
1.0 INTRODUCTION

This Environmental Assessment (EA) was prepared to consider the potential impacts to the human and natural environment associated with the proposed modification of the Duke Military Operations Area (MOA) in Pennsylvania and New York. The proposed modification would establish low-altitude airspace for the Maryland Air National Guard (ANG) A-10C Squadron to train and prepare for current and future conflicts. The ANG is a Directorate within the National Guard Bureau (NGB). The ANG Director assists the Chief of the NGB to carry out the functions of the NGB as they relate to the national defense directives of the United States (U.S.) (Department of Defense [DoD] 2015). The Maryland ANG, 175th Wing (175 WG) is stationed at Martin State Air National Guard Base, Martin State Airport near Baltimore, Maryland and is the primary user of the Duke MOA. The mission of the Maryland ANG is to provide air combat forces and theater airlift aircraft to America's Unified Combatant Commands. Under its federal mission, the 175 WG is assigned to the Air Combat Command and is tasked with carrying out missions compatible with training, mobilization readiness, humanitarian and contingency operations worldwide.


2.0 PROPOSED ACTION

The Proposed Action would follow the lateral footprint of the existing Duke MOA except for the southwestern portion to avoid regional airports. The components of the Proposed Action include:

1. The vertical limits would be defined as 100 ft above ground level (AGL) to 7,999 ft MSL.
2. The Duke Low MOA may be activated separately from the Duke MOA or concurrently as needed to facilitate low-level training requirements.
3. Activation times would be intermittent by Notice to Air Missions (NOTAM).
4. Expected usage would be two hours per day, twice per day, one hour at a time, with no more than six total aircraft, approximately 170 days per year.
5. Weekend operations would be limited mostly to Saturdays; Sundays would be non-typical.
6. The Maryland ANG is a federal entity that would not typically, outside of wartime, fly on federal holidays.

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7. Nighttime operations (defined as sunset until 10:00 p.m.) at low altitude would be limited to above 1,000 ft AGL.

8. A surface to 6,000 ft MSL exclusion area would avoid Wellsboro Airport Class E airspace within the eastern side of the Duke Low MOA. No supersonic operations, release of chaff and flares, ordnance deployment, weapons firing, infrastructure changes or ground disturbance would be conducted in the Duke Low MOA.

9. A 1,000 ft AGL floor would be implemented over sensitive areas of concern in the southern portions of the Duke Low MOA, specifically over the Hammersley Wild Area, Forrest H. Dutlinger Natural Area and the Kettle Creek State Park.

10. A 1,000 ft overflight buffer and a 0.5 nautical mile (NM) lateral buffer around Bald and Golden Eagle nests would be incorporated per Air Force direction.

11. A 500 ft AGL floor would be implemented over sensitive areas of concern in the remaining portions of the Duke Low MOA, such as over the State Parks, Sinnemahoning Creek and the historical Austin Dam ruins.

12. A 500 ft overflight buffer would be maintained over obstacles such as radio towers, windmills and oil drilling rigs per Air Force Manual (AFMAN 11-202v3).

The proposed Duke Low MOA would occur over all or parts of the following Pennsylvania counties: Elk, Cameron, Clinton, McKean, Potter, and Tioga. In addition, a small fraction of the northwest corner of the Duke MOA overlies portions of Cattaraugus and Allegany counties in New York (see Figure 2-1 in the EA). A cross-section of the proposed Duke Low MOA is depicted in Figure 2-5 of the EA.

On the days that the proposed Duke Low MOA would be activated; it would normally be activated for one hour in the morning between the hours of 10:00 a.m. and 12:00 p.m. and one hour in the afternoon between the hours of 2:00 p.m. and 4:00 p.m. During the one hour of usage, the majority of flight time would be spent at higher altitudes (above 1,000 ft). Approximately five percent of airspace usage would be below 1,000 ft AGL and less than one percent would be below 500 ft AGL. The A-10 aircraft would spend approximately ten minutes or less below 1,000 ft. Overall, during each sortie, aircraft would be down in the low altitude ranges between 500 ft to 100 ft for 2-3 minutes per activation. The aircraft’s radar altimeter is used to measure AGL altitude. In forested areas where the tree canopy is approaching 100 ft in height, the aircraft would be at least 200 ft AGL.

The Bird/Wildlife Air Strike Hazard (BASH) prevention program parameters as required by DoD and FAA pre-flight protocols would be implemented. It is a common procedure for flying units to have direct communication with other agencies who would be operating within proximity of ANG aircraft operations. The ANG Eastern Area Defense Sector and the Pennsylvania Game Commission would create a communications plan with protocols, which would allow them to coordinate with each other and de-conflict airspace as needed during wildlife operations, such as annual census activities. An altitudinal mitigation map was prepared by NGB to address concerns.
from Pennsylvania Department of Conservation and Natural Resources for the most critical sensitive areas (see Figure 2-3 in the EA).

3.0 ALTERNATIVES CONSIDERED

Nine alternatives to the Proposed Action were considered but not carried forward because they did not meet the purpose of and need for action. To allow for the required training events, the proposed airspace must be of sufficient, contiguous size and altitude to train and prepare military aircrews for current and future conflicts in a realistic training environment. The criteria for selection of alternatives included: (1) Must be within a reasonable distance (200 NM) of Martin State Airport, (2) Must provide sufficient low-level airspace to accommodate A-10C pilot training requirements, and (3) Must be adequate for 175 WG low level flight operations to maintain proficiency.

Modification of the Evers MOA in West Virginia was dismissed from further analysis because the existing MOA (1,000 ft AGL floor) or the proposed modifications (1,000 ft AGL floor) by other users would not support A-10C low-level qualifications training below 500 ft AGL and would not be adequate for 175 WG low level flight operations to maintain proficiency. Creation of a new stand-alone MOA within 200 NM of Martin State Airport that would allow full spectrum training was dismissed from further analysis because no suitable area was identified due to the congested airspace in the northeast region. Use of Patuxent River Restricted Areas (RAs) was dismissed from further analysis because they are predominantly over water, making it unrealistic as a low-level training area for the 175 WG. Six alternatives that were identified included the use of other RAs, alert areas, and military training routes (MTRs) within 200 NM of Martin State Airport. Those alternatives were dismissed from further analysis primarily due to insufficient size to accommodate 175 WG training requirements, safety concerns, and potential impacts to civilian air traffic. All of the alternatives considered but not carried forward are discussed in further detail in Section 2.3 of the EA.

4.0 ENVIRONMENTAL EFFECTS

4.1 PROPOSED ACTION

The Proposed Action would result in no significant effects on airspace management, noise, land use, biological resources, cultural resources, safety, socioeconomics, and environmental justice. No significant cumulative impacts would result from the Proposed Action when combined with past, present, and reasonably foreseeable future actions related to airspace use and management near the Duke Low MOA.

Airspace Management. The Proposed Action would result in no significant effects to airspace management. Proposed airspace operations would pose minimal to moderate constraints to existing and future commercial and civilian air traffic when activated. On the days that the proposed Duke Low MOA would be activated; it would normally be used for one hour in the FONSI-3
morning between the hours of 10:00 a.m. and 12:00 p.m. and one hour in the afternoon between the hours of 2:00 p.m. and 4:00 p.m. Cumulative effects on airspace management in the proposed Duke Low MOA would be less than significant when compared to existing conditions.

**Noise.** The FAA significance criteria indicates that the effects from noise would not be considered significant unless the Proposed Action would (1) increase noise levels by more than 1.5 A-weighted decibels (dBA) day-night Sound Average Level (DNL) in a noise sensitive area exposed to noise above 65 dBA DNL, or (2) that a noise sensitive area is exposed to noise levels at or above 65 dBA DNL due to a 1.5 dB DNL increase when compared to the No Action Alternative for the same timeframe. In addition, if individual acoustic events generate noise levels loud enough to damage hearing or structures, it would be considered significant. The Proposed Action would not result in significant effects on the noise environment. The Proposed Action would not increase noise levels by more than 1.5 dBA DNL in a noise sensitive area that is exposed to noise above 65 dBA DNL, nor would it generate individual acoustic events loud enough to damage hearing or structures. The Proposed Action would increase overall sound levels ($L_{dnmr}$) between 0.1 and 1.3 dBA in areas beneath the proposed Duke Low MOA, including land within wild and natural areas, state parks, and state forests. Several flight constraints (e.g., FAA 14 CFR 91.119, FAA Advisory Circular 91-36, exclusions and avoidance areas with minimum overflight altitudes) would be in effect in certain areas and times of year in the proposed Duke Low MOA, limiting the loudest noise levels at these times and places. Cumulative effects on the noise environment beneath the proposed Duke Low MOA would not be considered significant when compared to existing conditions.

**Land Use.** The Proposed Action would not result in significant impacts on land use. There would be no short- or long-term changes in land use due to the Proposed Action. The Proposed Action would not increase noise levels by more than 1.5 dBA DNL in a noise sensitive area that is exposed to noise above 65 dBA DNL or generate individual acoustic events loud enough to damage hearing or structures. The Proposed Action would increase overall sound levels ($L_{dnmr}$) between 0.1 and 1.3 dBA in areas beneath the proposed Duke Low MOA, this includes wilderness areas, state parks, and state forests. Noise from aircraft operations under the Proposed Action would not exceed 65 dBA DNL and would be compatible with all land uses. The Proposed Action would minimize interference with hunting activities beneath the proposed Duke Low MOA by reducing use on weekends, no use on federal holidays, and the majority of hours (approximately two hours per activation day) used would occur during the mid-day, when hunting is least affected. Early morning and late evening are the times when wildlife is most active, and the airspace would not be used. Considering implementation of management actions, special procedures (see Chapter 5.0 in the EA), and altitudinal mitigation (see Figure 2-3 in the EA) for state parks and state forests, the Proposed Action would not significantly impact land use. The Proposed Action would not 1) be inconsistent with applicable land use plans or policies; 2) preclude an existing land use; 3) preclude continued use of an area; or 4) be incompatible with adjacent or vicinity land use to the
extent that public health or safety is endangered. Cumulative effects on land use beneath the proposed Duke Low MOA would not be considered significant when compared to existing conditions.

**Biological Resources.** The Proposed Action would not result in significant impacts to biological resources. There would be no ground-disturbing activities, no chaff and flare deployment, no supersonic flight activities, no weapons firing, and no ordnance deployment within the Low MOA. No habitat disturbances would result from the Proposed Action. Short-term effects would occur from aircraft overflight noise during training exercises. These effects would cease and return to existing conditions when aircraft are not periodically flying overhead. Long-term effects would be similar in nature and overall level as the short-term effects. Pennsylvania’s elk population is a valuable public resource available for the enjoyment and benefit of all people. The Proposed Action would not be expected to impact Pennsylvania’s elk herd because the frequency of overflights below 1,000 ft AGL would be extremely limited (e.g., seconds to minutes per year overhead at any given point on the ground). Pilot training at 100 ft AGL would occur for several seconds and less than 0.5 miles overland in the 2-3 minutes of flight in the low altitude ranges. In addition, 95 percent of aircraft operations would be conducted above 1,000 ft AGL. The Proposed Action would not reduce the distribution or viability of species or of critical habitats. Cumulative effects on biological resources beneath the proposed Duke Low MOA would be less than significant when compared to existing conditions.

**Cultural Resources.** The Proposed Action would result in no adverse effects to cultural resources. While the Proposed Action would introduce noise (a potential effect under 36 CFR §800.5) to historic properties present beneath the Duke Low MOA, the nature of that noise is such that it would have no effect on the aspects of the properties that make them eligible for listing in the National Register of Historic Places. Additionally, no part of the Proposed Action would have adverse cumulative effects on historic properties when compared to existing conditions.

**Safety.** The Proposed Action would result in no significant effects on safety. In accordance with 14 CFR § 91.119 and AFMAN11-202v3, aircraft would continue to follow low-level guidance and remain 1,000 ft above the highest obstacle and 2,000 ft laterally when over congested or populated areas, as well as 500 ft above all known or observed antennas and obstacles. Pilots would continue to conduct preflight planning, participate in low-altitude awareness training, and implement a BASH plan with an Avian Hazard Advisory System and Bird Avoidance Model to ensure low-altitude training is conducted safely. Cumulative effects on safety would be less than significant when compared to existing conditions.

**Socioeconomics.** The Proposed Action would result in no significant effects on socioeconomic resources. No significant impacts were identified for land use or wildlife that would result in socioeconomic impacts. Aircraft operations conducted below 500 ft AGL would be approximately one percent of the overall aircraft utilization and broadly distributed over time and space within
the proposed Duke Low MOA. Several flight constraints would be in effect in certain areas and times of year in the proposed Duke Low MOA, limiting the loudest noise levels at these times and places. The flight constraints combined with the vast distribution of aircraft within the proposed Duke Low MOA and the limited amount of time at low altitudes would result in extremely limited (e.g., seconds to minutes per year) time an aircraft would be overhead at any given point on the ground. There would be no construction, development, changes in ground-based operations, or any other ground-disturbing activity that would alter tourism. The influence of noise may impact the quality of the tourist experience; however, noise from aircraft operations would not contribute appreciably to the overall background levels throughout the region. Considering implementation of management actions, special procedures (see Chapter 5.0 in the EA), and altitudinal mitigation (see Figure 2-3 in the EA) for state parks and state forests, the Proposed Action would not significantly impact tourism. The Proposed Action would not result in direct effects on the local economy, related effects on other socioeconomic resources or result in substantial shifts in community characteristics, including property values, employment, income, and social well-being. Cumulative effects on socioeconomic resources would not be considered significant when compared to existing conditions.

**Environmental Justice.** The Proposed Action would result in no significant effects to low-income, minority, or youth populations. Noise levels in the airspace would remain below 65 dB DNL. Air emissions would not exceed any defined thresholds that are in place to protect public health. The proposed training operations would be spread across a vast area and are not expected to occur in any one location on a repetitive basis; therefore, no population would be exposed to a disproportionate number of overflights or the associated impacts from those overflights. Since there would not be significant impacts that would adversely affect minority or low-income populations or children, no impacts to environmental justice populations are anticipated. There would not be a disproportionate impact to minority or low-income populations or children under the Proposed Action.

**Resources with Negligible Effects.** The Proposed Action would have negligible effects on the following resource areas: Air Quality; Climate; Coastal Resources; Department of Transportation Act: Section 4(f); Farmlands, Hazardous Materials, Solid Waste, and Pollution Prevention; Natural Resources and Energy Supply; Visual Effects; and Water Resources. Future conditions with respect to these resources would be indistinguishable from existing conditions with the implementation of the Proposed Action. **Section 1.5** of the EA provides a brief overview of, and a discussion of the limited effects on, each of these resources.

### 4.2 NO ACTION

The CEQ regulation 40 CFR§1502.14(c) specifically requires analysis of the “No Action” alternative in all NEPA documents. Under the No Action Alternative, the proposed Duke Low MOA would not be implemented, and the existing Duke MOA would remain in use. No changes
in flight altitudes would be implemented. Current operations in the existing Duke MOA would continue under the No Action Alternative. Under the No Action Alternative, the 175 WG would continue to experience training shortfalls that negatively impact combat readiness and pilot safety. Although the No Action Alternative does not meet the selection criteria or fulfill the purpose and need of the action, it has been carried forward for detailed analysis in this EA, as required under NEPA.

5.0 PUBLIC NOTICE

Executive Order (EO) 12372, Intergovernmental Review of Federal Programs, requires intergovernmental notifications prior to making any detailed statement of environmental effects. NEPA, 40 CFR §§1500-1508, and 32 CFR §989 requires public review of the EA before approval of the Finding of No Significant Impact (FONSI) and implementation of the Proposed Action. The ANG notified relevant federal, state, and local agencies in 2019 and 2021 and allowed them more than 60 days to make known their environmental concerns specific to the Proposed Action. Similarly, consultation letters were sent to the federally recognized tribes to provide notification of the action and to initiate government-to-government consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA), Agency and Public Coordination. Tribal consultation was conducted through certified mail and follow-up phone calls to tribal recipients were conducted at 2 weeks and at 2 months after receipt verification to request feedback regarding any questions or concerns related to the Proposed Action. Comments and concerns submitted by these agencies were incorporated into the analysis of potential environmental impacts conducted as part of the EA.

A Notice of Availability for public review of the Draft EA was published in the following newspapers on 27-30 October 2021 and 9-12 November 2021:

- Bradford Era, McKean County (10/29 and 11/12)
- Potter Leader-Enterprise, Potter County (10/28 and 11/11)
- Endeavor News, Potter County (10/30 and 11/13)
- Cameron County Echo, Cameron County (10/27 and 11/10)

The Draft EA was made available for public review at the following libraries:

- Bradford Area Public Library, Bradford, PA
- Coudersport Public Library, Coudersport, PA
- Green Free Public Library, Wellsboro, PA
- Galeton Public Library, Galeton, PA

The Draft EA was made available to federal, state, and local agencies, as well as regional libraries, to invite public participation. Additional information was made available on the 175 WG’s FONSI-7
During the Draft EA public review period, 430 comments were received by members of the public, agencies, special interest groups, and elected officials. A comment summary is included in Appendix H that summarizes the comments received and includes responses to the comments that were considered substantive. All comments received during the public review period are included in Appendix H and will be included in the Administrative Record.

Given the substantial changes that were completed to address the comments received during the public review of the Draft EA, the NGB is providing the public with an opportunity to review the Draft Final EA. A Notice of Availability for public review of the Draft Final EA was published in the following newspapers from 3 through 8 April 2023, and 17 through 22 April 2023:

- Bradford Era, McKean County (4/3 and 4/17)
- Potter Leader-Enterprise, Potter County (4/6 and 4/20)
- Endeavor News, Potter County (4/8 and 4/22)
- Cameron County Echo, Cameron County (4/5 and 4/19)

The Draft EA was made available for public review at the following libraries:

- Bradford Area Public Library, Bradford, PA
- Coudersport Public Library, Coudersport, PA
- Green Free Public Library, Wellsboro, PA
- Galeton Public Library, Galeton, PA

The Draft EA was made available to federal, state, and local agencies, as well as regional libraries, to invite public participation. Additional information was made available on the 175 WG’s webpage at https://www.175wg.ang.af.mil/. Copies of agency correspondence are provided in Appendix A of the EA.

6.0 FINDING OF NO SIGNIFICANT IMPACT

After careful review, I conclude that the Proposed Action would not have a significant impact on the quality of the human or natural environment or generate significant controversy. Accordingly,
the requirements of NEPA, CEQ, and 32 CFR 989, et seq. have been fulfilled, and an Environmental Impact Statement (EIS) is not necessary and will not be prepared.

_________________________________   ___________________________
MARC V. HEWETT. P.E., GS-15, DAF     Date

Chief, Asset Management Division