

**BEDDOWN OF A FOREIGN MILITARY SALES (FMS)
PILOT TRAINING CENTER (PTC)
AT
EBBING AIR NATIONAL GUARD BASE, ARKANSAS
OR SELFRIDGE AIR NATIONAL GUARD BASE,
MICHIGAN**

**DRAFT
ENVIRONMENTAL IMPACT STATEMENT
SUMMARY**

AUGUST 2022



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SUMMARY

S.1. INTRODUCTION

The Department of the Air Force (DAF) Proposed Action, described in detail in Chapter 2, *Description of the Proposed Action and Alternatives*, is to establish a permanent Foreign Military Sales (FMS) Pilot Training Center (PTC) at a single location within the Continental United States (CONUS). The DAF's Proposed Action would involve consolidation of F-35 FMS training activities and the Republic of Singapore Air Force (RSAF) F-16 aircraft operations at a single location, construction of new or renovation of existing infrastructure to support FMS training and RSAF operations, and the integration of up to 24 FMS F-35 aircraft and 12 RSAF F-16 aircraft relocated from Luke Air Force Base (AFB), Arizona. Alternatives for implementing the DAF's Proposed Action consist of Ebbing Air National Guard (ANG) Base, Arkansas (the Preferred Alternative) and Selfridge ANG Base, Michigan (Alternative 2).

The DAF is the lead agency for the DAF's Proposed Action and is responsible for the scope and content of this Environmental Impact Statement (EIS). The Federal Aviation Administration (FAA) is serving as a Cooperating Agency because the scope of the DAF's Proposed Action involves activities under their jurisdiction by law and for which they have special expertise.

S.2. PURPOSE AND NEED

The purpose of the DAF's Proposed Action is to establish a permanent FMS PTC by initially providing beddown of up to 36 total aircraft at a single location within the CONUS. The need for the DAF's Proposed Action is to provide a centralized location for FMS training and pilot production. Multiple nations have agreements with the DAF to purchase F-35 aircraft; this drives the need for a location suitable for initial F-35 training before returning to their home country. The RSAF is among the nations purchasing F-35s and plans to base a number of their aircraft in the United States for an indefinite period; the RSAF also desires to consolidate its pilot training. This drives the need for relocation of 12 F-16s from Luke AFB, Arizona, to the FMS PTC location.

Because the DAF's Preferred Alternative includes construction of infrastructure necessary to support the FMS PTC beddown within the Fort Smith Regional Airport (FSRA)¹ boundary, the City of Fort Smith (the Airport Sponsor) would need to submit a request to FAA's Office of Airports for approval of changes to their Airport Layout Plan. Therefore, the purpose of FAA's Office of Airports action is to evaluate the City of Fort Smith request to change the Airport Layout Plan. The need for FAA's Office of Airports action is to consider the impacts of the DAF's proposed construction of the aircraft barrier arresting kits at FSRA and to meet its statutory obligations under 49 United States Code (U.S.C.) § 47101.

¹ The official location ID for Fort Smith Regional Airport is "FSM." However, to avoid confusion between the acronyms for the DAF's Proposed Action, "FMS PTC," and the location ID for Fort Smith Regional Airport, "FSRA" is used throughout this EIS when referring to the airport.

1 S.3. OVERVIEW OF PROPOSED ACTION AND ALTERNATIVES

2 The FMS PTC would accommodate up to 36 total aircraft (12 F-16 and 24 F-35 aircraft), utilizing
 3 existing facilities to the maximum extent practicable to meet FMS requirements. Two F-35
 4 simulator training facilities would be constructed. The F-16 aircraft are anticipated to arrive in
 5 calendar year (CY) 2023. The first F-35 aircraft are anticipated to arrive in CY 2024. The FMS
 6 PTC would host various countries; in the near term, these countries include Poland and Finland.
 7 Additional foreign sales are ongoing. Aircraft increases above 24 F-35s may require further
 8 analysis and a supplemental EIS. The actual number of F-35s present at the FMS PTC at any one
 9 time may vary based on customer need. However, the maximum number of F-35s located at
 10 the FMS PTC is not expected to exceed 24, with the program of record of 36 total aircraft
 11 expected to be met by CY 2029, which is based on the current anticipated schedule with dates
 12 possibly subject to change.

13 Facility construction and upgrades would include the modification and renovation of several
 14 buildings, construction of F-35 simulator training facilities and new sunshades, and construction
 15 of two BAK-12 aircraft barrier arresting kits. All flight operations would take place within
 16 existing airspace. No additions to or alterations of airspace are associated with this Proposed
 17 Action. The DAF has selected Ebbing ANG Base as the preferred alternative because Ebbing
 18 ANG Base previously accommodated F-16 aircraft and can accommodate the DAF’s Proposed
 19 Action with minimal renovation, new construction, and displacement of current mission(s) to
 20 meet critical F-16 and F-35 timing. Additionally, existing airspace provides superior capacity
 21 compared to that available for Selfridge ANG Base.

22 S.3.1 Preferred Alternative (Ebbing ANG Base)

23 The 188th Wing (188 WG) of the Arkansas Air National Guard (ARANG) is a tenant at FSRA in
 24 Fort Smith, Arkansas, located in Sebastian County. The 188 WG occupies approximately
 25 140 acres of land leased from FSRA. Approximately 20 acres of this leased land are on the
 26 southeastern side of FSRA and are separate from the 120-acre main installation. The 188 WG’s
 27 current mission is to support domestic training and contingency operations for the MQ-9
 28 Reaper remotely piloted aircraft (the “Reaper”).

29 S.3.1.1 Aircraft Operations

30 **Table S-1** provides a summary of aircraft operations for Ebbing ANG Base and FSRA airfield.

31 **Table S-1. Current and Proposed Aircraft Operations at Fort Smith Regional Airport,**
 32 **Arkansas (a)**

Aircraft Operation Type	Current (2019)	No Action (2029)		Proposed (2029)	
		Ops	% Change Over Current	Ops	% Change Over No Action
Civilian Aircraft	26,545	28,321	6.69%	28,321	0%
Transient Military Aircraft	7,921	9,006	13.70%	9,006	0%
Blue Air Aircraft	0	948	100.00%	948	0%
Proposed FMS/RSAF F-35	0	0	0%	14,004	100%
Proposed RSAF F-16	0	0	0%	11,700	100%
Total Aircraft Operations	34,466	38,275	11.05%	63,979	67.16%

Source: (AETC, 2021–2022)

Key: % = percent; EA = Environmental Assessment; FMS = Foreign Military Sales; Ops = operations; RSAF = Republic of Singapore Air Force

Note: a. Current data from Final Runway Extension EA Appendix D Table 2 (Garver, 2022)

1 No new airspace or airspace adjustments would be required under the Preferred Alternative.
2 There are several available airspace areas within the required distance for both the F-16 and
3 F-35 missions. The primary airspace that would be used is Hog Military Operations Area (MOA)²
4 and Shirley MOA. To enhance missions in Hog and Shirley MOAs, a corridor called the “Pig
5 Path” between the two airspaces may be requested by the 188 WG 24 hours prior to use and
6 would be authorized by Air Traffic Control. Military Training Routes³ (MTRs) that would be
7 utilized for flight training consist of Visual Routes⁴ (VR) routes VR-189, VR-1102, VR-1103,
8 VR-1104, VR-1113, VR-1130, and VR-1182. The Instrument Routes⁵ (IR) routes consist of IR-117,
9 IR-120, IR-121, and IR-164.

10 The 188 WG’s primary range is Razorback Range, encompassed by Restricted Area (R-) 2401
11 and R-2402; it is 15 nautical miles (NM) to the center point of the range from Fort Smith.
12 R-2401A and R-2402A/B/C are scheduled by the 188 WG through Fort Chaffee (U.S. Army). The
13 Arkansas Army National Guard has scheduling authority for R-2401A/B and R-2402A. The
14 Arkansas Air National Guard (ARANG) has scheduling authority for R-2402B/C. Razorback
15 Range includes conventional (a bomb circle and strafe pits) and tactical targets. Full-scale inert
16 weapons are authorized, including precision-guided munitions. Additional targets are available
17 for use on the conjoined Fort Chaffee live-artillery impact area. The range is certified for day
18 and night operations and the use of combat lasers. Razorback and the Fort Chaffee live-artillery
19 impact area are considered the primary ranges to be utilized by FMS PTC aircraft for purposes
20 of analysis.

21 **S.3.1.2 Personnel/Manpower**

22 Under the Preferred Alternative, there would be an overall increase in personnel at Ebbing ANG
23 Base. There would be about 384 additional personnel (an increase of approximately
24 30 percent), as well as about 800 associated dependents added to the local community. The
25 increase of personnel related to the FMS PTC beddown and associated range support is still
26 being determined based on the total aircraft on-base at any one time.

27 **S.3.1.3 Facility Requirements**

28 Renovations to existing facilities, changes in facility use, and new facilities would all be required
29 to support the FMS mission. Approximately 450,000 square feet of ground disturbance would
30 be involved, to include development of new facilities and installation of aircraft barrier
31 arresting kits on one of the runways at FSRA.

32 **S.3.2 Alternative 2 (Selfridge ANG Base)**

33 The 127th Wing (127 WG) of the Michigan ANG is located at Selfridge ANG Base in Harrison
34 Township, Macomb County, Michigan, approximately 20 miles north of Detroit, Michigan, on
35 the shore of Lake St. Clair (**Figure 1.2-3**, Selfridge ANG Base Area Map). Selfridge ANG Base
36 occupies approximately 3,077 acres and is a Joint Military Community home to many diversified

² A MOA is airspace designated outside of Class A airspace, to separate or segregate certain nonhazardous military activities from Instrument Flight Rules (IFR) traffic and to identify for Visual Flight Rules (VFR) traffic where these activities are conducted.

³ Generally, MTRs are established below 10,000 feet mean sea level (MSL) for operations at speeds in excess of 250 knots.

⁴ VFR means that the aircraft may operate without the use of instrumentation during nice and clear weather. Clouds, heavy precipitation, low visibility, and otherwise adverse weather conditions should be avoided under VFR.

⁵ IFR implies that the flight may operate in cloudy or otherwise adverse weather conditions using instruments only.

1 Department of Defense and Department of Homeland Security units, including the Air National
 2 Guard, Army, Navy, Marine Corps, Coast Guard and Customs and Border Protection, and Border
 3 Patrol. The 127 WG is the host unit at Selfridge ANG Base. The 127 WG’s federal mission is to
 4 provide trained, equipped, and motivated airlift, fighter, and support resources serving the
 5 community, state, and nation.

6 The 127 WG also maintains a state mission of protecting life and property and preserving
 7 peace, order, and public safety. These missions are accomplished through emergency relief
 8 support during natural disasters such as floods, earthquakes, and forest fires, search and rescue
 9 operations, support to civil defense authorities, maintenance of vital public services, and
 10 counterdrug operations. The 127 WG supports two DAF major commands—Air Combat
 11 Command and Air Mobility Command—flying two distinctly different missions in the A-10
 12 Thunderbolt II, a close air support aircraft, and KC-135 Stratotanker, an aerial refueler with
 13 global reach.

14 **S.3.2.1 Aircraft Operations**

15 **Table S-2** provides a summary of aircraft operations for at Selfridge ANG Base under
 16 Alternative 2.

17 **Table S-2. Current, No Action Alternative, and Alternative 2 Aircraft Operations at**
 18 **Selfridge ANG Base**

Aircraft Type	Current (2020) and No Action Projected (2029) Annual Aircraft Operations	Alternative 2 Annual Aircraft Operations	% Increase From Current Operations
A-10	4,280	4,280	0%
KC-135	2,400	2,400	0%
Other military aircraft	13,575	13,575	0%
Transient Aircraft	536	536	0%
Proposed FMS/RSAF F-35	0	14,004	100%
Proposed RSAF F-16	0	11,700	100%
Total Aircraft Operations	20,791	46,495	123.63%

Source: (AETC, 2021–2022)

Key: % = percent; ANG = Air National Guard; FMS = Foreign Military Sales; RSAF = Republic of Singapore Air Force

19 No new airspace or airspace adjustments are proposed as part of Alternative 2. The 127 WG
 20 primarily uses the Michigan ANG Alpena Combat Readiness Training Center airspace
 21 (approximately 100 by 180 NM). The airspace includes Steelhead, Pike East, Pike West, and
 22 Grayling (temporary) MOAs, two range complexes (R-4201A/B and R 4207), and numerous air-
 23 to-air refueling tracks and is locally coordinated. Additionally, the Lumberjack, Firebird,
 24 Steelhead, and Garland Air Traffic Control Assigned Airspace (ATCAAs) expand the altitude
 25 available in the overall Alpena area.

26 Selfridge ANG Base flying operations use the Alpena Special Use Airspace (SUA) Complex for
 27 close air support training. Joint Tactical Air Controller (JTAC) support is provided by one
 28 assigned instructor/evaluator, as well as U.S. Services and foreign partners training at
 29 Alpena/Grayling Range. Ranges located within the Alpena airspace are R-4201A/B (Grayling
 30 Range) and R-4207 (Upper Lake Huron), which are approximately 150 NM from Selfridge ANG
 31 Base. The R-4201A/B range has scoring systems and impact areas for live weapons up to 500
 32 pounds and inert weapons, such as the Guided Bomb Unit (GBU)-10/12/31 and strafe. The

1 4201A/B range is F-35 and F-16 with targeting pod laser operations certified. Additionally, the
2 R-4201A/B range provides access to JTACs and coordinated attacks with the ANG Artillery
3 Range and is in close proximity to multiple target areas. The R-4207 range is overwater (20 by
4 50 NM), located in the Alpena airspace, and approved for inert ordnance only. Floating targets
5 are available to be placed on the surface of the R-4207 range in appropriate designated impact
6 areas. Munitions authorized are the same as on the R-4201A/B range, such as the
7 GBU-10/12/31 and laser-guided Joint Direct Attack Munition (JDAM). Additionally, the Alpena
8 Combat Readiness Training Center is a Joint Staff (J7) Joint National Training Capability (JNTC)
9 Certified Training site that typically hosts several joint training exercises per year.

10 **S.3.2.2 Personnel/Manpower**

11 The number of personnel required at Selfridge ANG Base under Alternative 2 would be the
12 same as described under the Preferred Alternative, representing a relative increase in base
13 personnel of approximately 20 percent. The increase of personnel related to the FMS PTC
14 beddown and associated range support is still being determined based on the total aircraft on
15 base at any one time

16 **S.3.2.3 Facility Requirements**

17 Renovations to existing facilities, changes in facility use, and new facilities would all be required
18 to support the FMS mission. Approximately 260,000 square feet of ground disturbance would
19 be involved, to include development of new facilities and installation of aircraft barrier
20 arresting kits.

21 **S.3.3 No Action Alternative**

22 Under the No Action Alternative, the DAF would not beddown the FMS mission at Ebbing ANG
23 Base or Selfridge ANG Base. The FMS mission, to include the RSAF F-16 squadron, would remain
24 at Luke AFB, Arizona. The No Action Alternative would negatively impact the DAF and Pooled
25 Partner (multiple FMS nation partners) F-35A's ability to train effectively as airspace and F-35
26 simulator availability at Luke AFB move toward full capacity.

27 **S.4. ENVIRONMENTAL CONSEQUENCES**

28 The following environmental resources were not analyzed in detail in this EIS because the
29 potential for impacts would either not be significant (based on context and intensity or
30 potential impacts), or there would be little to no potential for impacts based on the scope of
31 the action, resulting in neutral effects or no effects: Airspace; Hazardous Materials and
32 Waste/Solid Waste; Safety; Infrastructure; Soils and Geology; Natural Resources and Energy;
33 and Visual Effects.

34 **S.4.1 No Action Alternative**

35 The affected environment under the No Action Alternative reflects actions that are expected to
36 have occurred by CY 2029 at both locations. These are described in Section 3.12, *Preferred*
37 *Alternative, Cumulative Impacts*, and Section 4.12, *Alternative 2, Cumulative Impacts*, of this
38 EIS. Implementation of the No Action Alternative (i.e., no beddown of the FMS PTC at either
39 Ebbing ANG Base or Selfridge ANG Base) would not result in any additional impacts outside
40 those described under Cumulative Impacts for either location.

1 **S.4.2 Preferred Alternative and Alternative 2**

2 Detailed analysis for both alternatives was conducted for the following resource areas. In the
3 context of this discussion, “airspace” refers to SUA, which includes Restricted Areas, MTRs,
4 MOAs, and ATCAAs, while “installation” includes the area surrounding the installation and
5 associated airfield, the immediate airspace and, in the case of the Preferred Alternative, FSRA.

6 **S.4.2.1 Noise**

7 *Preferred Alternative (Ebbing ANG Base)*

8 Time-averaged noise levels under airspace would remain below 65 decibels (dB). Up to an
9 additional 7,855 acres of land affected by 65 dB day-night average sound level (DNL) or greater
10 and up to an additional 12,654 people affected by 65 dB DNL or greater. Potential mitigations
11 being considered would result in the number of acres affected by 65 dB DNL or greater being
12 reduced by as much as 15 percent and the number of people being reduced by as much as
13 20 percent relative to the unmitigated scenario depending on afterburner usage. As more
14 information is gained via public and agency input throughout the NEPA process, mitigation
15 measures will be further refined and the final approved set will be detailed in the Final EIS and
16 Record of Decision (ROD).

17 *Alternative 2 (Selfridge ANG Base)*

18 Time-averaged noise levels would remain below 65 dB. Up to an additional 7,171 acres of land
19 affected by 65 dB DNL or greater and up to an additional 18,799 people affected by 65 dB DNL
20 or greater. Potential mitigations being considered would result the number of acres and the
21 number of people affected by 65 dB DNL or greater being reduced by as much as 16 percent
22 relative to the unmitigated scenario depending on afterburner usage. Mitigation measures will
23 be further refined based on public and agency inputs, and the final approved set will be
24 detailed in the Final EIS and ROD.

25 **S.4.2.2 Land Use**

26 *Preferred Alternative (Ebbing ANG Base)*

27 Beneath the airspace, undeveloped areas would have low-to-moderate adverse effects on low-
28 to-moderately noise-sensitive land uses and areas. Low-level overflights may have a minor-to-
29 moderate adverse impact on persons engaged in outdoor recreational activities. There may be
30 moderate-to-high adverse impact on some wilderness users and their experience of primitive
31 recreation. Total off-base land exposed to noise levels of 65 dB DNL and greater would expand
32 from 202 acres to 8,062 acres. Residential land exposure would increase from 11 acres to 1,821
33 acres. Mitigations would be required and will be detailed in the Final EIS and ROD.

34 Under potential mitigations being considered the total off-base/airport residential land area
35 (acres) exposed to noise levels exceeding 65 dB DNL would be reduced by between 6% and 14%
36 depending on afterburner usage relative to the same unmitigated scenarios; residential acres
37 exposed to noise levels exceeding 70 dB DNL would be reduced by between 11% and 19%
38 depending on afterburner usage relative to the same unmitigated scenarios; residential acres
39 exposed to noise levels exceeding 75 dB DNL would be reduced by between 50% and 58 %
40 depending on afterburner usage relative to the same unmitigated scenarios; residential land
41 area exposed to more than 80 dB DNL would be reduced from one acre to zero under all
42 mitigated afterburner scenarios.

1 **Alternative 2 (Selfridge ANG Base)**

2 Impacts beneath the airspace would be similar to the Preferred Alternative. Projected noise
3 levels in the areas under the restricted airspace associated with Camp Grayling Joint Military
4 Training Complex would increase by 5 to 9 A-weighted decibels (dBA) onset rate-adjusted
5 monthly day-night average sound level (L_{dnmr})/DNL to levels up to 66 dBA L_{dnmr} /65 dB DNL.
6 Levels greater than 65 dBA L_{dnmr} /DNL are not compatible with noise-sensitive uses. There may
7 be moderate-to-high adverse impact on some wilderness users and their experience of
8 primitive recreation. Total off-base land exposed to noise levels of 65 dB DNL and greater
9 would increase to 7,170 acres. Residential land exposure would increase by 2,177 acres.

10 Under potential mitigations being considered the total off-base/airport residential land area
11 (acres) exposed to noise levels exceeding 65 dB DNL would be reduced by between 3% and 9%
12 depending on afterburner usage relative to the same unmitigated scenarios; residential acres
13 exposed to noise levels exceeding 70 dB DNL would be reduced by between 21% and 26%
14 depending on afterburner usage relative to the same unmitigated scenarios; residential acres
15 exposed to noise levels exceeding 75 dB DNL would be reduced by between 11% and 34%
16 depending on afterburner usage relative to the same unmitigated scenarios; no residential land
17 areas would be exposed to more than 80 dB DNL under any mitigated or unmitigated scenario.

18 **S.4.2.3 Socioeconomics**

19 **Preferred Alternative (Ebbing ANG Base)**

20 The Preferred Alternative does not involve socioeconomic factors under airspace. There would
21 be a less than 1 percent increase in local population surrounding the installation. Some
22 beneficial impacts may occur due to additional population. Potential decrease in property
23 values could occur (0.2 to 2.0 percent per dB increase). The estimated number of housing units
24 within the 65 dB DNL or greater noise contours under the Preferred Alternative increase over
25 the No Action from 18 to between 2,579 and 3,014 depending on afterburner scenario. Noise
26 mitigations under consideration by the DAF would result in a decrease of total affected housing
27 units by between 12% to 20% versus unmitigated noise.

28 **Alternative 2 (Selfridge ANG Base)**

29 Alternative 2 does not involve socioeconomic factors under airspace. There would be a
30 0.13 percent increase in local population surrounding the installation. Some beneficial impacts
31 may occur due to additional population. Potential decrease in property values could occur
32 (0.2 to 2.0 percent per dB increase). The estimated number of housing units within the 65 dB
33 DNL or greater noise contours under the Alternative 2 increase over the No Action from 0 to
34 between 5,855 and 6,099 depending on afterburner scenario. Noise mitigations under
35 consideration by the DAF would result in a decrease of total affected housing units by between
36 10% to 16% versus unmitigated noise.

37 **S.4.2.4 Environmental Justice**

38 **Preferred Alternative (Ebbing ANG Base)**

39 The Preferred Alternative would result in disproportionately high and adverse human health or
40 environmental effects on minority populations surrounding the installation and FSRA. The
41 Preferred Alternative would also result in environmental health risks and safety risks that may
42 disproportionately affect children, and the elderly. Mitigations would be required and will be

1 detailed in the Final EIS and ROD. Noise mitigations under consideration by the DAF would
2 result in approximately 7% to 15% less minority population affected and between 13% and 21%
3 low-income population affected by 65 dB DNL depending on afterburner scenario as compared
4 to unmitigated noise. Similarly, potential noise mitigations would result in an estimated
5 reduction of between 9% and 19% children and between 14% and 21% elderly potentially
6 affected depending on afterburner scenario as compared to unmitigated noise.

7 ***Alternative 2 (Selfridge ANG Base)***

8 Impacts would generally be the same as the Preferred Alternative. Mitigations would be
9 required and will be detailed in the Final EIS and ROD. Noise mitigations under consideration by
10 the DAF would result in approximately 12% to 18% less minority population affected and
11 between 13% and 22% low-income population affected by 65 dB DNL depending on afterburner
12 scenario as compared to unmitigated noise. Similarly, potential noise mitigations would result
13 in an estimated reduction of between 10% and 18% children and between 9% and 15% elderly
14 potentially affected depending on afterburner scenario as compared to unmitigated noise.

15 **S.4.2.5 Cultural Resources**

16 ***Preferred Alternative (Ebbing ANG Base)***

17 There would be no effects to archaeological resources or traditional cultural properties, and no
18 adverse effects to architectural resources under the airspace or on and surrounding the
19 installation. Consultation with Native American Tribes and the Arkansas State Historic
20 Preservation Officer (SHPO) is underway. In a letter dated January 21, 2022, the Oklahoma
21 SHPO found that the Preferred Alternative would result in no historic properties affected below
22 the airspace in Oklahoma. Noise mitigations under consideration by the DAF would result in
23 previously surveyed resource SB 1673, a house with unknown National Register of Historic
24 Places status, falling outside the 65 dB DNL noise contours, and thus outside the area of
25 potential effect for potential noise impacts.

26 ***Alternative 2 (Selfridge ANG Base)***

27 There would be no effects to archaeological resources or traditional cultural properties, and no
28 adverse effects to architectural resources under the airspace or on and surrounding the
29 installation. Consultation with Native American Tribes is underway. On July 21, 2022, the
30 Michigan SHPO concurred with a finding of no adverse effects. Noise mitigations under
31 consideration by the DAF would result in no change to the number of resources within 65 dB
32 DNL or greater noise contours.

33 **S.4.2.6 Biological Resources**

34 ***Preferred Alternative (Ebbing ANG Base)***

35 There would be minor impacts to wildlife under the airspace and on/near the installation due to
36 noise. Construction activities would result in minor impacts to vegetation and wildlife on the
37 installation. The Preferred Alternative may affect, but is not likely to adversely affect, federally
38 listed species. Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife
39 Service (USFWS) is ongoing. Any potential mitigations identified as a result of consultation with
40 the USFWS under ESA Section 7 will be identified in the Final EIS and ROD.

1 **Alternative 2 (Selfridge ANG Base)**

2 Impacts to biological resources would generally be similar to the Preferred Alternative and may
3 affect, but is not likely to adversely affect, federally listed species. Section 7 consultation with
4 the USFWS is ongoing. The DAF completed Section 7 consultation for Alternative 2 under the
5 ESA with the USFWS on May 12, 2022. The USFWS concurred with the DAF's effects
6 determinations.

7 **S.4.2.7 Water Resources**

8 **Preferred Alternative (Ebbing ANG Base)**

9 There would be no interaction with the resource under the airspace. Construction activities
10 would result in increased surface water runoff and potential for soil erosion, thus resulting in
11 direct and indirect minor impacts to surface water, groundwater, and wetlands. However, these
12 impacts would be minimized through required design elements, permit-related BMPs, and
13 installation management practices. There is the potential for construction projects to occur in
14 wetlands, and a field wetland delineation would be required for airfield construction prior to
15 ground-disturbance activities. There would be no impacts to floodplains.

16 **Alternative 2 (Selfridge ANG Base)**

17 Impacts to surface water and groundwater would be similar in scope to the Preferred
18 Alternative, and would be minimized through required design elements, permit-related BMPs,
19 and installation management practices. Development activities would occur within the 100-
20 year floodplain. Compliance with federal and local standards and design features to avoid
21 impedance of floodwater conveyance, decrease of floodplain capacity, or increase of flood
22 elevations would prevent or minimize potential impacts. There would be no impacts to
23 wetlands.

24 **S.4.2.8 Air Quality**

25 **Preferred Alternative (Ebbing ANG Base)**

26 There would be no exceedances of significance indicator thresholds or National Ambient Air
27 Quality Standards (NAAQS) under the Preferred Alternative. Implementation of noise
28 mitigations, which include altering flight profiles, would not have any notable effect on air
29 emissions. Emissions of all criteria pollutants would remain below significance indicator
30 thresholds, and there would be no significant impacts to air quality.

31 **Alternative 2 (Selfridge ANG Base)**

32 Air emissions would be somewhat similar to those of the Preferred Alternative. However,
33 because Selfridge ANG Base is in a maintenance area, nitrogen oxide (NO_x) emissions from
34 Alternative 2 would exceed the conformity threshold of 100 tons per year. The NO_x emissions
35 increase would trigger the requirement for a positive general conformity determination before
36 any final decision could be made to implement Alternative 2 at Selfridge ANG Base. This
37 determination would ensure that the alternative would conform to the applicable State
38 Implementation Plan for reduction of air quality impacts.

39 Implementation of noise mitigations, which include altering flight profiles, would decrease
40 emissions slightly for carbon monoxide (CO); however, there would be a slight increase in
41 annual emissions in the ROI for all other criteria pollutants versus the unmitigated scenarios.

1 The significance indicator threshold for NO_x would continue to be exceeded. Because the NO_x
2 emissions would exceed the indicator threshold by around 50 percent, significant reductions in
3 annual flight operations may be required to ensure conformity with the Michigan State
4 Implementation Plan.