulting with the Oregon SHPO on its finding of effects for the action alternatives.

Safety. Implementation of Alternatives 1 and 2 would not be expected to significantly increase the risk associated with Runway Protection Zones, Explosive Safety, Anti-terrorism/Force Protection (AT/FP), Flight Safety, Aircraft Mishaps, Bird/Wildlife Aircraft Strike Hazards, or Mid-Air Collision Avoidance. Additionally, AT/FP would be improved under the action alternatives with implementation of proposed construction projects when compared to existing conditions/No Action Alternative. Current and historical use of chaff and flares during 142 WG training within SUA associated with the Portland ANG installation has not resulted in direct or indirect impacts to health and safety. Under Alternative 3, existing F-15C aircraft would remain and continue flying operations to meet mission requirements. Therefore, no significant impacts to safety would occur.

Hazardous Materials and Wastes. The net increase in construction would produce minor increases in handling, storage, use, and transportation of hazardous materials. The types of hazardous materials needed for maintenance and operation of the F-15EX would be similar to those currently used for maintenance and operation of the F-15C fleet. Under Alternatives 1 and 2, the total number of airfield operations would increase; therefore, throughput of hazardous waste streams would be expected to increase slightly. However, as the new F-15EX aircraft would require less unscheduled maintenance than the aging F-15C they are replacing, this would likely offset the minor increase in hazardous waste generation from increased operations over time. In addition, by following applicable federal and state agency procedures, impacts to Environmental Restoration Program (ERP) Sites 3, 8, and 13; the firing range; areas of concern/potential release locations; and potential historical underground storage tanks would be less than significant under the action alternatives. Therefore, no significant impacts to hazardous materials, hazardous waste, toxic substances, or ERP sites would occur.

Biological Resources. The entirety of the proposed footprint would be constructed in an already urbanized area and would not cause increased effects to wildlife, special status species, vegetation, or wetlands. The minor changes in operational noise under Alternatives 1 and 2 are not expected to impact terrestrial species in the area because species are likely accustomed to elevated noise levels associated with aircraft and military operations. No occurrences of federally listed species are known on the installation. Therefore, implementation of Alternatives 1, 2, and 3 would have no effect on federally listed species. Additionally, with adherence to avoidance and minimization measures, impacts to bald and golden eagles would be less than significant and would not rise to the level of "take" under the Bald and Golden Eagle Protection Act. Therefore, no significant impacts to biological resources would occur.

Socioeconomics and Environmental Justice. Under Alternatives 1, 2, and 3, construction spending would be a minor beneficial impact on economic activity, employment, and wages. There would be no disproportionately high and adverse health or environmental effects on minority and low-income populations or impacts to children during construction or operations under the action alternatives.

Land Use. Under Alternatives 1, 2, and 3, land uses would be consistent with current functions on the installation and the airport and all facilities would be designed and sited to be compatible with existing land uses and safety guidelines. Overall, Alternative 1 would result in a reduction of the off-airport area affected by noise levels greater than 65 dB DNL by approximately 745 acres, Alternative 2 would result in a reduction of 649 acres, and there would be no change under Alternative 3. Therefore, no significant operational impacts to land use compatibility would occur with implementation of the action alternatives.

Department of Transportation, Section 4(f). Construction would not directly impact any Section 4(f) properties under any of the action alternatives. No physical use or temporary occupancy of a 4(f) property for project construction-related activities would occur. Under operations of Alternatives 1 and 2, Broughton Beach and the M. James Gleason Memorial Boat Ramp would experience a minor increase in acres under the 70 to 75 dB DNL when compared to existing conditions/No Action Alternative. The Marine Drive Trail, which runs along the edge of the Columbia River just north of the PDX boundary, would experience a slight reduction in miles under the 70 to 75 dB DNL and 75 to 80 dB DNL, and a slight increase (0.1 mile) under the 80 to 85 dB DNL under Alternatives 1 and 2. Additionally, under Alternative 1, the Columbia Slough Trail would experience a slight reduction in the miles under 70 to 75 dB DNL. However, given that the existing acoustic environment is an airport environment (lack of a quiet setting), and direct airplane noise would be intermittent, constructive use of these Section 4(f) resources would not be of such magnitude as to effectively act as a permanent incorporation or to substantially impair these resources. Land use within the Section 4(f) resources remains compatible with the action alternatives noise exposure levels, no significant operational impacts to Section 4(f) resources would occur with implementation of the action alternatives.

PUBLIC INVOLVEMENT: NEPA, 40 CFR 1500-1508, and 32 CFR 989 require public review of the Environmental Assessment (EA) before approval of the Finding of No Significant Impact (FONSI) and implementation of the Proposed Action. A newspaper advertisement of the Draft EA and FONSI will be published in the *Oregonian* newspaper inviting the public to review and comment on the Draft EA. The public and agency review period will end on March 5, 2024. Public and agency comments will be addressed in the Final EA.

FINDING OF NO SIGNIFICANT IMPACT: Based on my review of the facts and analysis in this EA, I conclude that the Preferred Alternative will not have a significant impact on the quality

of the human or natural environment or generate significant controversy either by itself or considering cumulative impacts. Accordingly, the requirements of NEPA, the CEQ, and 32 CFR 989 et seq. have been fulfilled, and an Environmental Impact Statement is not necessary and will not be prepared.

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