

Volume 2

**Draft Final Environmental Assessment for Modification of
Duke Military Operations Area
Appendices**

Maryland Air National Guard
175th Wing, Martin State Air National Guard Base
March 2023



Guarding America - Defending Freedom



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Appendix A

Agency Coordination

- FAA acceptance letter to participate as cooperating agency
- 2019 IICEP Recipient List
- 2019 Example IICEP Letters and Attachment Sent with Letters
- 2019 Responses received (order follows recipient list)
- 2021 IICEP Recipient List
- 2021 Example IICEP Letters and Attachment Sent with Letters
- 2021 Responses received (order follows recipient list)

Mission Support Services
800 Independence Avenue,
SW.
Washington, DC 20591



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

Scott P. Chambers, P.E., Colonel, USAF
National Guard Bureau
3501 Fetchett Avenue
Joint Base Andrews, Maryland 20762-5157

October 26, 2018

Dear Colonel Chambers,

Thank you for your letter of October 25, 2018 requesting that the Federal Aviation Administration (FAA) participate as a cooperating agency in the National Guard Bureau's (NGB) preparation of an Environmental Assessment (EA) for the Modification and/or Addition of Airspace Utilization of the Duke Military Operations Area (MOA), Pennsylvania, to meet current and emerging training needs and maximize effective use of the airspace structure. Per NGB's letter, this project will evaluate the establishment of the Duke Low MOA. The FAA appreciates the NGB's recognition of our role in the evaluation of Special Use Airspace (SUA) and analysis of potential impacts to airspace associated with your project as required by the National Environmental Policy Act (NEPA) and its implementing regulations at 40 C.F.R. Part 1500.

Since this proposal involves the use of SUA, the FAA accepts the NGB's request to act as a cooperating agency in accordance with the guidelines set forth in the Memorandum of Understanding (MOU) between the FAA and the Department of Defense (DoD) Concerning SUA Environmental Actions, dated October 4, 2005, and in accordance with the NEPA regulations at 40 C.F.R. Section 1501.6 regarding cooperating agencies, and with FAA Order 7400.2L, Chapter 32, Appendix 8 – *FAA Special Use Airspace Environmental Processing Procedures* which outlines the process by which FAA works with DoD as a cooperating agency on projects involving SUA.

FAA's participation in the development of the EA for this proposed action resides under the jurisdiction of FAA's Central Service Center, Operations Support Group, at 10101 Hillwood Parkway, Fort Worth, Texas 76177. Tom Lattimer is the Environmental Team Manager for Central Service Center who will assign an environmental specialist to coordinate NEPA document development and reviews. The Central Service Center's environmental specialist will be the focal point for matters related to the review of the NGB's NEPA documentation for this project and any related airspace issues that will be tracked and coordinated by FAA Headquarters Environmental Policy Group (AJV-114).

While Appendix 8 of FAA Order 7400.2L indicates that the airspace review and environmental impacts review should be conducted in tandem as much as possible, they are still separate processes. Approval of either the aeronautical portion or the environmental impact analysis portion of the NEPA document does not automatically indicate approval of the entire proposal. Enclosed are Appendices 7 and 8 from FAA Order 7400.2L for additional details.

A copy of your request for FAA's cooperating agency status and this reply are being forwarded to Tom Lattimer of the Service Center's Operations Support Group. Mr. Lattimer can be contacted at 817-222-5806 or thomas.l.lattimer@faa.gov for further review of the NEPA document(s).

For questions regarding NEPA document processing and coordination with the Service Center, please contact either me in the Airspace Policy Group (AJV-11) at 202-267-1209, or Paula Miller 202-267-7378 in AJV-114 (Environmental Policy Team).

Sincerely,



Rodger A. Dean
Manager, Airspace Policy Group
Air Traffic Organization
Federal Aviation Administration

Cc: Kevin Marek, NGB/A4AM
Tom Lattimer, Operations Support Group Environmental Team Manager, Central Service Center
Paula Miller, AJV-114, FAA HQ/ATO Environmental Policy Team
Kristi Regotti, Environmental Specialist, FAA/AJV-114, Central Service Center
Sean Hook, Maj, USAF, Exec. Dir., USAF/FAA HQ/AJV-11
Paul Gallant, AJV-113, FAA HQ/ATO Regulatory Policy Team
Colby Abbott, AJV-113, FAA HQ/ATO Regulatory Policy Team

Enclosures

Chapter 32, Appendices 7 and 8 from FAA Order 7400.2L

2019 ICEP Recipients List Environmental Assessment

ALL LETTERS SENT ON 8/26/2019

Pennsylvania & New York (Duke MOA)

Agency	Prefix	First Name	Last Name	Title	Organization	Address 1	Address 2	City	State	Zip Code	Date Response Received
FEDERAL											
USFWS	Ms.	Sonja	Jahrsdoerfer	Supervisor	Pennsylvania Ecological Services Field Office	110 Radnor Road Suite 101		State College	PA	16801-7987	9/16/2019
USFWS				Supervisor	New York Ecological Services Field Office	3817 Luker Road		Cortland	NY	13045-9385	9/17/2019
USACE				Deputy District Commander	U.S. Army Corps of Engineers	2200 William S. Moorhead	1000 Liberty Avenue	Pittsburgh	PA	15222-4186	No response
US National Forests (Dept of Agriculture)				Chief Officer	USDA Forest Service	1400 Independence Ave, SW		Washington	DC	20250-1111	No response
USDOT	Mr.	Daniel	Elwell	Acting Administrator	USDOT Federal Aviation Administration	800 Independence Ave, SW		Washington	DC	20591	No response
U.S. Geological Service (NY)	Mr.	Robert	Breault	Center Director	New York Water Science Center	425 Jordan Road		Troy	NY	12180-8349	No response
U.S. Geological Service (PA)	Mr.	James	Campbell	Director	U.S. Geological Survey	215 Limekiln Road		New Cumberland	PA	17070	No response
USEPA (NY)	Mr.	Peter	Lopez	Regional Administrator	USEPA, Region 2	290 Broadway		New York	NY	10007-1866	No response
USEPA (PA)	Mr.	Cosmo	Servidio	Regional Administrator	USEPA, Region 3	1650 Arch Street		Philadelphia	PA	19103-2029	9/26/2019
STATE											
Department of Environmental Protection	Mr.	Marcus	Kohl	Regional Director		North Central Regional Office	208 West Third St., Suite 101	Williamsport	PA	17701	9/17/2019
Department of Environmental Protection	Mr.	James	Miller	Regional Director	Department of Environmental Protection	North West Regional Office	230 Chestnut Street	Meadville	PA	16335	
New York State Department of Environmental Conservation	Ms.	Abby	Snyder	Regional Director	Region 9 NY State Dept. of Environmental Conservation	270 Michigan Ave.		Buffalo	NY	14203-2915	No response
SHPO (Pennsylvania)	Ms.	Andrea	MacDonald	Bureau Director/Deputy SHPO	Pennsylvania Historical & Museum Commission - SHPO	400 North Street	Commonwealth Keystone Bldg, 2nd Floor	Harrisburg	PA	17120-0093	9/19/2019*
SHPO (New York)	Mr.	Roger	Mackay	Deputy State Historical Preservation Officer	NY State Division for Historic Preservation	Peebles Island Resource Center	One Delaware Ave North	Cohoes	NY	12047	No response
Dept. of Transportation (Aviation Division)	Mr.	Anthony	McCloskey	Director	PennDOT Engineering , District 6	P.O. Box 3457		Harrisburg	PA	17105-3457	No response
Dept. of Forestry				Director	The Pennsylvania Forestry Association	300 N. Second Street, Suite 1002		Harrisburg	PA	17101	No response
Dept. of Conservation and Natural Resources Pennsylvania				Director	Dept. of Conservation and Natural Resources Pennsylvania	7th Floor, RCSOB	400 Market Street	Harrisburg	PA	17105	10/1/2019
Dept of Agriculture	Mr.	Curt	Coccodrilli	State Director	Pennsylvania Dept. of Agriculture	359 E. Park Drive, Suite 4		Harrisburg	PA	17111-2747	No response
Wildlife Resources Division	Ms.	Sonja	Jahrsdoerfer	Project Leader/Supervisor		Pennsylvania Field Office	110 Radnor Road, Suite 101	State College	PA	16801	No response
LOCAL BY COUNTY											
Elk											
Chamber of Commerce	Ms.	Christina	Clancy	Director	Ridgeway-Elk County Chamber of Commerce	300 Main St.		Ridgeway	PA	15853	No response
Economic Development	Mr.	Karl	Geci		Elk County Industrial Development Authority	Elk County Courthouse		Ridgeway	PA	15853	No response
McKean											
Chamber of Commerce	Ms.	Tea Jay	Aikey	President	Central PA Chamber of Commerce	30 Lawton Lane		Milton	PA	17847	No response
Economic Development	Ms.	Sherri	Geary	Director	McKean County Economic Development	17137, Route 6		Smethport	PA	16749	9/5/2019
Potter											
Chamber of Commerce & Economic Development	Mr.	Guy	Ciarrochi	President	Chester County Chamber of Business & Industry	1600 Paoli Pike		Malvern	PA	19355	No response
Cameron											
Chamber of Commerce	Ms.	Tina	John Solak	Executive Director	Cameron County Chamber of Commerce	34 East Fourth Street		Emporium	PA	15834	No response
Economic Development	Mr.	Cliff	Clark	Director	Cameron County Community & Economic Development	20th East 5th Street		Emporium	PA	15834	8/29/2019 9/6/2019 9/25/2019
Tioga											

2019 ICEP Recipients List Environmental Assessment

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Pennsylvania & New York (Duke MOA)

Agency	Prefix	First Name	Last Name	Title	Organization	Address 1	Address 2	City	State	Zip Code	Date Response Received
Chamber of Commerce & Economic Development	Ms.	Kristin	Hamilton	Director	Tioga County Development Corp.	114 Main Street		Wellsboro	PA	16901	No response
Clinton											
Chamber of Commerce & Economic Development	Mr.	Michael	Flanagan	President, CEO	Clinton County Economic Partnership	212 North Jay Street		Lock Haven	PA	17745	No response
Allegany (New York)											
Chamber of Commerce	Ms.	Gretchen	Hanchett	Executive Director	Greater Allegany County Chamber of Commerce, Inc.	Crossroads Commerce Center	6087 NYS Route 19N - Suite 120	Belmont	NY	14813	No response
Economic Development	Ms.	Angela	McKay	Assistant Director	Allegany County Dept. of Planning	Crossroads Commerce Center	6087 NYS Route 19N - Suite 100	Belmont	NY	14813	No response
Cattaraugus (New York)											
Chamber of Commerce & Economic Development	Ms.	Crystal	Abers	Director	Cattaraugus County Dept. of Economic Development, Planning and Tourism	Second Floor	303 Court St.	Little Valley	NY	14755	No response
TRIBES											
federally recognized on HUD.gov/TDAT website: https://egis.hud.gov/TDAT/											
Delaware Nation, Oklahoma	Ms.	Erin	Thompson	Historic Preservation/106 Director	Delaware Nation, Oklahoma	31064 US Highway 281	Bldg 100	Anadarko	OK	73005	11/4/2019
Delaware Tribe of Indians	Dr.	Brice	Obermeyer	Director	Delaware Tribe of Indians	1200 Commercial St.	Roosevelt Hall, Rm 212	Emporia	KS	66801	No response
Seneca Nation of Indians	Dr.	Joe	Stahlman	THPO	Seneca Nation of Indians	90 O:hi'yoh Way		Salamanca	NY	14779	No response
Seneca-Cayuga Nation	Mr.	William	Tarrant	THPO	Seneca-Cayuga Nation	23701 S. 655 Rd		Grove	OK	74344	No response
Tonawanda Band of Seneca	Mr.	Roger	Hill	Chief	Tonawanda Band of Seneca	7027 Meadville Road		Basom	NY	14013	No response
Airports											
Bradford Regional (BFD)	Ms.	Alicia	Dankesreiter	Airport Manager	Bradford Regional Airport Authority	212 Airport Dr., Ste E		Lewis Run	PA	16738	No response
St Marys Municipal (OYM)	Mr.	Matthew	Box	Airport Manager	City of St Marys	159 Cessna Rd		St Marys	PA	15857	No response
Wellsboro Johnston (N38)	Mr.	Shaw	Siglin	Airport Manager	Grand Canyon Airport Authority	112 Runway Rd		Wellsboro	PA	16901	9/11/2019
Freefal Oz (06PA)	Mr.	Ashley	Easdon-Smith	Airport Owner	Freefal Oz (06PA)	296 Faulkner Rd		Shinglehouse	PA	16748	No response
Adams (90PA)	Mr.	Merrill	Adams	Airport Owner	Adams (90PA)	21 Carrigan Ave		Spring City	PA	19475	No response
Greeley (PN15)	Mr.	Barton	Greeley	Airport Owner	Greeley (PN15)	119 Bowers Rd		Coudersport	PA	16915	No response
Johnson (2PA5)	Mr.	Merle	Johnson	Airport Owner	Johnson (2PA5)	25425 Troon Ave		Sorrento	FL	32776	No response
Ranch-Aero (PN90)	Mr.	James	Yates	Airport Owner	Ranch-Aero (PN90)	PO Box 75		Roulette	PA	16746	No response- Letter returned by USPS
Sharretts (PN91)	Mr.	Fred	Sharretts	Airport Owner	Sharretts (PN91)	97 Johnson Rd		Westfield	PA	16950	No response
Cole Mem Heliport (PN09)	Mr.	Melvin	Blake	Airport Manager	Charles Cole Memorial Hospital	1001 East Second St		Coudersport	PA	16915	No response
Cameron Co Jr/Sr High (8PN7)		N/A	N/A		Cameron County Jr/Sr High School	601 Woodland Ave		Emporium	PA	15634	No response
Elk Rgnl Med Ctr Heliport (7PS9)	Mr.	Keith	Van Horn	Airport Manager	Elk Regional Health Center	763 Johnsonburg Rd		St Marys	PA	15857	No response
Special Interest Groups											
NBAA	Ms.	Hedi	Williams	Director	National Business Aviation Association	1200 G St. NW, Ste 1100		Washington	DC	20005	No response
AOPA	Mr.	Rune	Duke	Sr. Director	Aircraft Owners & Pilots Association	50 F St. NW, Ste 750		Washington	DC	20001	9/6/2019
American Wind Energy Association	Mr.	Tom	Vinson	Vice President	American Wind Energy Association	1501 M Street NW, Suite 900		Washington	DC	20005	No response

*Response received from someone other than recipient at same agency or group.



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

26 August 2019

Sample Agency Letter
Sample Agency
Sample Agency Address
Sample Agency Address
Sample Agency Address

To Whom It May Concern:

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment. In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we are writing this letter to advise you of this effort and request your assistance in identifying any potential issues related to the proposal.

The National Guard Bureau (NGB) has invited the Federal Aviation Administration (FAA) to be a cooperating agency in the EA. The EA will assess the effects of the Proposed Action and will include analysis of the required No-Action alternative. Enclosed, please find a detailed description of the Proposed Action (Att.1).

The Maryland ANG mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and also provide assistance to Allies during emergencies. The federal mission during peacetime has the combat-ready unit assigned to the Air Combat Command to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations. The 175 WG must have a reliable and realistic training environment in which to conduct upgrades and continuation training for aircrew.

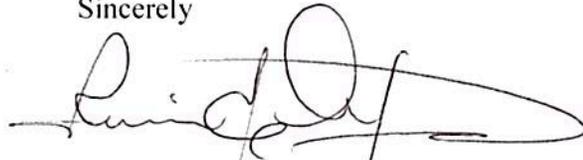
The proposed action would establish a Low MOA below the existing Duke MOA. The Duke Low MOA would follow the lateral footprint of the Duke MOA as it currently exists except for the southwestern portion. The Duke Low MOA would be activated Intermittent by Notice to Airmen. The vertical limits for the Duke Low MOA would be 100 feet Above Ground Level (AGL) to 7,999 feet above Mean Sea Level (MSL). The expected usage would be four hours per day, 170 days per year, two hours at a time, twice per day, with no more than six total aircraft. The Duke Low MOA would be used only for sorties requiring the use of low altitude training. Weekend and night time operations at low-altitude would be limited. The 175 WG flies one weekend per month with one week per month consisting of routine night training.

Under the proposed action, there would be no infrastructure changes, no ground-disturbing activities, no weapons firing, and no ordnance deployment within the Duke MOA. No supersonic operations or release of chaff and flares would be conducted in the Duke Low MOA. Weekend and night time operations at all altitudes would be limited.

The National Guard Bureau intends to maximize the use of electronic transmittals during subsequent coordination phases of this project. A hard copy of the Draft and Final EA documents will be provided to your office for review. Enclosed is a copy of the distribution list for those agencies and organizations to be contacted regarding this EA (Att.2). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

In order for the ANG to address your concerns, in a timely manner, please respond within 30 days of receipt of this letter. Please provide any comments you may have within 30 days of receipt of this letter to me at Ramón E. Ortiz, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ramon.e.ortiz2.civ@mail.mil. Thank you for your assistance.

Sincerely

A handwritten signature in black ink, appearing to read 'Ramón E. Ortiz', with a long horizontal flourish extending to the right.

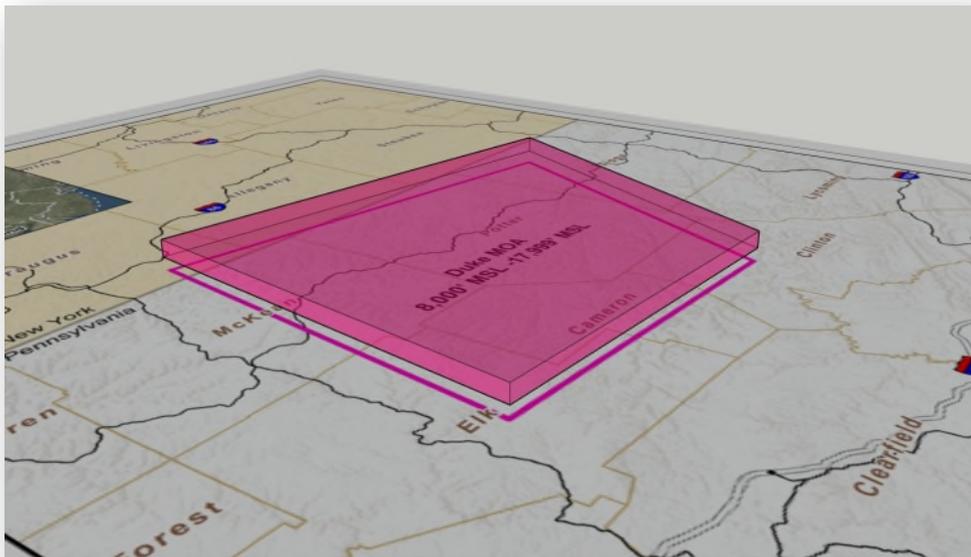
RAMÓN E. ORTIZ, P.E.
Technical Lead Environmental Planner
NGB/A4AM - Plans and Requirements

2 Attachments:

1. Description of Proposed Action
2. IICEP Distribution List

The Air National Guard (ANG) is preparing an Environmental Assessment (EA) to consider the potential consequences to the human and natural environment associated with the modification of the Duke Military Operations Airspace (MOA) to establish low-altitude airspace for the Maryland Air National Guard A-10C Squadron to train and prepare for current and future conflicts. The Maryland Air National Guard, 175th Wing (175 WG) is stationed at Warfield Air National Guard Base, Martin State Airport near Baltimore, Maryland. The 175 WG's mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and to aid Allies during emergencies. The 104th Fighter Squadron (FS) is a unit of the 175th Operations Group at Warfield Air National Guard Base and the A-10C is the Primary Assigned Aircraft at the 175 WG.

Nearly all the existing Duke MOA is in Pennsylvania, the underlying counties include all or parts of Elk, Cameron, Clinton, McKean, Potter, and Tioga. A small fraction of the northwest corner of the MOA overlies portions of Cattaraugus and Allegany counties in New York. The existing Duke MOA does not provide airspace for low level training because the airspace begins at 8,000 feet (ft) above mean sea level (MSL). The proposed Duke Low MOA would underly the existing airspace.

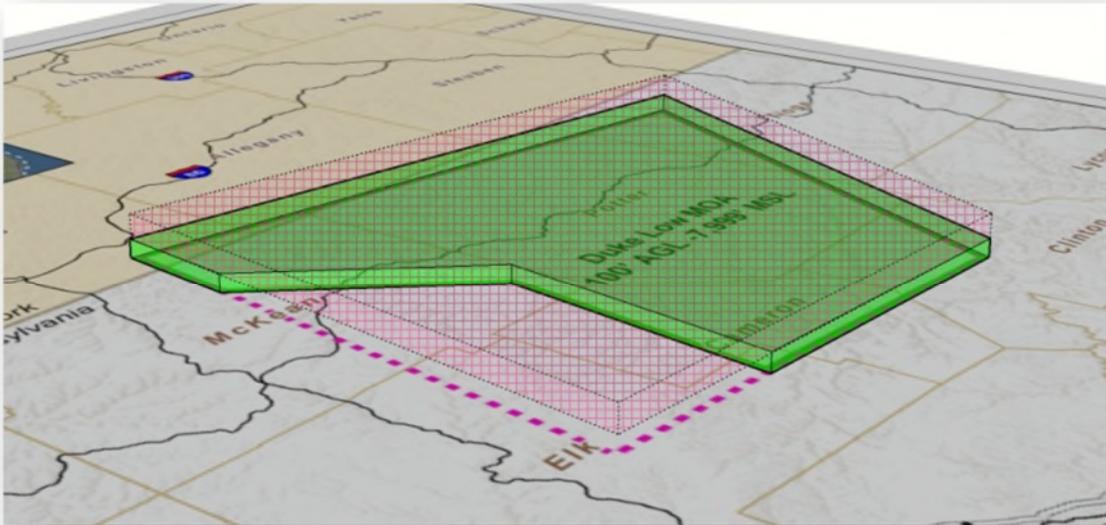


The purpose of the action is to establish low-level airspace beneath the existing Duke MOA to train and prepare military pilots and aircrews for current and future conflicts. The need for action is to accommodate 175 WG training requirements for a reliable and realistic training environment in which to conduct training for aircrews in accordance with AFI 11-2A-OA-10V1 and A-10 Ready Aircrew Program.

The 104 FS has 29 pilots on the Letter of Qualifications. Pilots are expected to maintain proficiency in all qualifications or continue to upgrade their qualifications as they gain experience. The AFI 11-2A-OA-10V1 specifies Low Altitude Step-Down training (LASDT) requirements for experienced pilots to fly at altitudes below 500 ft above ground level (AGL). The LASDT categories (500 ft AGL to 300 ft AGL to 100 ft AGL) and come into play during specific mission sets. Slightly more than half (58%) of 104 FS pilots have been qualified to fly down to 100 ft AGL. Availability of low-level training airspace is needed to avoid training shortfalls and a lack of combat readiness.

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:

- Vertical limits would be 100 ft AGL to 7,999 ft above MSL.
- Activation times would be intermittent by Notice to Airmen (NOTAM).
- A surface to 6,000 ft above MSL exclusion area would avoid Wellsboro Airport Class E airspace within the eastern side of the Duke Low MOA.
- Expected usage would be four hours per day, 170 days per year, two hours at a time, twice per day, with no more than six total aircraft.
- The Duke Low MOA would be scheduled separately from the Duke MOA and used only for sorties requiring the use of low altitude training.
- Weekend and night time operations at low-altitude would be limited.
- No supersonic operations, release of chaff and flares, infrastructure changes or ground disturbance, ordnance deployment, or weapons firing would be conducted in the Duke Low MOA.



Five action alternatives that were considered but were dismissed from detailed analysis because the alternatives did not meet the purpose and need for the action include modification of other existing airspace, creation of a new stand-alone MOA, use of existing Restricted Areas, and use of existing Military training Routes. The Proposed Action would (1) be within 200 miles of Martin State Airport, (2) provide sufficient low-level airspace to accommodate A-10C pilot training requirements, and (3) be adequate for 175 WG Letter of Qualifications. The EA will analyze the Proposed Action and the No Action Alternative. Under the No Action Alternative, local and deployed units would continue losing adequate training opportunities, thus degrading the combat capability of the 175 WG.

Through the process of interagency and intergovernmental coordination for environmental planning (IICEP), the ANG will notify relevant federal, state, and local agencies, and federally recognized tribes to request their environmental concerns specific to the Proposed Action. The Draft EA will be available on the 175 WG website and sent to regional libraries to invite public participation during a 45-day comment period. Historic resources under the proposed airspace are depicted in Figure 1.

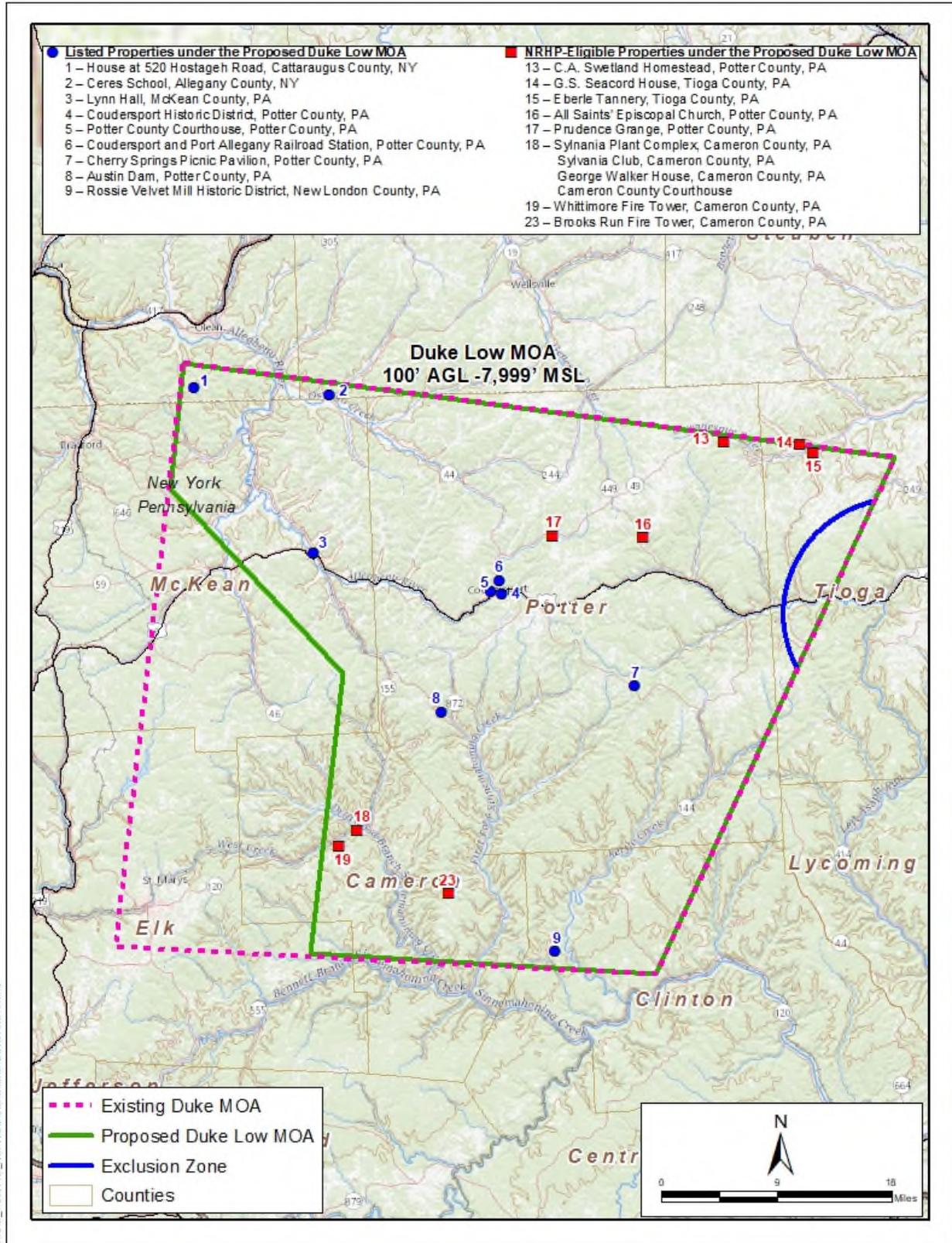


Figure 1. Historic Resources under the Proposed Duke Low MOA



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 175TH WING (ANG)
BALTIMORE MARYLAND**

26 August 2019

Sample Tribes Letter
Sample Tribes Recipient
Sample Address
Sample Address
Sample Address
Sample Address

Dear Sample Recipient,

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA). The project would accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment.

The National Guard Bureau (NGB) has invited the Federal Aviation Administration (FAA) to be a cooperating agency in the EA. The EA will assess the effects of the proposed action and will include analysis of the required no-action alternative. Enclosed, please find a description of proposed action (Att.1). In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we are writing this letter to advise you of this effort and to offer an invitation to consult with NGB on the project.

The Maryland ANG mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and also provide assistance to Allies during emergencies. The federal mission during peacetime has the combat-ready unit assigned to the Air Combat Command to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations. The 175 WG must have a reliable and realistic training environment in which to conduct upgrades and continuation training for aircrew.

The proposed Duke Low MOA would follow the lateral footprint of the Duke MOA as it currently exists except for the southwestern portion. The Duke Low MOA would be activated Tue - Fri between 1000-1200 and 1400-1600 hours and other times by Notice to Airmen (NOTAM). The vertical limits for the Duke Low MOA would be 100 feet Above Ground Level (AGL) to 7,999 feet above Mean Sea Level (MSL). The Duke Low MOA would be used only for sorties requiring the use of low altitude training. Weekend and night time operations at low-

altitude would be limited. The 175 WG flies one weekend per month with one week per month consisting of routine night training.

The ANG has reviewed the proposed project for potential effects on historic properties and, because there will be no associated ground disturbance, consider them to be minimal. Under the proposed action, there would be no infrastructure changes, no ground-disturbing activities, no weapons firing, and no ordnance deployment within the Duke MOA. No supersonic operations or release of chaff and flares would be conducted in the Duke Low MOA. Weekend and night time operations at all altitudes would be limited.

ANG intends to maximize the use of electronic transmittals during subsequent coordination phases of this project. A hard copy of the Draft and Final EA documents will be provided to your office for review. Enclosed is a copy of the distribution list for those agencies and organizations to be contacted regarding this EA (Att.2). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

In order for the ANG to address your concerns, in a timely manner for both the Tribe and the proposed undertaking, please respond within 30 days of receipt of this letter. Please provide any comments to Jennifer Harty, Cultural Resources Program Manager, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to [REDACTED]. Thank you for your assistance and we look forward to working with you on this undertaking.



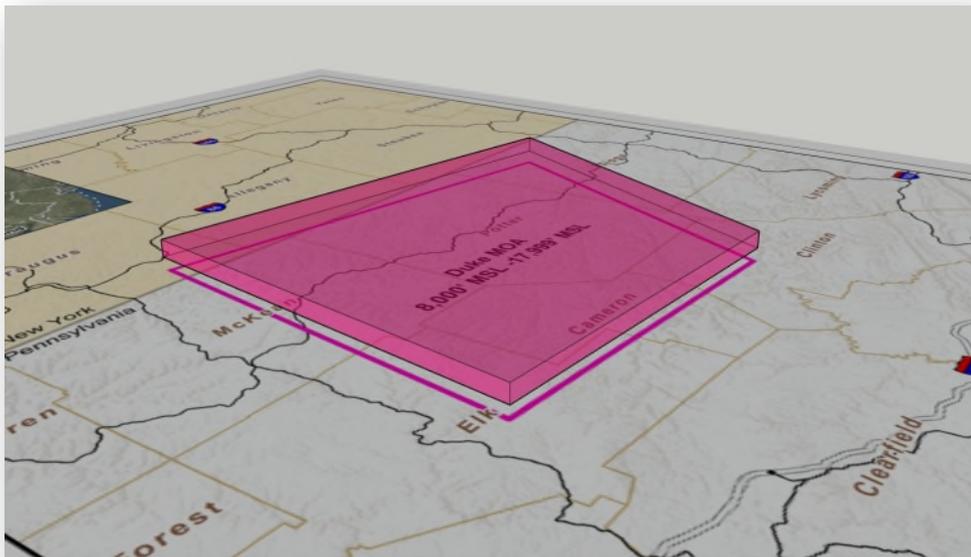
PAUL D. JOHNSON, Brig Gen, MDANG
Commander

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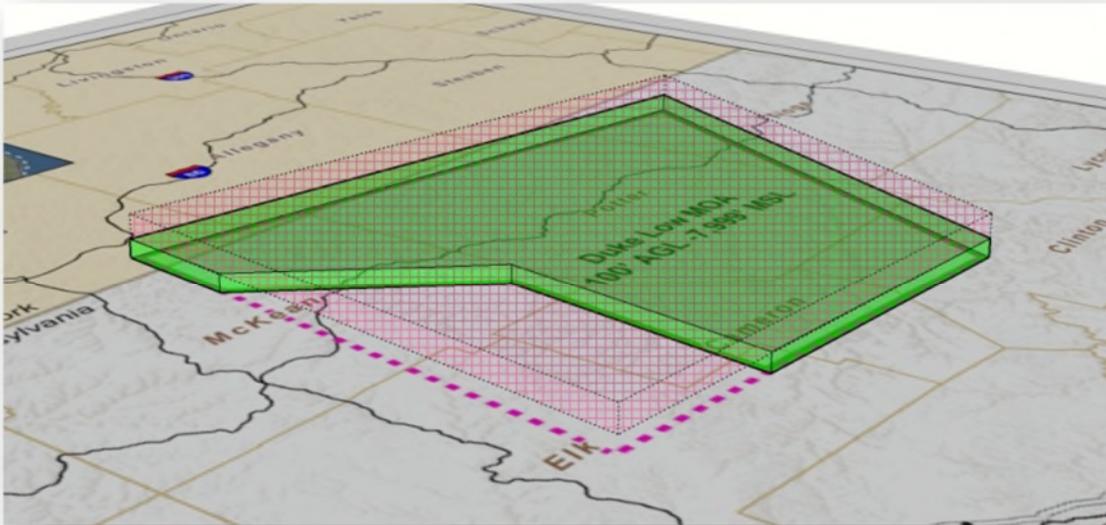


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- Weekend and night time operations at low-altitude would be limited.
- No supersonic operations, release of chaff and flares, infrastructure changes or ground disturbance, ordnance deployment, or weapons firing would be conducted in the Duke Low MOA.



Five action alternatives that were considered but were dismissed from detailed analysis because the alternatives did not meet the purpose and need for the action include modification of other existing airspace, creation of a new stand-alone MOA, use of existing Restricted Areas, and use of existing Military training Routes. The Proposed Action would (1) be within 200 miles of Martin State Airport, (2) provide sufficient low-level airspace to accommodate A-10C pilot training requirements, and (3) be adequate for 175 WG Letter of Qualifications. The EA will analyze the Proposed Action and the No Action Alternative. Under the No Action Alternative, local and deployed units would continue losing adequate training opportunities, thus degrading the combat capability of the 175 WG.

Through the process of interagency and intergovernmental coordination for environmental planning (IICEP), the ANG will notify relevant federal, state, and local agencies, and federally recognized tribes to request their environmental concerns specific to the Proposed Action. The Draft EA will be available on the 175 WG website and sent to regional libraries to invite public participation during a 45-day comment period. Historic resources under the proposed airspace are depicted in Figure 1.

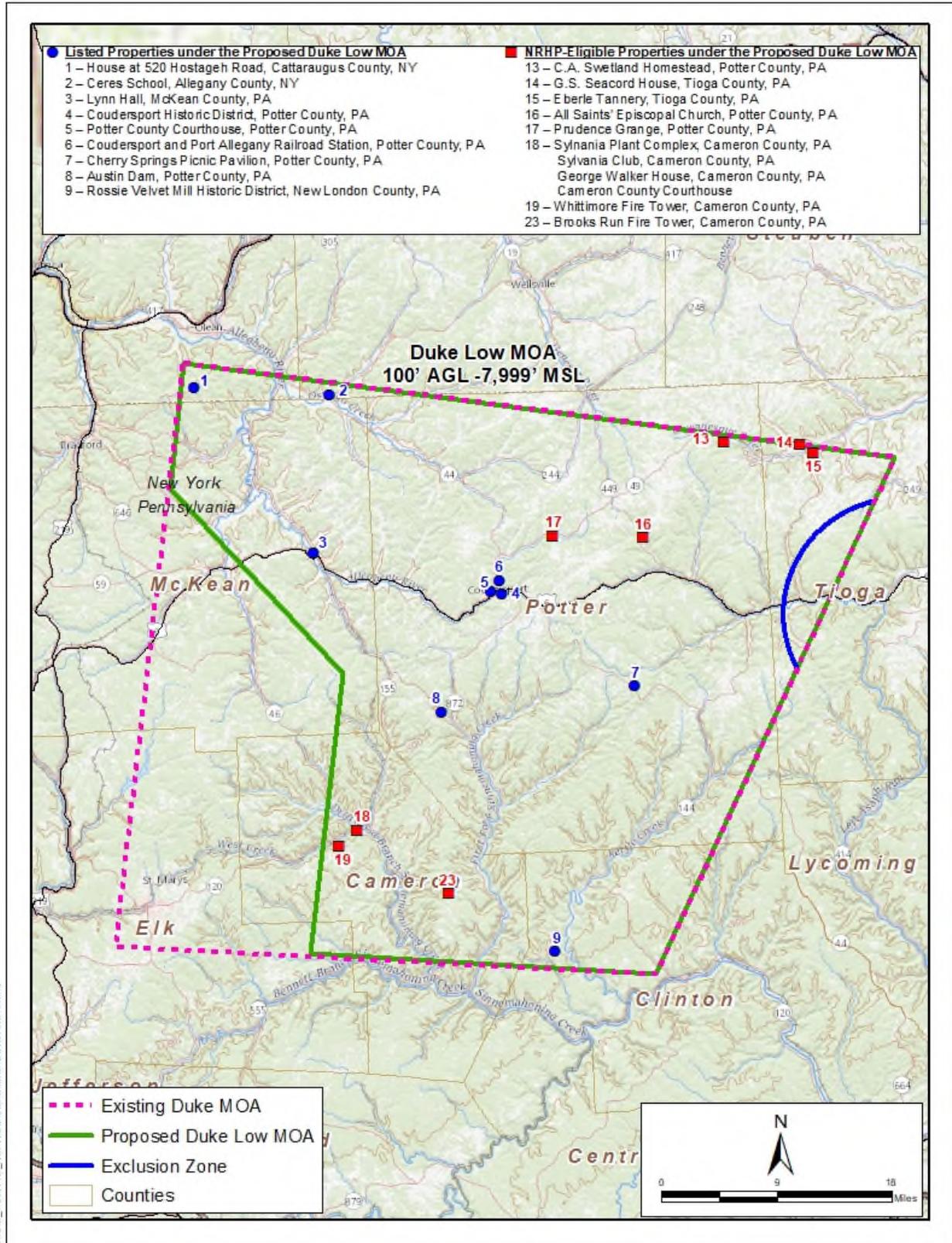


Figure 1. Historic Resources under the Proposed Duke Low MOA



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

26 August 2019

Ms. Andrea MacDonald
Pennsylvania Historical & Museum Commission - SHPO
400 North Street
Commonwealth Keystone Bldg, 2nd Floor
Harrisburg, PA 17120-0093

Dear Ms. MacDonald,

The United States Air Force National Guard Bureau (NGB) at Joint Base Andrews, Maryland 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 CFR §800).

Pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 USC 4321 et seq.), the NGB is preparing an Environmental Assessment (EA) for a proposed undertaking that will analyze potential effects to human health and the natural environment, including historic and traditional cultural properties. The purpose of the undertaking is for the proposed Modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland.

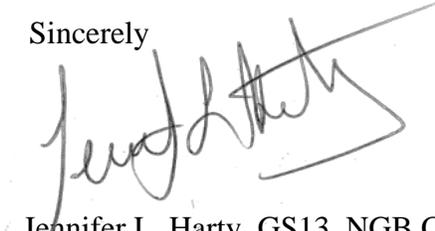
A complete project description is provided in Attachment 1, but in general, the proposed action would follow the lateral footprint of the Duke MOA as it currently exists except for the southwestern portion. The Duke Low MOA would be activated Intermittent by Notice to Airmen. The vertical limits for the Duke Low MOA would be 100 feet Above Ground Level (AGL) to 7,999 feet above Mean Sea Level (MSL). The expected usage would be four hours per day, 170 days per year, two hours at a time, twice per day, with no more than six total aircraft. The Duke Low MOA would be used only for sorties requiring the use of low altitude training. Weekend and night time operations at low-altitude would be limited. The 175 WG flies one weekend per month with one week per month consisting of routine night training.

The NGB has reviewed the proposed undertaking for potential effects to historic properties and, because there will be no associated ground disturbance, consider them to be minimal. Under the proposed action, there would be no infrastructure changes, no ground-disturbing activities, no weapons firing, and no ordnance deployment within the proposed air spaces. No supersonic operations or release of chaff and flares would be conducted. Weekend and night time operations at all altitudes would be limited.

Because there will be no ground disturbing activities or alterations to historic properties, the NGB has reached a determination of No Historic Properties Affected for the proposed undertaking. We respectfully request your concurrence with our determination. A hard copy of the Draft and Final EA documents will be provided to your office for review should you request one. We can also provide an electronic copy if you would prefer.

In order for the NGB to address any concerns, in a timely manner, please respond within 30 days of receipt of this letter. Please provide any comments to Jennifer Harty, Cultural Resources Program Manager, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or by email at [REDACTED]. Thank you for your assistance and we look forward to working with you on this undertaking.

Sincerely



Jennifer L. Harty, GS13, NGB Cultural
Resources Program Manager

Attachment:

1. Description of Proposed Action



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

26 August 2019

Mr. Roger Mackay
NY State Division for Historic Preservation
Peebles Island Resource Center
One Delaware Ave North
Cohoes, NY 12047

Dear Mr. Mackay,

The United States Air Force National Guard Bureau (NGB) at Joint Base Andrews, Maryland 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 CFR §800).

Pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 USC 4321 et seq.), the NGB is preparing an Environmental Assessment (EA) for a proposed undertaking that will analyze potential effects to human health and the natural environment, including historic and traditional cultural properties. The purpose of the undertaking is for the proposed Modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland.

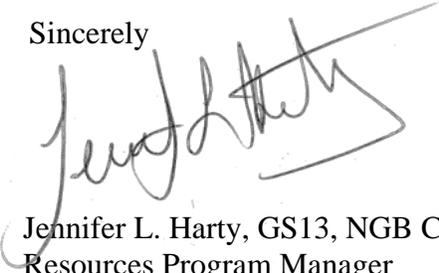
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Sincerely



Jennifer L. Harty, GS13, NGB Cultural
Resources Program Manager

Attachment:

1. Description of Proposed Action



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

26 August 2019

Ms. Sonja Jahrsdoerfer
Supervisor
Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987

Dear Ms. Jahrsdoerfer,

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment. In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we are writing this letter to advise you of this effort and request your assistance in identifying any potential issues related to the proposal.

The National Guard Bureau (NGB) has invited the Federal Aviation Administration (FAA) to be a cooperating agency in the EA. The EA will assess the effects of the Proposed Action and will include analysis of the required No-Action alternative. Enclosed, please find a detailed description of the Proposed Action (Att.1).

The Maryland ANG mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and also provide assistance to Allies during emergencies. The federal mission during peacetime has the combat-ready unit assigned to the Air Combat Command to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations. The 175 WG must have a reliable and realistic training environment in which to conduct upgrades and continuation training for aircrew.

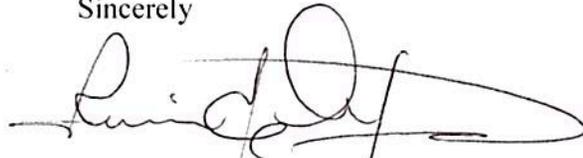
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Under the proposed action, there would be no infrastructure changes, no ground-disturbing activities, no weapons firing, and no ordnance deployment within the Duke MOA. No supersonic operations or release of chaff and flares would be conducted in the Duke Low MOA. Weekend and night time operations at all altitudes would be limited.

The National Guard Bureau intends to maximize the use of electronic transmittals during subsequent coordination phases of this project. A hard copy of the Draft and Final EA documents will be provided to your office for review. Enclosed is a copy of the distribution list for those agencies and organizations to be contacted regarding this EA (Att.2). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

In order for the ANG to address your concerns, in a timely manner, please respond within 30 days of receipt of this letter. Please provide any comments you may have within 30 days of receipt of this letter to me at Ramón E. Ortiz, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ramon.e.ortiz2.civ@mail.mil. Thank you for your assistance.

Sincerely

A handwritten signature in black ink, appearing to read 'Ramón E. Ortiz', written over a horizontal line.

RAMÓN E. ORTIZ, P.E.
Technical Lead Environmental Planner
NGB/A4AM - Plans and Requirements

2 Attachments:

1. Description of Proposed Action
2. IICEP Distribution List



NATIONAL GUARD BUREAU

3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

26 August 2019

Supervisor
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385

To Whom It May Concern:

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment. In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we are writing this letter to advise you of this effort and request your assistance in identifying any potential issues related to the proposal.

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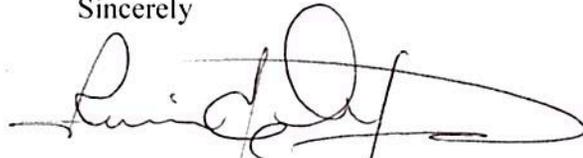
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In order for the ANG to address your concerns, in a timely manner, please respond within 30 days of receipt of this letter. Please provide any comments you may have within 30 days of receipt of this letter to me at Ramón E. Ortiz, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to ramon.e.ortiz2.civ@mail.mil. Thank you for your assistance.

Sincerely

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RAMÓN E. ORTIZ, P.E.
Technical Lead Environmental Planner
NGB/A4AM - Plans and Requirements

2 Attachments:

1. Description of Proposed Action
2. IICEP Distribution List



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, Pennsylvania 16801-4850

September 16, 2019

Ramón Ortiz
Technical Lead Environmental Planner
3501 Fetchet Avenue
Planning Division
Joint Base Andrews, MD 20762-5157

RE: USFWS Project #2019-1418

Dear Mr. Ortiz:

This responds to your letter of August 26, 2019, requesting information about federally listed and proposed, endangered and threatened species within the area affected by the proposed upcoming Environmental Assessment (EA) for the Modification of Duke Military Operations Airspace (MOA) project located in Elk, Cameron, Clinton, McKean, Potter, and Tioga Counties, Pennsylvania. The proposed MOA project is within the known range of the federally endangered Indiana bat (*Myotis sodalis*); the northern long-eared bat (*Myotis septentrionalis*), a species federally listed as threatened; the rayed bean (*Villosa Fabalis*), a freshwater mussel federally listed as endangered; and northeastern bulrush (*Scirpus ancistrochaetus*), a federally listed endangered plant. It is also within the range of known bald eagle (*Haliaeetus leucocephalus*) nests. The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species, and the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended; 16 U.S.C. 668-668d) to ensure the protection of eagles.

Indiana Bat

Clinton County is within the range of the Indiana bat. Studies have found that forested areas provide important foraging and roosting habitat for Indiana bats, especially during the fall and spring, when bats are building up their fat reserves prior to and after hibernation. You state that there will be no ground-disturbing activities throughout the project area. However, more information concerning your project will be necessary in order to assess possible impacts to bats associated with ground vibrations. During preparation of the Environmental Assessment, please include an analysis of the ground vibrations associated with airspace use at 100 ft Above Ground Level (AGL) to 7,999 ft above Mean Sea Level (MSL).

Northern Long-eared Bat

All counties within your proposed project are within the range of northern long-eared bats. The northern long-eared bat hibernates in caves and abandoned mines during the winter months (November through March), and uses a variety of upland, wetland and riparian habitats during the spring, summer and fall, usually roost in dead or living trees with exfoliating bark, crevices or cavities. The Service issued a special rule that exempts incidental take¹ that may occur while conducting otherwise lawful activities. However, take within hibernacula is prohibited. Take of northern long-eared bats inside of hibernacula may include disturbing or disrupting hibernating individuals when they are present as well as the physical or other alteration of the hibernaculum's entrance or environment when bats are not present if the result of the activity will impair essential behavioral patterns, including sheltering northern long-eared bats.

The southern portion of Clinton County is within 0.25 miles of a known northern long-eared bat hibernaculum. In addition, McKean, Potter, Tioga, Elk, and Clinton Counties contain known, occupied maternity roost trees throughout the counties. No tree removal is associated with your project; however, more information will be necessary to better understand possible impacts to bats throughout the project timeframe. As stated above, please include an analysis of the ground vibrations associated with airspace use at 100 ft AGL to 7,999 ft above MSL.

Northeastern Bulrush

Tioga and Clinton Counties are within the range of northeastern bulrush. The northeastern bulrush is typically found in ponds, wet depressions, shallow sinkholes, vernal pools, small emergent wetlands, or beaver-influenced wetlands. These wetlands are often located in forested areas and characterized by seasonally variable water levels. Based on your project description, there will be no ground disturbance; therefore, the Service does not anticipate impacts to northeastern bulrush.

Rayed Bean

McKean and Potter Counties are within the range of the rayed bean mussel. As sedentary filter-feeders, freshwater mussels are vulnerable to substrate disturbance, silt deposition, scouring, and water quality degradation. Therefore, based on your project description that there will be no ground disturbance, the Service has does not anticipate impacts to rayed bean.

Bald Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (Eagle Act). The Eagle Act protects eagles by prohibiting killing, selling, disturbing, or otherwise harming eagles, their nests or eggs. "Disturb" means to agitate or bother a bald or golden eagle

¹ Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. The term "harass" (50 CFR 17.3) means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The term "harm" (50 CFR 17.3) means an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle; 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

There are known bald eagles nests within all counties associated with your project. Consequently, we recommend that you evaluate the project type, size, location and layout in light of the *National Bald Eagle Management Guidelines* to determine whether bald eagles may be disturbed as a direct or indirect result of your project. If it appears that disturbance may occur, we recommend that you consider modifying your project consistent with the *Guidelines*. These guidelines, as well as additional eagle information, are available at <http://www.fws.gov/northeast/EcologicalServices/eagle.html>. To assist you in making a decision regarding impacts to bald eagles, a screening form can be found at https://www.fws.gov/northeast/pafo/bald_eagle_map.html.

If you have additional questions regarding eagle permits, please contact Thomas Wittig, Northeast Regional Bald and Golden Eagle Coordinator at 413-253-8577 or Thomas_Wittig@fws.gov.

This response is based on the information submitted to this office and our knowledge of species distribution and habitat needs. No field inspection of the project area has been conducted by this office.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

Please contact Nicole Ranalli of my staff at 814-206-7455 if you have any questions regarding this matter.

Sincerely,



Sonja Jahrsdoerfer
Project Leader

From: Niver, Robyn <robyn_niver@fws.gov>
Sent: Tuesday, September 17, 2019 9:53 AM
To: Ortiz, Ramon E CIV USAF NGB A4 (USA) <ramon.e.ortiz2.civ@mail.mil>
Cc: Rothrock, Anne O (DEC) <anne.rothrock@dec.ny.gov>; MacDuff, Andrew (DEC) <andrew.macduff@dec.ny.gov>; Sandra Doran <sandra_doran@fws.gov>
Subject: [Non-DoD Source] Low Military Operations Airspace

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Good morning, Ramon,

Thank you for the notification of upcoming draft environmental assessment for a proposed low flight area including portions of Pennsylvania and New York State. I encourage you to coordinate with the New York State Department of Environmental Conservation (NYSDEC) to obtain information about bald eagle nests/roost concentrations in the area to include those in your flight plans, similar to other hazards such as communication towers. Our recommendation for aircraft activity is a minimum 3-dimensional 1000-foot buffer, however, NYSDEC has worked with other installations and may have alternative recommendations.

I have copied the local wildlife biologist, Anne Rothrock and the wildlife manager, Andy MacDuff, that worked with the Army on buffers across northern NY.

There may be similar concerns in Pennsylvania, but I don't have any specific information.

Thank you,
Robyn

--

Robyn A. Niver
Endangered Species Biologist
USFWS
New York Field Office
3817 Luker Road
Cortland, NY 13045
607-299-0620

Caution-<https://www.fws.gov/northeast/nyfo/index.html> < Caution-
<https://www.fws.gov/northeast/nyfo/index.html> >

"Let us have faith that right makes might, and in that faith, let us to the end, dare to do our duty as we understand it." - Abraham Lincoln



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

September 26, 2019

Mr. Ramón E. Ortiz
National Guard Bureau
3501 Fetchet Avenue
Joint Base Andrews, Maryland 20762-5157

RE: Air National Guard – Modification of Duke Military Operations Airspace; scoping for the development of an Environmental Assessment

Dear Mr. Ortiz:

In accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508), the U.S. Environmental Protection Agency (EPA) is responding to notice that the Air National Guard (ANG) at Joint Base Andrews is preparing an Environmental Assessment (EA) for the proposed modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing, Maryland ANG stationed at Warfield Air National Guard Base in Baltimore, Maryland.

As described by CEQ regulations, the purpose of an EA is to briefly provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact. §1508.9 states the EA should include a brief discussion of the need for the proposal, the alternatives considered, the environmental impacts of the proposed action and alternatives, and a listing of the agencies and persons consulted. We are providing a number of comments for your consideration in the development of the EA.

While the boundaries of the MOA are not clear in the attached figure, the letter indicates that underlying counties are Cameron, Clinton, Elk, McKean, Potter, and Tioga Counties in Pennsylvania as well as a small portion of Cattaraugus and Allegany Counties in New York. This MOA is generally located over the area known as the Pennsylvania Wilds region, which publicizes the approximately 2.1 million acres of public land in northcentral counties of the Commonwealth. This an outdoor recreation destination that attracts people for a range of activities based on enjoying the natural environment. We recommend the EA discuss current conditions of the area and evaluate the range of potential impacts from the proposed action. Specific recommendations are provided in the attached enclosure.

Thank you for providing us with this notice for our review. If you have any questions or would like to discuss the suggestions provided in the enclosure, please don't hesitate to contact Carrie Traver at 215-814-2772 or traver.carrie@epa.gov.

Sincerely,

A handwritten signature in cursive script, appearing to read "Barbara Rudnick".

Barbara Rudnick
NEPA Program Coordinator
Office of Communities, Tribes and
Environmental Assessment

Enclosure

Air National Guard – Modification of Duke Military Operations Airspace (MOA) Environmental Assessment Scoping

As indicated above, the project overlays a portion of the Pennsylvania Wilds, which includes Warren, Lycoming, Forest, Clearfield, Clarion, Jefferson and Centre counties in addition to the counties impacted by the MOA. The Pennsylvania Wilds is an outdoor recreation destination that attracts tourists, residents, and part-time residents who come to experience the undeveloped nature of the region and enjoy nature-based activities such as camping, hiking, riding, biking and skiing trails, bird watching and wildlife viewing, hunting, fishing, astronomy and stargazing, and water sports, such as swimming, whitewater rafting, and boating. Overall, 29 Pennsylvania State Parks, 8 State Forests, and a number of State Game Lands are found in the Wilds. Pine Creek Gorge, the “Grand Canyon of Pennsylvania” and Cherry Springs State Park, a certified International Dark Sky Park, are located in the affected counties. Allegany State Park is located in New York, just across the border in the “Enchanted Mountains” of Cattaraugus County.

The ANG letter indicates that the vertical limits for the proposed Duke Low MOA would be 100 feet Above Ground Level to 7,999 feet above Mean Sea Level. This Low MOA would generally follow the existing Duke MOA with minor modification; however, the impacts from low altitude flying could be substantial, and both impacts and alternatives should be carefully evaluated.

EPA has the following recommendations for information to include in the EA:

Proposed action and Scope of analysis

For clarity, the EA should identify the area of effect of the project, including any areas outside the MOA that may be either directly or indirectly impacted. A map clearly showing the boundaries of both the existing and proposed MOA would be helpful. As indicated above, the boundaries of the MOA are not clear in the attached figure.

It would be helpful to the reader if the EA explain where, when, and how very low operations would be conducted to understand the scope of impacts. We recommend that a discussion of avoidance of towers or other structures that may exceed 100 feet also be included.

Purpose and Need

Since the range of alternatives evaluated is defined by the purpose and need for the project, it is important that the purpose and need be clearly identified in the EA. The EA would benefit from a discussion of the selection and use of the current MOA boundaries, including an explanation how the current MOA location in northern Pennsylvania and southern New York was chosen. Additionally, Attachment 1 indicates some constraints; we recommend these constraints be fully discussed.

Alternatives analysis

As described in the regulations for CEQ (40 CFR §1502.14), the examination and comparison of alternatives is the heart of the environmental document. It is through this comparison that the lead agency is able to incorporate agency and public input to make informed decisions regarding the merits of the project and the advantages and disadvantages of each of the alternatives being studied.

The notice provided indicates that the EA will analyze the Proposed Action and the No Action Alternative and that five alternatives were considered but dismissed. We recommend that alternative locations, alterations of the MOA, operational alternatives, or other alternatives be thoroughly evaluated in the EA for the Low MOA, and that details of each alternative, including the “no action” alternative, be clearly presented in a comparative form for easy interpretation and understanding by the reader. For those alternatives that are eliminated from consideration, the specific reasons for their elimination should be given.

Safety

It is important that the EA include an evaluation of potential safety-related issues, particularly in low-elevation maneuvers. Operation of A-10C aircraft and any failures of aircraft 100 feet above Above Ground Level could be potentially hazardous to any people or livestock that may be in the vicinity. It is recommended that safety concerns for both pilots and persons in the MOA, including residents as well as trail users and hunters in wilderness areas, be fully evaluated. Any data available on safety and potential for accidents or collisions associated with heavily forested terrain should be presented to the public in the study.

We also suggest consideration of the prospect of low-flying aircraft to startle animals. Startle of large prey animals such as elk and white-tailed deer could create an additional safety hazard as they typically flee when frightened; this may result in accidents if the run into roads or people in the area. Livestock, including horses being ridden on trails, may also be frightened which can cause injuries.

Wildlife

We recommend detailed evaluation of potential impacts on wildlife. Some key considerations include the potential for wildlife-aircraft strikes and disruption/startle of wildlife. Please discuss if a bird/wildlife-aircraft strike hazard (BASH) plan will be implemented and provide information on implementation of the hazard abatement program.

Impacts on migratory species should also specifically be evaluated. Time of year restrictions or other minimization measures may be appropriate. We encourage you to consult with the U.S. Fish and Wildlife Service and appropriate state agencies such as Pennsylvania Game Commission and Department of Conservation and Natural Resources to consider actions and alternatives that minimize impacts to wildlife, especially species of special concern, and document this coordination in the EA.

This area is also known for the re-introduced elk herd; elk viewing and hunting in Cameron and Elk Counties draw a number of tourists, particularly during the breeding season in fall. We recommend a thorough evaluation of potential impacts on elk breeding, calving, hunting, and associated tourism if the MOA overlaps with the range of the elk. (See <https://visitpago.com/outdoor-adventures/elk-viewing/> and <https://www.pgc.pa.gov/Wildlife/WildlifeSpecies/Elk/Pages/default.aspx>)

PA Wilds Region

As stated previously, the Pennsylvania Wilds is an outdoor recreation destination that attracts hikers, bikers, backpackers, campers, hunters, fishermen, horseback riders, cross-country skiers, boaters, and others who come to experience nature-based activities. (See <https://pawilds.com/> and <https://www.dcnr.pa.gov/Communities/ConservationLandscapes/PennsylvaniaWilds/Pages/default.aspx>) While aircraft in the existing MOA above 8,000 feet may have minimal effects on the region, the EA

should evaluate and discuss the impacts of low-flying aircraft on the residents in the rural areas and the wilderness experience of visitors. Some specific aspects to consider include:

Noise

As this is a predominantly rural area, noise impacts could potentially be substantial. While some buffering of noise can be expected indoors; even mild noise can be disruptive and adversely impact the experience of those who are participating in outdoor activities such as camping and hiking. Therefore, we recommend that the document include a thorough study of noise impacts to rural communities and residents, particularly children and environmental justice communities, and evaluate impacts on outdoor recreation and tourism. The documentation should include considerations of noise based on factors such as aircraft type, flight path, altitude, time of day, and other factors.

Aesthetics/Visual impacts

Visual impacts could also be a concern, especially during night training. Wilderness experiences and astronomical observation may be reduced by the intrusion of low-flying aircraft. Cherry Springs State Park reportedly attracts “astronomers and stargazers from all over the world.” Cherry Springs, and nearby state parks such as Patterson, Prouty Place, Lyman Run, and Denton Hill are destinations for cosmological events such as the annual Perseid meteor shower. The EA should consider the impacts to the region as a destination for wilderness activities and for astronomy.

Socioeconomic Impacts and Quality of Life

It is appropriate to carefully evaluate the economic consequences of the proposed action, including a potential decrease in recreational activities and tourism within the Low MOA. We suggest the EA evaluate potential unintended consequences of the action, including the possibility of recreational users avoiding the region, residents relocating, or part-time residents selecting other areas for their vacation homes and hunting cabins.

We also suggest the EA consider and discuss impact to residents and part-time residents who may have chosen to live in a rural and relatively undisturbed location; both the noise and visual impacts from low-flying planes may adversely impact their rural sense of place and quality of life.

Environmental Justice

An assessment as to whether the Project activities may disproportionately impact low-income and/or minority communities should be considered and inform appropriate outreach and /or mitigation. Methodologies are discussed by several agencies including CEQ. EPA’s environmental justice (EJ) screening tool, EJSCREEN, can be utilized as well for demographic information on the census block group level. Additionally, you may refer to “Promising Practices for EJ Methodologies in NEPA Reviews”: <https://www.epa.gov/environmentaljustice/ej-iwg-promising-practices-ej-methodologies-nepa-reviews>.

Outreach

We encourage you to identify effective outreach in the predominantly rural area. We recommend that you develop a robust public outreach plan to engage the potentially impacted residents, businesses, and recreational users to capture the range of concerns that may occur with the implementation of the action. We recommend that you reach out locally to potentially impacted State Parks, State Forests, outfitters, and other facilities that may be affected by the proposed action.

Air Quality

We suggest the EA state if the project area is within an area of nonattainment in relation to general air conformity. The EA should identify areas that meet the National Ambient Air Quality Standards (NAAQS) standard for a criteria pollutant as well as those areas where a criteria pollutant level exceeds the NAAQS. Additionally, we suggest anticipated emissions be evaluated and discussed in the EA.

Cumulative impacts

Cumulative impacts from the proposed project should be evaluated. Cumulative effects “are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.”

From: Gustafson, Staci <gustafson@pa.gov>
Sent: Tuesday, September 17, 2019 12:57 PM
To: Ortiz, Ramon E CIV USAF NGB A4 (USA) <ramon.e.ortiz2.civ@mail.mil>
Cc: Dressler, Jared <jardressle@pa.gov>; Kohl, Marcus J <mkohl@pa.gov>; Miller, James E. <jamesmill@pa.gov>; Babb, Brian <bbabb@pa.gov>; Ryder, John <jryder@pa.gov>
Subject: [Non-DoD Source] Duke MOA Review

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Dear Mr. Ortiz,

The Department of Environmental Protection (Department) has reviewed the proposed modification of the Duke MOA. We bring to your attention the potential presence of drilling rigs that may be erected more than 100 feet in height. Attached is a map of locations where, in the last 16 months, the Department has issued permits for drilling rigs that exceeded 100 feet in height. Should you have any questions, please contact Brian Babb, Subsurface Permits Environmental Program Manager with the Department's Oil and Gas Program, at 814.332.6857 or bbabb@pa.gov < Caution-mailto:bbabb@pa.gov > .

Submitted on behalf of:

Marcus Kohl | Regional Director
Department of Environmental Protection |
North Central Regional Office
208 West Third Street Suite 101 | Williamsport PA 17701
Phone: 570.327.3695 | Fax: 570.327.3565
[Caution-www.dep.pa.gov](http://www.dep.pa.gov)
< Caution-www.dep.pa.gov%0b >

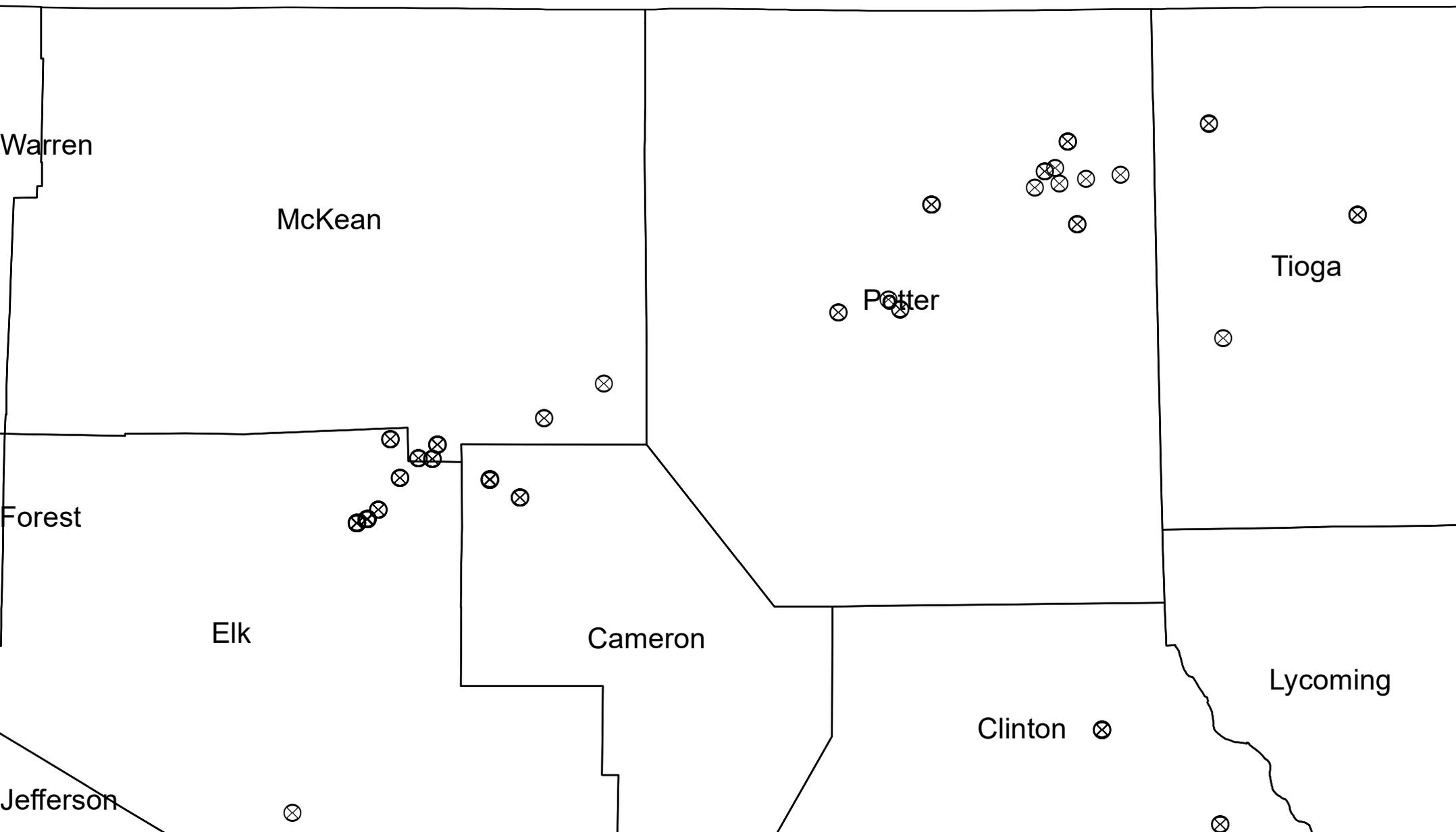
James Miller | Regional Director
Department of Environmental Protection
North West Regional Office
230 Chestnut Street | Meadville PA 16335
Phone: 814.332.6816 | Fax: 814.332.6125
[Caution-www.dep.pa.gov](http://www.dep.pa.gov)
< Caution-www.dep.pa.gov%0b >

Regards,

Staci Gustafson | Assistant Regional Director
Department of Environmental Protection | Field Operations
230 Chestnut Street | Meadville, PA 16335
Phone: 814.332.6935 | Fax: 814.332.6125 [Caution-www.dep.pa.gov](http://www.dep.pa.gov) < Caution-
<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2FCaution->

[7C418e284101284dd59b6c47fc5a9a1bde%7C1%7C0%7C636597657686330837&sdata=ZAP5mO5Acb86n%2Ffc482J%2BvXv9K9cAdqqExHfcZqwHW18%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2FCaution-7C418e284101284dd59b6c47fc5a9a1bde%7C1%7C0%7C636597657686330837&sdata=ZAP5mO5Acb86n%2Ffc482J%2BvXv9K9cAdqqExHfcZqwHW18%3D&reserved=0) >

The 24-hour toll free Emergency Response number is: 1-800-541-2050



Warren

McKean

Potter

Tioga

Forest

Elk

Cameron

Lycoming

Clinton

Jefferson



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

September 19, 2019

Jennifer Harty
Cultural Resources Program Manager
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

ER 2019-2214-042-A: USAF National Guard Bureau, Modification of Duke Military Operations Airspace (MOA), Duke Low MOA, McKean, Cameron, Potter, Clinton and Tioga Counties, Pennsylvania

Dear Ms. Harty,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution, and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Project Description

The proposed project involves the modification of Duke Military Operations Airspace (MOA) to establish low-altitude airspace for the Maryland Air National Guard, A-10C Squadron for training. The vertical limits would be 100 feet Above Ground Level (AGL) to 7,999 feet above Mean Sea Level (MSL). The expected usage would be four hours per day, 170 days per year, two hours at a time, twice a day, with no more than six total aircraft.

Archaeological Review Comments

There is a high probability that archaeological resources are located in this project area. In our opinion, the activity described in your proposal should have no effect on such resources.

Above Ground Resources Review Comments

We require more information to complete our review of this project, as outlined below.

Area of Potential Effect (APE)

The APE is defined as the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties. The APE should take into account those areas from which the project may have direct or indirect effects on historic properties.

Please provide a larger USGS map or an USGS map for each county with the APE delineated.

Potential Indirect Effects and Identification of Historic Properties

Audible: If the audible aspects of the setting of a historic property are fundamental to the resources' National Register of Historic Places (NRHP) eligibility, then newly introduced audible intrusions that would significantly alter the resource's setting could have a potential adverse effect. There are numerous state parks and a portion of the Allegheny National Forest in the vicinity of the proposed project that may have significance in the area of Recreation/Conservation. Many of these resources have not been previously evaluated for the NRHP.

Has there been an analysis of the potential noise related impact associated with the operation of the Duke Low MOA?

Has there been an effort to identify potential historic resources in the APE whose setting and significance would be affected by increases in noise?

Vibration: Studies have established that subsonic noise related to vibration can damage an above ground resource when high decibel levels in a low frequency range are generated in close proximity to the above ground resource for an extended period of time (NPS 1994). Similar studies have shown that aircraft generating at least 120 dB at a distance of less than 150 feet for an extended period can cause measurable structural damage to above ground resources (Battis 1983), taken from "March Air Reserve Base, California, Environmental Assessment," February 2003, 4-45.

The NRHP listed Austin Dam, Key # 046777 appears to be in the APE for the project. At the time of its listing in the 1980s, the dam included "a series of broken sections...five large sections remain upright while two large sections and several smaller pieces are toppled." It was categorized as a ruin.

Please provide more information on the probability of the sorties being in the vicinity of the Austin Dam for an extended period of time and the potential for effects to the ruin. What measures, if any, will be undertaken to protect the fragile nature of this NRHP listed ruin?

Consulting Parties

This project has the potential to affect historic properties. In accordance with the regulations for Section 106 (36 CFR 800.2.a.4), federal agencies or those acting on their behalf are required to consider the effects of their undertakings on historic properties in consultation with identified historic preservation stakeholders. Consultation is defined as the process of seeking, discussing and considering the views of other participants and, where feasible, seeking agreement with them regarding matters arising in the Section 106 process. Please provide documentation of your agency's efforts to identify consulting parties with an interest in the effect of this project on historic properties.

The following organizations may have an interest in participating in the Section 106 consultation.

PA Wilds Center for Entrepreneurship
Ta Enos, Executive Director
PA Wilds Center
PO Box 285
Sugar Grove PA 16350
tenos@pawildscenter.org

PA Wilds Planning Team
Jim Weaver, Chair
Jmwvr69@gmail.com

Deborah Pontzer
Economic Development Work Force Specialist,
Congressman Glenn Thompson's Office
Deborah.pontzer@mail.house.gov

Austin Dam Memorial Association
PA-872
Austin PA 16720

Allegheny National Forest
29 Forest Service Drive
Bradford PA 16701

McKean County Historical Society
502 W. King Street
Smethport PA 16749

Clinton County Historical Society
362 E. Water Street
Lock Haven PA 17745

SEDA Council of Governments
201 Furnace Road
Lewisburg PA 17837

Forest Fire Lookout Association
Kyle Stetler | _____

Lumber Heritage Region
Cameron County courthouse
20 East Fifth Street
Emporium PA 15834

PA Route 6 Alliance/Heritage Corridor
PO Box 180
Galeton PA 16922

Potter County Historical Society
308 N. Main St
Coudersport PA 16915

Tioga County Historical Society
120 Main Street
Wellsboro PA 16901-1411

Cameron County Historical Society
125 W Greenwood St
Emporium PA 15834

If you need further information in this matter, please contact Cheryl L. Nagle at chnagle@pa.gov or (717) 772-4519.

Sincerely,



Douglas C. McLearen, Chief
Division of Environmental Review

October 1, 2019

Ramon E. Ortiz
National Guard Bureau
3501 Fetchet Avenue
Joint Base Andrews 20762-5157
Email: ramon.e.ortiz2@eiv.mail.mil

SUBJ: DCNR Comments on Duke MOA

Dear Mr. Ortiz:

Please find the following comments on behalf of the Pennsylvania Department of Conservation & Natural Resources (DCNR) related to the proposed action by the Air National Guard (ANG) to establish a Low MOA below the existing Duke MOA, 100 feet above ground level to 7,999 feet above Mean Sea Level (MSL) to be used 4 hour per day, 170 days per year, two hours at a time, twice a day, with no more than six total aircraft.

This proposal would impact low-level airspace in the counties of Cameron, Clinton, Elk, McKean, Potter, and Tioga where DCNR holds and manages thousands of acres of land for wildlife habitat and public recreation. DCNR has concerns regarding the proposal and its impact on wildlife, residents and visitors, and the communities that rely on the outdoors for steady tourism revenue. The proposed activity would drastically change the character of this region and the numerous state parks and forests that shape its unique conservation landscape and wilderness.

Per Article 1 Section 27 of Pennsylvania's constitution, the state is a trustee of the commonwealth's natural resources. State parks and forests are in the public natural resource trust. As a trustee, the commonwealth is obligated to conserve and maintain the corpus of the trust for future generations. DCNR is mandated to prevent and remedy any degradation, diminution, or depletion of the natural resources. As such, the public natural resource must be compensated for any impacts. Article 1, Section 27 states:

"The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people."

The proposed Low MOA would impede on Pennsylvanians' constitutional right to experience and enjoy *natural, scenic, historic, and aesthetic values of the environment*.

Some of the state forest and park lands in this region have been protected through the Land & Water Conservation Fund (LWCF) State Assistance Program, which was established by the LWCF Act of 1965 to assist in preserving, developing, and assuring to all citizens of the United States of present and future generations such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation. The state must comply with the National Environmental Policy Act (NEPA) in regards to all federally-funded projects as well as the following federal laws and executive orders:

- National Historic Preservation Act
- Endangered Species Act
- Floodplain Management and Wetland Protection
- Environmental Justice in Minority and Low-Income Populations
- Department of Interior Environmental Compliance Memorandum
- Intergovernmental Review of Federal Programs

If the proposed Low MOA is approved there will be impact on outdoor recreation, especially for those that are seeking a wilderness experience. This impact may constitute a conversion which will require the acquisition of replacement land.

The following state forests would be impacted: Elk, Moshannon, Sproul, Susquehannock, Tioga, and Tiadaghton encompassing tens of thousands of acres of forest land and wilderness. Visitors look to Pennsylvania's state forest system for a variety of recreational activities, including hiking, camping, hunting, and wildlife viewing.

Twelve state parks would be impacted by this proposed activity, including Bucktail, Cherry Springs, Denton Hill, Elk, Kettle Creek, Lyman Run, Ole Bull, Patterson, Prouty Place, Sinnemahoning, and Sizerville. Pennsylvania's state park system draws over 36 million visitors each year and significantly supports the state's \$13 billion outdoor recreation and tourism industry.

Pennsylvania established a Conservation Landscape entitled Pennsylvania Wilds in this region which has unified public and private efforts to leverage funding and work collaboratively to protect the natural resources, establish a tourist destination, and grow a core industry around outdoor recreation. \$130 million in new infrastructure improvements have been implemented to DCNR lands and facilities in the region, including a recent \$860,000 grant through the U.S. Department of Commerce's Economic Development Administration.

The region, before capitalizing on its natural character and heritage, had experienced decades of divestment and population decline. Nature tourism and outdoor recreation are the significant economic drivers for communities in the Pennsylvania Wilds; preserving the scenic beauty and natural landscape has been the foundation for growing the \$1.8 billion nature and heritage tourism of the region.

It is the Commonwealth's greatest concentration of public lands, the state's largest acreage of wilderness, and is home to two National Wild & Scenic Rivers, the largest elk herd in the northeast, and Cherry Springs State Park, a Gold Level Dark Sky Park designated by the International Dark Sky Association. The region's rugged landscape has shaped the region's culture and identity in positive ways, cultivating an independent, entrepreneurial spirit, and a commonsense conservation ethic.

The frequency of the proposed activity would greatly impact the work and investments made in this region to draw visitors from across Pennsylvania and beyond and it would make it difficult for DCNR to fulfill its mission, which is to conserve and sustain Pennsylvania's natural resources for present and future generations' use and enjoyment.

The activity is proposed to occur almost half of the year (170 days) for 4 hours a day which would cause extreme disruption to those on the ground; negatively impact the tourism industry (which provides significant economic benefits to this region of Pennsylvania); and cause cumulative impacts to wildlife in particular, migratory birds and elk.

We have significant concerns regarding the proposed activity over the Pennsylvania Wilds and request that the ANG:

- Consider a no-action alternative, in which the AFB maintains current flight protocols and operations as defined in the current MOA;
- Consider alternative locations that would not be as adversely impacted by the frequency and nature of this activity;
- Limit the activity significantly to lessen the impacts on the proposed region by:
 - Eliminating any low-level flight activity directly above state parks and key recreational, historical, and tourist destinations (consulting with DCNR and other stakeholders as appropriate). NOTE: *DCNR has imposed restrictions on unmanned aerial systems (UAS) for park benefit and safety to visitors and wildlife. The Bureau of State Parks has a policy that disapproves peacetime military training on state park land, as per Act 18 of 1995, 71 P. S. Section 1340.303(a) (2) and (4) "to promote healthful outdoor recreation and environmental education."*
 - Prohibiting this activity during the following months: April, May, September, and October (to avoid impacts to raptor migration and the elk rut);
 - Prohibiting activity on weekends and federal holidays, which draw large numbers of visitors;
 - Prohibiting activity to avoid interference with key recreational activities, including:
 - Spring Turkey Hunting Saturdays in May = 4 days

- Big Game Hunting Seasons of Traditional Rifle Bear and Deer = 15 days
- Elk Tourism: Mid-Sept to Mid-Oct. = 30 days
- Calving Season (stress) – May-June of Deer & Elk = approximately 30 days
- Primitive Hunting Season: from Christmas Day onward = 14 days

We recognize the need for training opportunities within the ANG but have serious concerns regarding the cumulative impacts of the proposed Duke Low MOA to the quality of life and economy of the PA Wilds region. For the reasons indicated above, the agency believes that these low-level airspace activities are not conducive to the nature of this wilderness area and could adversely impact the natural resources and wildlife we protect; impede Pennsylvanians' constitutional right to recreate in our parks and forests; and harm the people and businesses that rely on these lands for their livelihood.

Thank you for your consideration.

Sincerely,



Cindy Adams Dunn
Secretary



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

7 August 2020

Mr Ramón E. Ortiz, P.E., GS-14, DAF
NEPA Airspace Program Manager
Air National Guard Readiness Center, NGB/A4AM
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Ms Cindy Adams Dunn
Secretary
Pennsylvania Department of Conservation and Natural Resources
Rachel Carson State Office Building
P.O. Box 8767
Harrisburg PA 17105

Dear Secretary Dunn

First of all, I would like to thank you and your staff for their time and participation in multiple collaborative conversations over the past several months. The National Guard Bureau (NGB) has been working diligently with the installation to address the Pennsylvania Department of Conservation and Natural Resources (DCNR) sensitive area concerns while ensuring the Maryland Air National Guard (ANG) A-10 training mission. Please find the attached draft altitudinal mitigation map for incorporation into the proposed Duke Low MOA Environmental Assessment. We believe that this graphic captures the most critical sensitive areas as discussed with your staff, which hopefully will result in lessening your concerns regarding the Duke Low MOA proposal as it moves through the NEPA process.

To clarify further, in response to concerns received and collaboration outcomes:

- A 1000 ft AGL floor will 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.
- A 1,000 ft overflight buffer and a .5 nautical mile (NM) lateral buffer around Bald and Golden Eagle nests will be incorporated per Air Force direction (Note: these buffers are not specifically depicted on the attached map).
- A 500 ft AGL floor will 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.
- A 500 ft overflight buffer would be maintained over man-made obstacles such as radio towers, windmills and oil drilling rigs per Air Force Instruction (AFI 11-202v3).

As a reminder in addition, key specific operational parameters included in the Description of the Proposed Action and Alternatives (DOPAA) for the Proposed Duke Low MOA would include:

- The vertical limits of the airspace, unless required otherwise, would be defined as 100 ft AGL to 7,999 ft above MSL.
- The Duke Low MOA may be activated separately from the Duke MOA or concurrently as needed to facilitate low-level training requirements.
- Activation times would be intermittent by Notice to Airmen (NOTAM).
- Anticipated activation would be four hours per day, twice per day, two hours at a time, with no more than six total aircraft, approximately 170 days per year.
- Weekend operations would be limited mostly to Saturdays; Sundays would be non-typical.
- The MD Air National Guard is a federal entity that would not typically, outside of wartime, fly on Federal Holidays.
- Nighttime operations (defined as sunset until 10:00 p.m.) at low-altitude would be limited.
- 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.

Published activation timeframes and actual usage time are different terms. 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. – 12:00 p.m. and one hour in the afternoon between the hours of 2:00 p.m. 4 p.m. During the one hour of usage, the majority of flight time would be spent at higher altitudes (above 1,000 ft). The A-10 aircraft would spend approximately ten minutes or less below 1,000 ft. Overall, during each sortie, aircraft will be down in the low altitude ranges between 500 ft to 100 ft for 2-3 minutes per activation.

As previously noted in my February 13, 2020 email, Bird/Wildlife Air Strike Hazard (BASH) prevention program parameters as required by DoD and FAA pre-flight protocols will be implemented. It is a common procedure for flying units to have direct communication with other agencies who will be operating within proximity of ANG aircraft operations. The Maryland ANG and the Pennsylvania Game Commission will create a communication plan with protocols, which will allow them to coordinate with each other and de-conflict airspace as needed during wildlife operations, such as annual census activities.

Thank you once again for the collaboration and communications. It is our intention that providing the above additional detailed information, along with the accompanying Duke Low MOA altitudinal mitigation map, will serve to clarify the MD ANG Environmental Assessment Proposed Action and provide a pathway forward for the NEPA airspace evaluation process to continue.

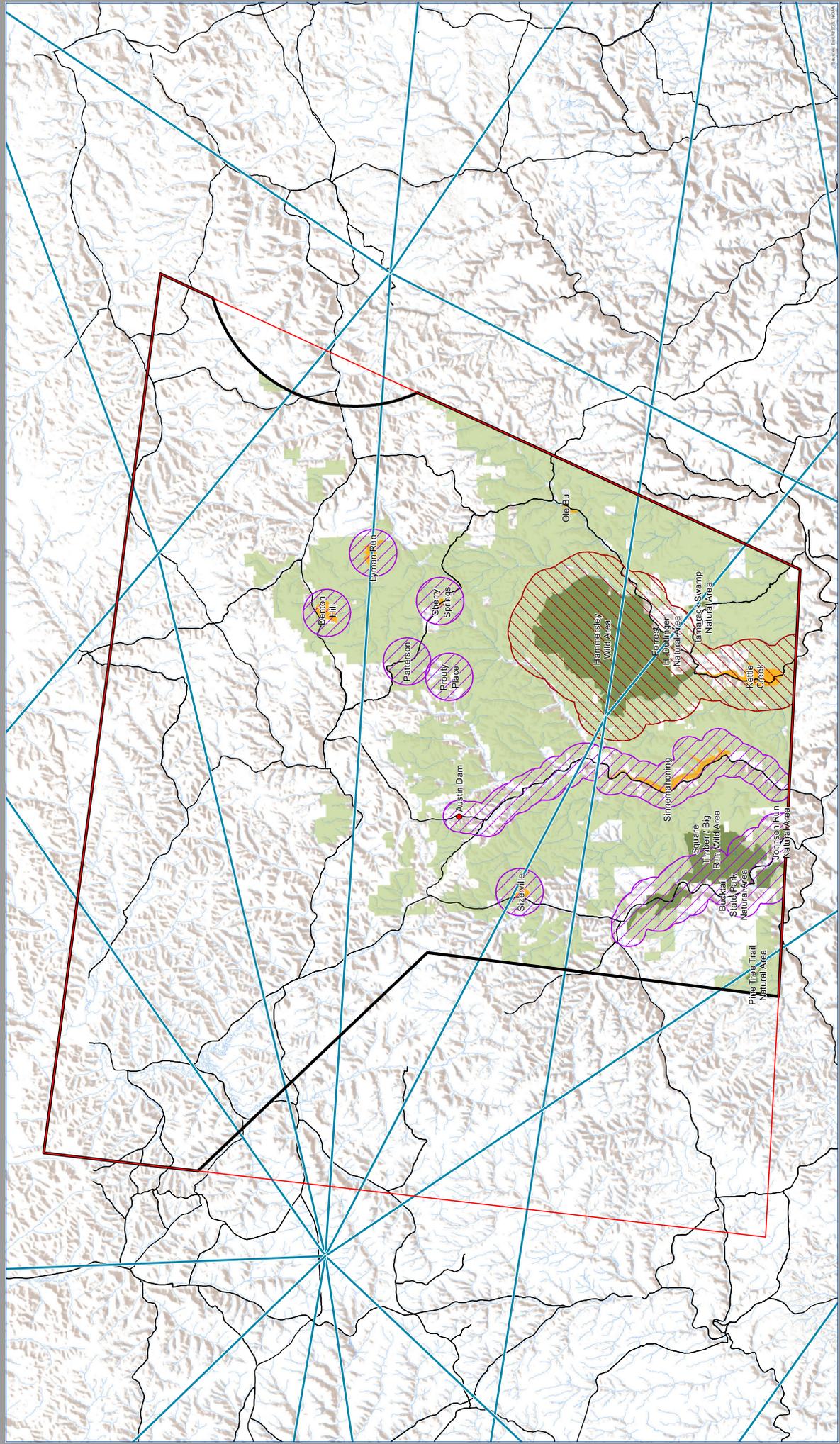
Sincerely

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Date: 2020.08.07 15:18:20
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RAMÓN E. ORTIZ, GS-14, DAF
NEPA Airspace Program Manager

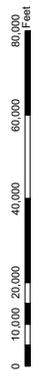
Attachment: Draft Altitudinal Mitigation Map



Legend

- Existing Duke MDA (Red outline)
- Proposed Duke Low MDA (Black outline)
- State Parks (Yellow)
- State Forests (Light Green)
- Natural & Wild Areas (Dark Green)
- Main Road (Black line)
- Rivers & Creeks (Blue line)
- Existing FAA Airways (4000' or Greater MSL) (Blue line)
- Altitude: 1000' AEL (Pink hatched), 500' AEL (Purple hatched)
- Dam Location (Red dot)

Proposed Duke Low Altitude Mitigation Map State Parks & State Forests



Prepared By: J. Figueroa
 ANS Geospatial Office
 Corrections And Additions Should Be
 Brought To The Attention Of The Above
 Organization (SN):
 Sources: NGB/A4AM, USGS

This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. It is for informational purposes only. Information and data located from AT National Guard installations, joint bases, various City, County, and State Offices and other sources, are not guaranteed for accuracy. The ANS Geospatial Office is not responsible for any inaccuracies herein.





McKean County

Planning Commission

Jeremy S. Morey, Director
jsmorey@mckeancountypa.org
Phone: 814-887-2754

17137 U.S. Route 6
Smethport, PA 16749
Fax-814-887-3234

Laura Lord, Asst. Planner
lmlord@mckeancountypa.org
Phone: 814-887-2348

September 5, 2019

Mr. Ramon Ortiz, P.E.
Technical Lead Environmental Planner

Re: Low Altitude MOA

Dear Mr. Ortiz,

Thank you for allowing me to provide comments on the proposed Low Altitude MOA with the Air National Guard. I have some questions regarding this that I would appreciate some clarification on at your earliest convenience.

- What is the period of the MOA?
- Can "limited" be quantified into a number? How many nights of night-time low altitude training would be required?
- Will aircraft routes be planned to avoid flying over populated areas as well as schools and hospitals?
- Will aircraft have inert/dummy ordinance mounted on them?
- Will the aircraft have chaff/flares removed before conducting this training? This is training, things happen, risk of fire to forest or populated areas could be negated if they were removed.
- Is there a fuel dump zone in the current MOA or will this MOA add one? If so where and what are/could be the environmental impact to that dump zone area?
- Will Temporary Duty (TDY) squadrons to the 175 WG or units be allowed access to Low altitude MOA? (If yes, what are the impacts of those airframes going to be on the area. i.e. increased engine noise from much louder fighter aircraft.

- The MFR states that activation times would be by NOTAMS, Can these NOTAMS or a schedule of flying times be sent to County Emergency Management (EM) Directors/centers so they are made aware of active flying operations going on in the MOA?
- Is there an Emergency response plan in-place for an aircraft incident/accident with County EM centers?
- If possible, we request a listing of Wing POC's with phone/email i.e. Public Affairs, Flight Operations, FOD, etc. for County EM to be able to make contact if questions/concerns arise.
- Is there an agreement for Emergency Services Coverage?
- We request a procedure with contact information for reporting possible damages from aircraft operations as well as reporting found pieces of aircraft to be turned into the Air Force.

Respectfully,



Jeremy S. Morey, Director
McKean County Planning

-----Original Message-----

From: Cliff Clark <cclark@cameroncountypa.com>

Sent: Friday, September 6, 2019 9:10 AM

To: Ortiz, Ramon E CIV USAF NGB A4 (USA) <ramon.e.ortiz2.civ@mail.mil>

Subject: [Non-DoD Source] RE: National Guard Bureau Letter - LOW MOA over North Central Pennsylvania

Comments from the Cameron County Office of Community and Economic Development:

1. We understand the need for our military to be well trained, however, there is no explanation in the letter as to why this particular was chosen. Is it the terrain, or the low population?
2. The subject area is dependent on nature tourism to supplement and in some cases sustain its economy. The very reason people live here and visitors come to enjoy this area is its peacefulness. This will unarguably disrupt that and threaten it.
3. It is interesting that local governments were not on the distribution list but rather economic development agencies and chambers of commerce.
4. The usage of hrs/day, 170 days/year, 2 hrs at a time, 2x day seems excessive, however, it is unclear how many of those instances would be at extremely low altitudes. It would help if that were clarified.

Thank you.

-----Original Message-----

From: Cliff Clark

Sent: Thursday, August 29, 2019 11:47 AM

To: 'ramon.e.ortiz2.civ@mail.mil'

Cc: Jim Thomas; Lori Reed; Phil Jones

Subject: National Guard Bureau Letter

Mr. Ortiz,

I am on the distribution for the attached letter. The letter references an expected usage of 4 hrs/day, 170 days/year, 2 hrs at a time, 2x day, but does not indicate over what time span - 1 year, 5 years, indefinitely? And when would this begin?

Thank you,

Cliff Clark, Director
Cameron County Community and Economic Development
20 East 5th Street
Emporium, PA 15834
(814) 486-3439
cclark@cameroncountypa.com

cc: Cameron County Commissioners

County of Cameron
20 East 5th Street
Emporium, PA 15834
Tele: 814/486-2315
Fax: 814/486-3176
camcocomm@cameroncountypa.com

Cameron County Commissioners
Lori J. Reed, Chair
Phillip P. Jones
H. James Thomas

Solicitor, **Edwin W. Tompkins III**

September 25, 2019

Dear Mr. Ortiz:

We, the Cameron County Commissioners, have been made aware of your August 26, 2019 letter to Cameron County Community and Economic Development Director Cliff Clark regarding the proposed "flyover" Air National Guard Training Program.

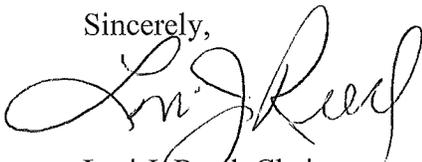
Many of our constituents have posed questions to us, as their elected officials, concerning the impact on our community. While we understand that you will be conducting an Environmental Assessment, we would appreciate first receiving some clarification from you concerning your letter to Mr. Clark. Ours is a rural community of less than 5,000 residents (many of whom are senior citizens), and we are part of the PA Wilds Program (state sponsored) designed to promote tourism and wildlife conservation. Thus, as local governmental leaders, we want to allay concerns while exercising due diligence regarding the potential impact.

Specifically, your letter noted that the "proposed action would establish a Low MOA below the existing Duke MOA." Furthermore, that the "expected usage would be four hours per day, 170 days per year, two hours at a time, twice per day, with no more than six total aircraft." Your letter then specifically notes: "The 175 WG flies one weekend per month with one week per month consisting of routine night training."

Perhaps we are reading into those statements; however, they appear to be contradictory. Therefore, we respectfully request that you provide us with clarification as to the expected frequency of the flights, and the lowest altitude our County residents and wildlife can expect. If, indeed, the frequency will only be one (1) weekend per month, and depending on the anticipated lowest altitude, we certainly would support this military training program.

We thank you in advance for the anticipated courtesy of your clarifying response.

Sincerely,



Lori J. Reed, Chair,
On behalf of Cameron County Board of Commissioners

"The Heart of the Wilds"



The Delaware Nation
Historic Preservation Department
31064 State Highway 281
Anadarko, OK 73005
Phone (405)247-2448

November 4, 2019

To Whom It May Concern:

The Delaware Nation Historic Preservation Department received correspondence regarding the following referenced project(s).

Project: Modification of Duke Military Operations Airspace

Our office is committed to protecting tribal heritage, culture and religion with particular concern for archaeological sites potentially containing burials and associated funerary objects.

The Lenape people occupied the area indicated in your letter during prior to European contact until their eventual removal to our present locations. According to our files, the location of the proposed project does not endanger cultural, or religious sites of interest to the Delaware Nation. **Please continue with the project as planned** keeping in mind during construction should an archaeological site or artifacts inadvertently be uncovered, all construction and ground disturbing activities should immediately be halted until the appropriate state agencies, as well as this office, are notified (within 24 hours), and a proper archaeological assessment can be made.

Please note the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge Munsee Band of Mohican Indians are the only Federally Recognized Delaware/Lenape entities in the United States and consultation must be made only with designated staff of these three tribes. We appreciate your cooperation in contacting the Delaware Nation Cultural Preservation Office to conduct proper Section 106 consultation. Should you have any questions, feel free to contact our offices at 405-247-2448 ext. 1403.



Erin Thompson
Director of Historic Preservation
Delaware Nation
31064 State Highway 281
Anadarko, OK 73005
Ph. 405-247-2448 ext. 1403
ethompson@delawarenation-nsn.gov

From: Shaw Siglin [REDACTED]
Sent: Wednesday, September 11, 2019 10:50 AM
To: Ortiz, Ramon E CIV USAF NGB A4 (USA) [REDACTED]
Cc: [REDACTED]; Tom Freeman [REDACTED]; Skip Shaw [REDACTED]

Subject: [Non-DoD Source] Duke MOA Environmental Assessment

Mr. Ortiz,

This email is in response to your letter dated 26 August 2019 requesting input from the Wellsboro-Johnston Airport (N38) on the changes being proposed to the Duke MOA in north central Pennsylvania. Essentially, the proposed change results in a lowering of the MOA floor to 100 feet AGL.

Our concern is that there be reasonable notification as to when the area will be hot or not. The explanation of the proposed change specifies notification by intermittent NOTAM. I'm hoping there will be an authoritative operational contact available via telephone that can provide timely and accurate range status. Many of our pilots fly through, and have farms with airstrips within, the MOA's footprint and they are concerned about their ability to safely operate their aircraft there. Having a reliable and knowledgeable range contact would go a long way in assuring flight safety.

Thanks,
Shaw Siglin
Grand Canyon Airport Authority

Attachment: Duke MOA Environmental Assessment Planning Letter

From: Duke, Rune <Rune.Duke@aopa.org>
Sent: Friday, September 6, 2019 8:24 AM
To: Ortiz, Ramon E CIV USAF NGB A4 (USA) <ramon.e.ortiz2.civ@mail.mil>
Subject: [Non-DoD Source] Duke MOA Scoping

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

Good morning Mr. Ortiz,

Thank you for the August 26 letter reference the preparation of an Environmental Assessment for the Duke Low MOA. Please find attached AOPA's February 6 letter on the topic of the Duke Low MOA. Please consider this letter our comments for the scoping phase. We look forward to reviewing the Draft EA once it has been published.

Thanks,

Rune Duke
Senior Director of Government Affairs
Airspace, Air Traffic & Aviation Security
Aircraft Owners & Pilots Association, AOPA
p: 202.509.9515 | c: 334.430.5338
a: 50 F Street Northwest, Suite 750, Washington, DC 20001
[Caution-www.aopa.org](http://www.aopa.org/) < Caution-http://www.aopa.org/ >



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50 F St. NW, Suite 750
Washington, D.C. 20001

T. 202-737-7950
F. 202-273-7951

www.aopa.org

February 6, 2019

Mr. Jamie A. Flanders
Airspace Manager
NGB/A2/3/6/10TA
3500 Fetchet Ave
Joint Base Andrews, MD 20762

Re: *Proposal by the Maryland and Pennsylvania Air National Guard to Establish the Duke Low MOA over Pennsylvania and New York.*

Dear Mr. Flanders,

The Aircraft Owners and Pilots Association (AOPA), the world's largest aviation membership association, submits the following comments in response to the initial proposal by the Maryland and Pennsylvania Air National Guard (ANG) to establish the Duke Low Military Operations Area (MOA) over Pennsylvania and New York. We understand this airspace will be utilized primarily by the Maryland ANG A-10s that operate out of Martin State Airport, Baltimore, Maryland. We understand the need for low-altitude airspace to accomplish the training and mission requirements of these units; however, we could not find a similar example in the National Airspace System (NAS) of a MOA that has a 100' AGL floor, would be of similar large size, and would have as many General Aviation airports in close proximity. We appreciate the proponents doing their due diligence throughout this process to reach out to the local operators and to meet with the local flight schools to better understand the impact this new Special Use Airspace (SUA) would have on local businesses and communities. Please find below our initial comments, and we look forward to future formal comment periods where we will engage our broader membership on the proposal.

Historical use of stationary Altitude Reservation inappropriate

As noted, the A-10s have been using this same low-altitude airspace for several years via a stationary Altitude Reservation (ALTRV) and this proposal is to correct that discrepancy. AOPA believes the routine activation of the Duke ALTRV to be inconsistent with FAA policy and the use of this ALTRV must not continue in the interim. As you are aware, an ALTRV cannot be used in lieu of a MOA and it appears that that is what is taking place. After reviewing the NOTAM history for Cleveland ARTCC, we see a pattern of regular activation of this airspace, counter to FAA policy. Below are example NOTAMs.

!CARF 04/067 ZOB AIRSPACE DCC DUKE EXTENSION STNR ALT RESERVATION
WI AN AREA DEFINED AS 4203N07829W TO 4154N07724W TO 4120N07748W TO
4123N07836W TO POINT OF ORIGIN 500FT-7900FT 1704141820-1704141920

!CARF 01/203 ZOB AIRSPACE DCC DUKE STNR ALT RESERVATION WI AN AREA
DEFINED AS 4203N07829W TO 4154N07724W TO 4120N07748W TO 4123N07836W
TO POINT OF ORIGIN 500FT-7900FT 1901311530-1901311730

We disagree that the lack of complaints about the ALTRV is evidence the activation of the Duke Low MOA will not have a significant impact. ALTRV NOTAMs do not provide a phone number to call to query the activity, nor do ALTRVs in general have a public comment period. The Letters of Agreement (LOA) that establish these areas are not made publicly available so the flying public has little insight into what is taking place. This process and the airspace itself, a stationary ALTRV, is largely opaque to General Aviation pilots and contributes to why there may not have been complaints filed before. It would be difficult for an average pilot to know who to call to file a complaint and then it is questionable whether that report would even be documented if they did find a number.

To highlight the inconsistencies between the utilization of the Duke ALTRV and FAA policy, we provided the following information to the FAA. For the airspace in the NAS to be available equitably and transparently, it is important the FAA and SUA proponents respect these common-sense requirements.

JO 7610.4T, para. 3-1-3(f): "An ALTRV must not be used in lieu of other airspace expressly defined and designated for a special activity." We believe this ALTRV is being activated in lieu of a MOA as evidenced by this Duke Low MOA proposal of similar dimensions. We are aware of the ALTRV tool being abused in the NAS as there is no public comment period, no visibility into the LOAs, and little notice. We believe there must be higher scrutiny of this ALTRV, in particular, as we believe it is being used in lieu of a MOA.

JO 7610.4T, para. 3-1-3(j): "An ALTRV APVL is valid in Controlled airspace only." The NOTAM indicates the floor altitude is 500' AGL (cannot be MSL as the terrain at its lowest is about 2,000' MSL), which is well below controlled airspace in this area. Most of the area has Class E starting at 1,200' AGL. We do not believe an ALTRV in uncontrolled airspace is valid.

JO 7610.4T, para. 3-1-5(b): "Special care must be exercised when processing ALTRV requests which entail operation on a broad frontal width. Indiscriminate approval of these requests would render a considerable portion of navigable airspace unavailable to other users for extended periods of time." This ALTRV has the same dimensions as the overlying Duke MOA, which has an area of 1,643 square NMs. We believe the routine utilization of this ALTRV for extended periods of time, combined with its large size and the fact it overlies General Aviation airports, to be grounds for not approving it.

Should the military progress to a formal comment period, AOPA will provide additional feedback on the specific economic impact of the activation of the Duke ALTRV, which has similar dimensions as the proposed Duke Low MOA. Capturing the number and cost of reroutes involves more extensive membership outreach and discussions with the FAA. We plan to invest the time to provide this information to the military at a later time.

Low-altitude MOA will impact local aviation

We noted the proposal includes a cut-out for the Bradford Regional Airport (BFD) and St Marys Municipal Airport (OYM) Class E airspace areas. This is an important mitigation that ensures these busy General Aviation airports remain accessible in all weather conditions and for all operators. It would be appropriate for a similar cut-out to be provided for the Wellsboro Johnston Airport (N38) to ensure the RNAV (GPS) RWY 10 approach remains available. There are many precedents for this

type of cut-out in existing MOAs with a 100' AGL floor. The cut-out may only be necessary to 4,500' MSL as that would allow the RWY 10 final approach to be available.

The N38 airport is primarily utilized by VFR aircraft but there are several IFR operators based there and at least one operator who conducts IFR flight training. Although this airport is not currently expanding, ensuring the existing approaches remain available is important for users and for ensuring the investment in the airport infrastructure is protected.

When discussing this proposal with local users, there was concern primarily regarding the requested 100' AGL floor. This low floor would necessitate that VFR operators would have to either make a long and costly reroute around the Duke Low MOA or they would have to fly in the active SUA. Based on the feedback we received, many pilots would choose to fly through the active SUA but they found this situation uncomfortable. The proponent should consider strategies that would allow the low floor of 100' AGL to remain while allowing General Aviation to take less expensive routes. The preferred option is that the Duke Low MOA would not be activated simultaneously as the Duke MOA. Many aircraft are capable of flying over 8,000' MSL and would therefore be able to fly over the SUA.

Local pilots also requested the proponent coordinate with the FAA a Letter to Airmen (LTA) that would discuss any established SUA. This LTA could include the military scheduling telephone number so pilots might call in advance of their flight to learn of upcoming airspace activation, in addition to checking SUA.FAA.gov. Pilots flying low-altitude expressed that information sharing would mitigate the impact of the unusually low floor altitude.

As the FAA's VOR Minimum Operational Network initiative continues, additional legacy VORs and Victor Airways will be retired; however, attention must be paid in each instance of what the utilization is of the routes and what the impact to users will be. The decommissioning of nearly all VORs in this area will result in a loss of continuity of airways in the vicinity of the Duke Low MOA. To mitigate this foreseeable event, we believe T-Routes will need to be evaluated to see whether any route structure will be needed in the future due to air traffic concerns or for pilots to remain clear of icing. We anticipate an FAA effort will soon be taking place to address these routes. Furthermore, a review of air traffic PDARS data should be undertaken to fully review the impacts of the SUA on transient users.

Pilots need advanced notification of activation

As noted above, the concurrent activation of the Duke Low MOA and the Duke MOA could have a significant impact on General Aviation. The activation of these SUA areas should be independent of each other to ensure aircraft operators could go over or under the active SUA. Additionally, as normally requested, we believe at least four hours advanced notice is necessary to assist pilots with their flight planning and to help them avoid costly reroutes or the need for fuel diversions. This amount of time is included in many SUA legal descriptions. Furthermore, the FAA states in JO 7400.2L, para. 21-2-4(b)(3)(e), "the minimum advance notice should be at least 4 hours prior to the activation time."

Any change in airspace configuration must coincide with the VFR charting cycles to ensure the flying public is aware of the change. Safety could be significantly impacted should the airspace

change be made before the change is charted and widely disseminated to pilots. We appreciate the ANG's long-standing commitment to General Aviation to ensure these steps do take place.

Underlying airports affected by new airspace

In reviewing the airspace proposal, we note nine private airports would underlie the SUA. In accordance with JO 7400.2L, para. 25-1-4, MOA Floor, "if the MOA floor extends below 1,200 feet AGL over a charted private airport, coordination should be effected with the airport operator to determine whether there would be any conflict between the MOA activity and airport operations." We believe it is a responsibility for the military to coordinate their proposal with the charted airports and we encourage the military to engage with all other private airports affected by this proposal. As a good neighbor, communicating with those affected assists with understanding the proposal and why the military is requesting the establishment of this airspace.

Airspace dynamic deactivation needs documentation

During preflight planning pilots can access SUA information via NOTAMs and schedule information via SUA.FAA.gov. If a pilot sees the SUA overlying or near their departure or destination airport, such as at OYM, BFD, or N38, is scheduled to be active, the pilot has no choice but to amend their flight to arrive before the SUA's activation or after it is scheduled to be inactive. The General Aviation flying public does not have access to Letters of Agreement or other information that states air traffic control will coordinate with the military to give way to IFR General Aviation aircraft to allow them access during a SUA's scheduled utilization. It is not reasonable to think a pilot will expend the money and time to fly IFR under the possibility the scheduled time in SUA.FAA.gov is incorrect. Pilots flying IFR are trained that they should plan to not have any access to that airspace when the SUA is active and will delay their flight if their destination is located below the SUA.

If there is to be "flexible use" or "dynamic deactivation" of the airspace formally documented with the FAA, that arrangement should be publicly disseminated so pilots can be informed that they will be provided egress or ingress to underlying airports with minimal delay. AOPA agrees this is a significant mitigation as it facilitates airport access, but only if pilots are told this is the case. Any arrangement must be noted for each airport in FAA publications utilized by pilots. For example, if it is the proponent's intention to release the MOA when IFR aircraft are transiting the airspace, it must be documented so civil aircraft operators understand they will receive airspace access with minimal delay. Without clear communication of the mitigation to the pilot community, it is effectively non-existent and ineffective.

As the Duke Low MOA is large and located in a remote area, it is important consideration is given to medical aircraft that may need to expeditiously transit the airspace. We noted the proposal makes allowances for those medical operators claiming priority to be given preferential access. This is an important mitigation, but it is only effective if it is clearly communicated to civil operators. The military must identify how they will publicize this accommodation and what procedure civil pilots must follow to request it. It is also not clearly identified whether there is the capability for immediate recall of military aircraft given the communication infrastructure available. The military should commit to having the required radio infrastructure in place and for military aircraft to remain in communication with air traffic control, so this procedure is effective.

Conclusion

AOPA recognizes and fully supports the military's need to train as they fight, and I personally, as this MOA shares my surname, look forward to finding an airspace solution that works for civil and military aviation. We appreciate being engaged early in the process and your willingness to enter into a dialogue about this new airspace. We appreciate the proponent following established policies and requesting a MOA versus continuing to utilize an ALTRV, which we view as inappropriate for routine military training. Additional details are still needed on the time of designation of the proposed SUA, which we hope will account for operators having the ability to fly over or under the active SUA.

We look forward to future discussions and, should the proponent move forward with the proposal, submitting formal comments on the environmental and aeronautical impacts of the SUA as viewed by our many thousands of local members. Thank you for reviewing our comment on this important issue. Please feel free to contact me at 202-509-9515 if you have any questions.

Sincerely,



Rune Duke
Senior Director, Airspace and Air Traffic

2021 IICEP Recipients List Environmental Assessment

ALL LETTERS & EMAILS SENT ON 3/30/2021

Pennsylvania & New York

Agency	Prefix	First Name	Last Name	Title	Organization	Address 1	Address 2	City	State	Zip Code	Date Response Received
FEDERAL											
USFWS	Ms.	Sonja	Jahrsdoerfer	Supervisor	Pennsylvania Ecological Services Field Office	110 Radnor Road Suite 101		State College	PA	16801-7987	5/4/2021*
USFWS	Ms.	Anne	Rothrock	Wildlife Biologist	New York Ecological Services Field Office	3817 Luker Road		Cortland	NY	13045-9385	No response
USACE				Deputy District Commander	U.S. Army Corps of Engineers - Baltimore District	Tioga-Hammond-Cowanesque Office	710 Ives Run Lane	Tioga	PA	16946	4/22/2021*
USDA, Forest Service	Ms.	Jamie	Davidson	Forest Supervisor	Allegheny National Forest	4 Farm Colony Drive		Warren	PA	16365	No response
USDA, Rural Development	Mr.	Curt	Coccodrilli	State Director	USDA, Rural Development Pennsylvania	359 E. Park Drive, Suite 4		Harrisburg	PA	17111	4/19/2021*
U.S. Geological Service (NY)	Mr.	Robert	Breault	Center Director	New York Water Science Center	425 Jordan Road		Troy	NY	12180-8349	No response
U.S. Geological Service (PA)				Director	U.S. Geological Survey	439 Hepburn Street		Williamsport	PA	17701	No response
USEPA (NY)	Mr.	Peter	Lopez	Regional Administrator	USEPA, Region 2	290 Broadway		New York	NY	10007-1866	No response
USEPA (PA)	Mr.	Cosmo	Servidio	Regional Administrator	USEPA, Region 3	1650 Arch Street		Philadelphia	PA	19103-2029	No response
TRIBES Federally recognized on HUD.gov/TDAT website: https://egis.hud.gov/TDAT/											
Delaware Nation, Oklahoma	Ms.	Nekole	Allgood	Historic Preservation/106	Delaware Nation, Oklahoma	PO Box 825		Anadarko	OK	73005	No response
Delaware Tribe of Indians	Dr.	Brice	Obermeyer	Director	Delaware Tribe of Indians	1Kellog Circle		Emporia	KS	66801	No response
Seneca Nation of Indians	Dr.	Joe	Stahman	THPO	Seneca Nation of Indians	Cultural Center	82 W. Hetzel Street	Salamanca	NY	14779	No response
Seneca-Cayuga Nation	Mr.	William	Tarrant	THPO	Seneca-Cayuga Nation	PO Box 453220		Grove	OK	74344	No response
Tonawanda Band of Seneca	Mr.	Roger	Hill	Chief	Tonawanda Band of Seneca	7027 Meadville Road		Basom	NY	14013	No response
STATE											
Department of Environmental Protection	Mr.	Marcus	Kohl	Regional Director	Department of Environmental Protection	North Central Regional Office	208 West Third St., Suite 101	Williamsport	PA	17701	5/5/2021 4/28/2021
Department of Environmental Protection	Mr.	James	Miller	Regional Director	Department of Environmental Protection	North West Regional Office	230 Chestnut Street	Meadville	PA	16335	No response
New York State Department of Environmental	Ms.	Abby	Snyder	Regional Director	Region 9 NY State Dept. of Environmental Conservation	270 Michigan Ave.		Buffalo	NY	14203-2915	4/9/2021
SHPO (Pennsylvania)	Ms.	Andrea	MacDonald	Bureau Director/Deputy SHPO	Pennsylvania Historical & Museum Commission - SHPO	400 North Street	Commonwealth Keystone Bldg, 2nd	Harrisburg	PA	17120-0093	4/27/2021*
SHPO (New York)	Mr.	Roger	Mackay	Deputy State Historical Preservation Officer	NY State Division for Historic Preservation	Peebles Island Resource Center	One Delaware Ave North	Cohoes	NY	12047	No response
PA Dept. of Transportation (Aviation Division)	Mr.		McCloskey	Director	PennDOT - Bureau of Aviation	400 North Street		Harrisburg	PA	17120	No response
PA Air National Guard	Col	Terrence	Koudelka	Commander	193 SOW	81 Constellation Ct	Harrisburg IAP	Middletown	PA	17057	No response
Dept. of Forestry	Mr.	John	Norbek	Deputy Secretary	PA DCNR Bureau of Forestry	Rachel Carson State Office Building, 6th Floor	PO Box 8552	Harrisburg	PA	17105	No response
Dept. of Conservation and Natural Resources	Ms.	Cindy	Adams Dunn	Secretary	Dept. of Conservation and Natural Resources Pennsylvania	7th Floor, RCSOB	400 Market Street	Harrisburg	PA	17105	No response
PA Wilds	Mr.	Jim	weaver	Chairperson	PA Wilds Planning Team	PA Wilds Center	PO Box 285	Sugargrove	PA	16350	No response
PA Great Outdoors	Mr.	John	Straitiff	Executive Director	Visitors Bureau	2801 Maplevale Rd		Brookville	PA	15825	No response
Dept of Agriculture	Mr.	Russell	Redding	Secretary	Pennsylvania Dept. of Agriculture	2301 North Cameron Street		Harrisburg	PA	17110	4/26/2021*
Wildlife Resources Division	Ms.	Bryan	Burhans	Executive Director	Pennsylvania Game Commission - NC Region	1566 South Route 44 Highway	PO Box 5038	Jersey Shore	PA	17740	No response
LOCAL BY COUNTY											
Elk County											
Elk County Commissioners	Ms.	Fritz	Lecker	Commissioner	Elk County Commissioners	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	No response

Agency	Prefix	First Name	Last Name	Title	Organization	Address 1	Address 2	City	State	Zip Code	Date Response Received
Elk County Commissioners	Mr.	Joe	Daghir	Commissioner	Elk County Commissioners	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	No response
Elk County Commissioners	Mr.	Matt	Quensenberry	Commissioner	Elk County Commissioners	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	No response
Elk County Planning Dept.	Ms.	Jodi	Foster	Director	Elk County Planning Dept.	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	No response
Ridgway Industrial Development Corporation	Mr.	Steve	Cleveland	Director	Ridgway Industrial Development Corporation	PO Box 176		Ridgway	PA	15853	No response
Ridgway Industrial Development Corporation	Ms.	Jane	Bryndel	Director	Ridgway Industrial Development Corporation	PO Box 176		Ridgway	PA	15853	No response
Keystone Elk Country Alliance	Mr.	Rawley	Cogan	CEO	Keystone Elk Country Alliance	134 Homestead Dr.		Benezette	PA	15821	No response
Western Pennsylvania Conservancy	Mr.	Matt	Marusiak	Land Manager	Western Pennsylvania Conservancy	159 Main Street		Ridgway	PA	15853	No response
Ridgway Township	Ms.	Michelle	Bogacki	Secretary	Ridgway Township	1537-A Montmorenci Road		Ridgway	PA	15853	3/30/2021
City of St. Marys Community Planning	Ms.	Tina	Gradizzi	Director	City of St. Marys Community Planning	11 LaFayette Street		St. Marys	PA	15857	No response
Ridgway-Elk County Chamber of Commerce	Mr.	Steve	Caggese	President	Ridgway-Elk County Chamber of Commerce	300 Main Street		Ridgway	PA	15853	No response
St. Marys Chamber of Commerce	Ms.	Ann	Gabler	Managing Director	St. Marys Chamber of Commerce	53 South St. Marys Street		St. Marys	PA	15857	No response
Elk County Farm Bureau	Mr.	Ernie	Mattiuiz	Director	Elk County Farm Bureau	133 Frey Road		Kersey	PA	15846	No response
Ridgway Borough Council	Ms.	Abbi	Peters	Council Member	Ridgway Borough Council	Ridgway Borough Office	108 Main Street	Ridgway	PA	15853	No response
Elk County Catholic School System	Mr.	Sam	MacDonald	President	Elk County Catholic School System	Elk County Catholic High School	600 Maurus Street	St. Marys	PA	15857	No response
Ridgway Area School District	Ms.	Heather	Vargas	Superintendent	Ridgway Area School District	RASD Main Office	62 School Drive	Ridgway	PA	15853	No response
St. Marys Area School District	Mr.	Brian	Toth	Superintendent	St. Marys Area School District	SASD Main Office	977 S. St. Marys Road	St. Marys	PA	15857	No response
Johnsonburg Area School District	Mr.	Dennis	Crotzer	Superintendent	Johnsonburg Area School District	JASD Main Office	315 High School Road	Johnsonburg	PA	15845	No response
Elk County Conservation District	Ms.	Katie	Wehler	District Manager	Elk County Conservation District	850 Washington Street		St. Marys	PA	15857	No response
PA Wild Turkey Federation	Mr.	Andy	Olson	Elk County Representative	PA Wilds Turkey Federation	181 Timberline Road		St. Marys	PA	15857	No response
County Board of Commissioners				Chairperson	Elk County Courthouse Annex	300 Center Street	PO Box 448	Ridgway	PA	15853	No response
Chamber of Commerce	Mr.	Gennaro	Aiello	President	Ridgway-Elk County Chamber of Commerce	300 Main Street		Ridgway	PA	15853	No response
Forrest County											
Forest County Commissioners	Mr.	Mark	Kingston	Chair, Commissioner	Forest County Commissioners	Forest County Commissioners Office	526 Elm Street, #3	Tionesta	PA	16353	No response
Forest County Commissioners	Mr.	Basil	Huffman	Commissioner	Forest County Commissioners	Forest County Commissioners Office	526 Elm Street, #3	Tionesta	PA	16353	No response
Forest County Commissioners	Mr.	Robert	Snyder, Jr.	Commissioner	Forest County Commissioners	Forest County Commissioners Office	526 Elm Street, #3	Tionesta	PA	16353	No response
Forest County Conservation District and Planning	Ms.	Donna	Zofcin	Manager	Forest County Conservation District and Planning Department	Forest County Conservation District & Planning Dept. Office	526 Elm Street, #3	Tionesta	PA	16353	No response
Forest Area School District	Ms.	Amanda	Heltrick	Superintendent	Forest Area School District		22318 Route 62, Box 16	Tionesta	PA	16353	No response
McKean County											
McKean County Commissioners	Ms.	Carol	Duffy	Commissioner	McKean County Commissioners	McKean County Courthouse	500 West Main 50 th West Main	Smethport	PA	16749	No response
McKean County Commissioners	Mr.	Cliff	Lane	Commissioner	McKean County Commissioners	McKean County Courthouse	5 th West Main	Smethport	PA	16749	No response
McKean County Commissioners	Mr.	Tom	Kreiner	Commissioner	McKean County Commissioners	McKean County Courthouse	Street	Smethport	PA	16749	No response
McKean County Planning Commission	Mr.	Jeremy	Morey	Planning Director	McKean County Planning Commission	17137 Route 6		Smethport	PA	16749	No response
Allegheny National Forest Visitor Bureau	Ms.	Linda	Devlin	Director	Allegheny National Forest Visitor Bureau	80 Corydon Street		Bradford	PA	16701	11/2/2021
McKean County Conservation District	Ms.	Sandy	Thompson	District Manager	McKean County Conservation District	17137 Route 6		Smethport	PA	16749	No response
Kane Area School District	Mr.	Brock	Benson	Superintendent	Kane Area School District	KASD Main Office	400 West Hemlock Avenue	Kane	PA	16735	No response
Bradford Area School District	Ms.	Katharine	Pude	Superintendent	Bradford Area School District	BASD Main Office	150 Lorana Avenue	Bradford	PA	16701	No response
Smethport Area School District	Mr.	David	London	Superintendent	Smethport Area School District	SASD Main Office	414 South Mechanic Street	Smethport	PA	16749	No response
County Board of Commissioners				Chairperson	500 W Main Street			Smethport	PA	16749	No response

Agency	Prefix	First Name	Last Name	Title	Organization	Address 1	Address 2	City	State	Zip Code	Date Response Received
Economic Development	Mr.	Robert	Veilleux	Director	McKean County Economic Development	17137, Route 6		Smethport	PA	16749	No response
Potter County											
County Board of Commissioners	Mr.	Paul	Heimel	Vice-Chair	Potter County Commissioners	Gunzburger	One North Main St.	Coudersport	PA	16915	No response
County Board of Commissioners	Mr.	Barry	Hayman	Commissioner	Potter County Commissioners	Gunzburger	One North	Coudersport	PA	16915	4/29/2021
Potter County Conservation District	Mr.	Jason	Childs	District Manager	Potter County Conservation District		107 Market Street	Coudersport	PA	16915	No response
Potter County Community Development	Ms.	Ellen	Russell	Director	Potter County Community Development	Gunzburger Building Suite 200	One North Main St.	Coudersport	PA	16915	No response
County Board of Commissioners	Ms.	Nancy	Grupp	Chairperson	Gunzburger Building	One North Main Street	Suite 203	Coudersport	PA	16915	4/29/2021 5/7/2021
Chamber of Commerce & Economic Development				Board of Directors	Coudersport Area Chamber of Commerce	227 N Main St	PO Box 261	Coudersport	PA	16915	No response
County Planning	Mr.	Will	Hunt	County Planning	Potter County Planning	Gunzburger Building One N Main	Suite 105	Coudersport	PA	16915	No response
Cameron County											
County Board of Commissioners	Mr.	James	Moate	Commissioner	Cameron County Commissioners	Cameron County Courthouse	20 East 5 th Street	Emporium	PA	15834	No response
County Board of Commissioners	Ms.	Ann	Losey	Commissioner	Cameron County Commissioners	Cameron County Courthouse	20 East 5 th Street	Emporium	PA	15834	No response
DCNR	Mr.	Alan	Lichtenwalner	Regional Park Manager	DCNR	DCNR Regional Office	260 Sizerville Road	Emporium	PA	15834	No response
Cameron County Area School District	Mr.	Keith	Wolfe	Superintendent	Cameron County Area School District	CCSD Main Office	601 Woodland Avenue	Emporium	PA	15834	No response
Cameron County Conservation District	Mr.	Todd	Deluccia	District Manager	Cameron County Conservation District	Cameron County Courthouse	74 East 3 rd Street	Emporium	PA	15834	No response
County Board of Commissioners	Ms.	Lori	Reed	Chairperson	Cameron County Courthouse	20 East 5th Street		Emporium	PA	15834	No response
Chamber of Commerce	Ms.	Tina	John Solak	Executive Director	Cameron County Chamber of Commerce	34 East 4th Street		Emporium	PA	15834	No response
Economic Development	Mr.	Cliff	Clark	Director	Cameron County Community & Economic Development	20 East 5th Street		Emporium	PA	15834	No response
Tioga County											
County Board of Commissioners	Mr.	Roger	Bunn	Commissioner	Tioga County Government	County of Tioga	118 Main Street	Wellsboro	PA	16901	No response
County Board of Commissioners	Mr.	Mark	Hamilton	Commissioner	Tioga County Government	County of Tioga	118 Main Street	Wellsboro	PA	16901	No response
County Board of Commissioners	Mr.	Erik	Coolidge	Commissioner	Tioga County Government	County of Tioga	118 Main Street	Wellsboro	PA	16901	No response
Tioga County Conservation District	Ms.	Erica	Tomlinson	District Manager	Tioga County Conservation District		1867 Shumway Hill Road	Wellsboro	PA	16901	No response
Tioga County Planning Commission	Ms.	Deb	Crawford	Director	Tioga County Planning Commission	County of Tioga	118 Main Street	Wellsboro	PA	16901	No response
Develop Tioga PA	Ms.	Kristin	Hamilton	Executive Director	Develop Tioga PA		33 Pearl St.	Wellsboro	PA	16901	No response
County Board of Commissioners	Mr.	Marc	Rice	Chairperson	Tioga County Government	118 Main Street		Wellsboro	PA	16901	No response
Warren County											
Warren County Commissioners	Mr.	Ben	Kafferlin	Commissioner	Warren County Commissioners	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	No response
Warren County Commissioners	Ms.	Tricia	Durbin	Commissioner	Warren County Commissioners	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	No response
Warren County Commissioners	Mr.	Jeff	Eggleston	Commissioner	Warren County Commissioners	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	No response
Warren County Planning Department	Mr.	Dan	Glutz	Dept. Head	Warren County Planning Department	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	No response
Warren County Conservation District	Ms.	Heather	Wilcox	District Manager	Warren County Conservation District		4000 Conewango Avenue	Warren	PA	16365	No response
Warren County Visitors Bureau	Mr.	Dave	Sherman	Executive Director	Warren County Visitors Bureau		22045 US Route 6	Warren	PA	16365	No response
Wellsboro City (Tioga)											
Wellsboro Chamber of Commerce	Ms.	Julie	VanNess	Executive Director	Wellsboro Chamber of Commerce	114 Main Street, Suite #1		Wellsboro	PA	16901	No response
Clinton County											
County Board of Commissioners	Mr.	Jeff	Snyder	Commissioner	Clinton County Commissioners	Commissioners Office	2 Piper Way, Suite 300	Lock Haven	PA	17745	No response
County Board of Commissioners	Ms.	Angela	Harding	Commissioner	Clinton County Commissioners	Commissioners Office	2 Piper Way, Suite 300	Lock Haven	PA	17745	No response
Clinton County Conservation District	Mr.	Wade	Jodun	Manager	Clinton County Conservation District	Conservation District Office	45 Cooperation Lane	Mill Hall	PA	17751	No response
Clinton County Planning Commission	Ms.	Katie	de Silva	Planning Director	Clinton County Planning Commission	2 Piper Way	Suite 244	Lock Haven	PA	17745	No response
Keystone Central School District	Ms.	Jacquelyn	Martin	Superintendent	Keystone Central School District	Keystone Central School District Office	85 Administration Drive	Mill Hall	PA	17751	No response
Chamber of Commerce & Economic Development	Mr.	Michael	Flanagan	President, CEO	Clinton County Economic Partnership	212 North Jay Street	PO Box 506	Lock Haven	PA	17745	No response
County Board of Commissioners	Mr.	Miles	Kessinger	Chairperson	County Commissioners Office	2 Piper Way, Suite 300		Lock Haven	PA	17445	4/15/2021

Agency	Prefix	First Name	Last Name	Title	Organization	Address 1	Address 2	City	State	Zip Code	Date Response Received
Allegany (New York)											
Chamber of Commerce	Ms.	Gretchen	Hanchett	Executive Director	Greater Allegany County Chamber of Commerce, Inc.	Crossroads Commerce Center	6087 NYS Route 19N - Suite 120	Belmont	NY	14813	No response
Economic Development	Ms.	Angela	McKay	Assistant Director	Allegany County Dept. of Planning	Crossroads Commerce Center	6087 NYS Route 19N - Suite 100	Belmont	NY	14813	No response
Cattaraugus (New York)											
Chamber of Commerce & Economic Development	Ms.	Crystal	Abers	Director	Cattaraugus County Dept. of Economic Development, Planning and Tourism	Second Floor	303 Court St.	Little Valley	NY	14755	No response
Regional											
PA Wilds Center	Ms.	Tataboline	Enos	CEO	PA Wilds Center	PO Box 286		Sugar Grove	PA	16350	4/21/2021
PA Wilds Planning Team	Ms.	Candi	Hand	Administrative Assistant	PA Wilds Planning Team	219 Edison Bates Drive		Port Allegany	PA	16734	No response
Trout Unlimited	Ms.	Kelly	Williams	NW Regional VP	Trout Unlimited	PO Box 5148		Bellefonte	PA	16823	No response
Trout Unlimited	Mr.	Troy	McDunn	Complanter #526 Chapter Representative	Trout Unlimited	79 Buena Vista Blvd.		Warren	PA	16365	No response
PA Wild Turkey Federation	Mr.	Skip	Motts	Regional Director	PA Wilds Turkey Federation	68 Railroad Grade Road		Smethport	PA	16749	No response
PA Wild Turkey Federation	Mr.	Heath	Nace	PA President	PA Wild Turkey Federation	1354 Pisgah State Road		Shermans Dale	PA	17090	No response
Central PA Pheasants Forever	Mr.	Howard	Olay	Chapter Representative	Central PA Pheasants Forever	225 Old Kersey Road		Kersey	PA	15846	No response
Friends of the Allegheny Wilderness	Mr.	Kirk	Johnson	Executive Director	Friends of the Allegheny Wilderness	220 Center Street		Warren	PA	16365	No response
The Conservation Fund	Ms.	Kendra	Briechle	Manager, Community & Economic Development	The Conservation Fund	National Conservation Training Center	698 Conservation Way	Shepherdstown	WV	25443	No response
North Central PA Regional Planning & Development Commission	Mr.	Jim	Chorney	Executive Director	North Central PA Regional Planning & Development Commission	49 Ridgmont Drive		Ridgway	PA	15853	No response
Northwest Commission	Ms.	Jill	Foys	Executive Director	Northwest Commission	395 Seneca Street		Oil City	PA	16301	No response
Norther Tier Regional Planning & Development	Mr.	Kevin	Abrams	Executive Director	Norther Tier Regional Planning & Development Commission	312 Main Street		Towanda	PA	18848	No response
PA Farm Bureau	Ms.	Brittany	Eisenman	Region 6 Director	PA Farm Bureau	510 South 31 st Street		Camp Hill	PA	17011	No response
Headwaters Charitable Trust	Ms.	Janie	French	Executive Director	Headwaters Charitable Trust	434 State Street		Curwensville	PA	16833	No response
PA Senate	Sen.	Cris	Dush	Senator	PA Senate		73 South White Street	Brookville	PA	15825	No response
PA House	Rep.	Martin	Causer	Representative	PA House		78 Main Street	Bradford	PA	16701	No response
PA House	Rep.	Mike	Armanini	Representative	PA House	DuBois Area Plaza, Suite 10	1221 East DuBois	DuBois	PA	15801	No response
PA Great Outdoors	Mr.	John	Stratiff	Director	PA Great Outdoors	2801 Maplevale Road		Brookville	PA	15825	No response
AIRPORTS											
Bradford Regional (BFD)	Ms.	Alicia	Dankesreiter	Airport Manager	Bradford Regional Airport Authority	212 Airport Dr, Ste E		Lewis Run	PA	16738	No response
St Marys Municipal (OYM)	Mr.	Joe	Kerchinski	Airport Manager	City of St Marys	159 Cessna Rd		St Marys	PA	15857	No response
Wellsboro Johnston (N38)	Mr.	Shaw	Siglin	Airport Manager	Grand Canyon Airport Authority	112 Runway Rd		Wellsboro	PA	16901	No response
Freefal Oz (06PA)	Mr.	Ashley	Easdon-Smith	Airport Owner	Freefal Oz (06PA)	296 Faulkner Rd		Shinglehouse	PA	16748	No response
Adams (90PA)	Mr.	Merrill	Adams	Airport Owner	Adams (90PA)	21 Carrigan Ave		Spring City	PA	19475	No response
Greeley (PN15)	Mr.	Barton	Greeley	Airport Owner	Greeley (PN15)	119 Bowers Rd		Coudersport	PA	16915	No response
Johnson (2PA5)	Mr.	Merle	Johnson	Airport Owner	Johnson (2PA5)	25425 Troon Ave		Sorrento	FL	32776	No response
Ranch-Aero (PN90)	Mr.	James	Yates	Airport Owner	Ranch-Aero (PN90)	PO Box 75		Roulette	PA	16746	No response
Sharretts (PN91)	Mr.	Fred	Sharretts	Airport Owner	Sharretts (PN91)	97 Johnson Rd		Westfield	PA	16950	No response
Cole Mem Heliport (PN09)	Mr.	Melvin	Blake	Airport Manager	Charles Cole Memorial Hospital	1001 East Second St		Coudersport	PA	16915	No response
Cameron Co Jr/Sr High (8PN7)		N/A	N/A		Cameron County Jr/Sr High School	601 Woodland Ave		Emporium	PA	15634	No response
Elk Rgnl Med Ctr Heliport (7PS9)	Mr.	Keith	Van Horn	Airport Manager	Elk Regional Health Center	763 Johnsonburg Rd		St Marys	PA	15857	No response
SPECIAL INTEREST GROUPS											
NBAA	Ms.	Brittany	Davies	NE Region	National Business Aviation Association	1200 G St. NW, Suite 1100		Washington	DC	20005	No response
AOPA	Mr.	Jim	McClay	Director Airspace, Air Traffic & Security	Aircraft Owners & Pilots Association	50 F Street NE, Suite 750		Washington	DC	20001	No response
American Wind Energy Association	Mr.	Tom	Vinson	Vice President	American Wind Energy Association	1501 M Street NW, Suite 900		Washington	DC	20005	No response

*Response received from someone other than recipient at same agency or group.

PA Wilds Planning Team-Email Recipients

First Name	Last Name	Email	Organization	County	Date Response Received
Jason	Albright	jasalbrigh@pa.gov			No response
Kristi	Amato	kamato@co.clarion.pa.us			No response
Kaye	Aumick	kaumick@tiogacountypa.us	Planning Specialist	Tioga	4/23/2021
Mary	Baker	mary.baker3@usda.gov			No response
Jodi	Brennan	jbrennan@clearfieldco.org	Planning	Clearfield	No response
Julie	Brennan	tourismdirector@clintoncountyinfo.com		Clinton	No response
Josh	Bridge	jbridge@fs.fed.us			No response
Bill	Callahan	wcallahan@pa.gov	PHMC		No response
Renee	Carey	rcarey@npcweb.org	North Central PA Conservancy	Lycoming	No response
Trish	Carothers	tcarothers@susquehannagreenway.org	Susquehanna Greenway Partensrhip		No response
Eric B.	Cowden	ecowden@marcelluscoalition.org			No response
Dana	Crisp	rcrisp@pa.gov	DCNR - State Parks Region I		No response
Lori D.	Dabbondanza	ldabbon@pacounties.org	County Commissioners Association of PA		No response
Brittany	Dittemore	bdittemore@headwatersrcd.net			No response
Kristi	Ditz	kditz@co.clarion.pa.us	Planning & Development	Clarion	No response
James	Dunn	jdunn2492@comcast.net			No response
Corey	Ellison	cellison@susquehannagreenway.org	Susquehanna Greenway Partensrhip		No response
Jennifer	F.	jenniferf@northwestpa.org			No response
Wes	Fahringer	mfahringer@pa.gov	DCNR - North Central Regional Office		No response
Gregory A.	Faller	gafaller@gmail.com	Commissioner	Clarion	No response
Rob	Fallon	rfallon@fs.fed.us	Marienville District Ranger		No response
Jackie	Felion	jfelion@state.pa.us			No response
Jason	Fellon	jfellon@pa.gov	DEP - North Central Regional Office	Lycoming	No response
Marissa	Galeotti	mgaleotti@pa.gov			No response
Sue	Hannegan	shannegan@co.centre.pa.us	Planning Commission	Centre	No response
Colleen	Hanson	colleen@visitpottertioga.com	Visit Potter Tioga	Tioga	No response
Doug	Hill	dhill@pacounties.org	County Commissioners Association of PA		No response
Meredith	Hill	mehill@pa.gov	DCNR		No response
Candace	Hillyard	candace@paroute6.com	PA Rt 6 Heritage Corporation	Potter	No response
Tim	Holladay	thollada@clintoncountypa.com	Planning Commission	Clinton	No response
Mary Jo	Hughes	manager@downtowndubois.com	Downtown DuBois Revitalization Group	Clearfield	No response

First Name	Last Name	Email	Organization	County	Date Response Received
Bob	Imhof	bwi@ncentral.com			No response
Josiah	Jones	jjones@visitclearfieldcounty.org	Visit Clearfield County	Clearfield	No response
Mike	Keller	mkeller@psats.org	PSATS		No response
Allen	Kerkeslager	akerkesl@sju.edu	OntarioSusquehanna Greenway Trail		No response
Amy	Kessler	amy@exchange.ncentral.com		Elk	No response
Ed	Knittel	eknittel@boroughs.org	PA State Assoc. of Boroughs		No response
Holly	Komonczi	hkomonczi@visitclearfieldcounty.org	Recreation & Tourism	Clearfield	No response
Jackie	Koons-Felion	jfelion@pa.gov	PennDOT		No response
Lisa	Kovalick	lkovalick@clearfieldco.org	Planning	Clearfield	No response
John	Lavelle	jlavelle@lyco.org	Planning & Development	Lycoming	No response
Jamie	Lefever	jamie@callclarionpa.com			No response
Elizabeth	Lose	ealose@centercountypa.gov		Centre	No response
Andrea	MacDonald	amacdonald@pa.gov	PHMC		No response
Nicholas	Mackereth	nmackereth@pa.gov	DCEC	Allegheny	No response
Paul	McCloskey	pmccloskey@clearlyahead.com			No response
Doty	McDowell	domcdowell@pa.gov			No response
Michele	Moore	mmoore@pcedcouncil.org	Potter County Education Council	Potter	No response
Mark	Murawski	mmurawski@lyco.org	Planning Director	Lycoming	No response
Wendy	Nickerson	wnickerson@boroughs.org	PA State Assoc. of Boroughs		No response
Rosemary	Orner	rorner@seda-cog.org	SEDA-COG		No response
Mike	Piaskowski	mpiaskowsk@pa.gov			No response
Jenny	Picciano	jpicciano@lyco.org	Planning & Development	Lycoming	No response
Deborah	Pontzer	debpontzer@windstream.net	Congressman Thompson's Office	Elk	3/24/2021 ¹
Deborah	Pontzer	deborah.pontzer@mail.house.gov	Congressman Thompson's Office		No response
Dennis	Puko	dennypuko@dpukoplanning.com	Planning Consultant	Allegheny	No response
Josh	Roth	josroth@pa.gov	Lumber Heritage Museum		No response
Lisa	Schaefer	lschaefer@pacounties.org			No response
Bill	Setree	bsetree@jeffersoncountypa.com		Jefferson	No response
Jim	Seyler	jseyler@fs.fed.us			No response
Dave	Sherman	dave@wcvb.net	Warren County Visitor's Bureau		No response
Sue	Smith	susans@nwcommission.org	NW Regional Planning		No response
Ron	Steffey	rsteffeyavlt@gmail.com	Allegheny Valley Land Trust		No response

First Name	Last Name	Email	Organization	County	Date Response Received
Raymond	Stolinas	rjstolinas@centercountypa.gov		Centre	No response
Laurie	Storror	lstorror@ncentral.com	Jones Twp	Elk	No response
Jessica	Trimble	jtrimble@pa.gov			No response
Rick	Viglione	rickviglione@padowntown.org	Western Region PA Downtown Center	Elk	No response
Dan	Vilello	dvilello@pa.gov	DEP - North Central Regional Office	Lycoming	No response
Jerry	Walls	jerry@jwallsaicp.com	AICP Professional Planner	Lycoming	No response
Jim	Weaver	jmwwr69@gmail.com		Tioga	No response
Jason L.	Weigle, Ph.D.	jason.weigle@gmail.com			No response
Kim	Wheeler	kwheeler@seda-cog.org	SEDA-COG	Lycoming	No response
Erin	Wiley Moyers	ewiley@pa.gov	DCNR - Northwest Region		No response
Rachel	Wolfel	rwolfel@exchange.ncentral.com	North Central	Elk	No response
Farley	Wright	farley.wright@gmail.com	Experience Works		No response
1) provided some contact information for IICEP list					

Sent via email and postal service: Tuesday, March 30, 2021

From: [MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR](#)

Subject: IICEP Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA)

Attachments: [Attachment 1-Proposed Action.pdf](#)
[Attachment 2-Figures.pdf](#)
[Attachment 3-IICEP Recipient List.pdf](#)

Good Afternoon

“The National Guard Bureau (NGB) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment. In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we are writing this letter to advise you of this effort and request your assistance in identifying any potential issues related to the proposal.

The NGB had previously sent out IICEP letters on this airspace proposal to various Federal, state, and local agencies in August 2019. Thank you for your previous involvement and comments. We have further improved the Proposed Action based on feedback received since the initial invitation. Therefore, we are once again requesting your assistance in identifying issues. Previous comments have been incorporated and additional comments are welcome. The EA will assess the effects of the Proposed Action and will include analysis of the required No-Action alternative. Enclosed, please find a detailed description of the updated Proposed Action (Att.1).

The Maryland ANG mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and also provide assistance to Allies during emergencies. The federal mission during peacetime has the combat-ready unit assigned to the Air Combat Command to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations. The 175 WG must have a reliable and realistic training environment in which to conduct upgrades and continuation training for aircrew.

The proposed action would establish a Low MOA below the existing Duke MOA. The Duke Low MOA would follow the lateral footprint of the Duke MOA as it currently exists except for the southwestern portion. The vertical limits for the Duke Low MOA would be 100 feet Above Ground Level (AGL) to 7,999 feet above Mean Sea Level (MSL), except where noted in the Altitudinal Mitigation Map (attached) over sensitive resource areas. The Duke Low MOA would be used only for sorties requiring the use of low altitude training. The expected usage would be two hours per day, one hour in the morning and one in the afternoon, approximately 170 days per year, with no more than six total aircraft at once. Usage will be routinely Monday through Friday with the 175WG additionally activating the airspace for their one drill

weekend a month. Even then, the usage will be mostly Saturdays only; Sunday usage will be nontypical. The airspace will also not be used during any Federal holidays. The Duke Low MOA would be activated by publishing a Notice to Airmen at least four hours in advance.

Under the proposed action, there would be no supersonic operations, and there will be no release of chaff and flares. In addition, there would be no infrastructure changes, no ground disturbing activities, no weapons firing, and no ordnance deployment within the Duke MOA. Nighttime operations at all altitudes would be limited.

The National Guard Bureau intends to maximize the use of electronic transmittals during subsequent coordination phases of this project. A hard copy of the Draft and Final EA documents will be provided to your office for review. Enclosed is a copy of the distribution list for those agencies and organizations to be contacted regarding this EA (Att. 3). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a redistribution of this letter and the attached materials. In order for the ANG to address your concerns, in a timely manner, please respond within 30 days of receipt of this letter. Please provide any comments you may have within 30 days of receipt of this letter to me at Lt Col Christopher Jesus Mayor, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to [REDACTED]. Thank you for your assistance.

Sincerely,

Lt Col Christopher Mayor

CHRISTOPHER "BUBBA" J. MAYOR, Lt Col, USAF
NGB/A4AM - Plans and Requirements (SharePoint [here](#))
3501 Fetchet Ave
Andrews AFB, MD 20762

[REDACTED]
[REDACTED]

Attachment 1: Description of Proposed Action for Modification of Duke Military Operations Airspace

The National Guard Bureau (NGB) is preparing an Environmental Assessment (EA) to consider the potential consequences to the human and natural environment associated with the modification of the Duke Military Operations Airspace (MOA) to establish a low-altitude airspace. The Maryland Air National Guard, 175th Wing (175 WG), stationed at Martin State Airport near Baltimore, Maryland, will utilize this airspace to train and prepare their A-10C squadron for current and future conflicts. The 175 WG's mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and to aid Allies during emergencies. The 104th Fighter Squadron (FS) is a unit of the 175th Operations Group at Warfield Air National Guard Base and the A-10C is the Primary Assigned Aircraft at the 175 WG.

Nearly all the existing Duke MOA is in Pennsylvania, the underlying counties include all or parts of Elk, Cameron, Clinton, McKean, Potter, and Tioga. A small fraction of the northwest corner of the MOA overlies portions of Cattaraugus and Allegany counties in New York. The existing Duke MOA does not provide airspace for low level training because the airspace begins at 8,000 feet (ft) above mean sea level (MSL). The proposed Duke Low MOA would underly the existing airspace.

The Purpose of the action is to establish low-level airspace beneath the existing Duke MOA to train and prepare military pilots and aircrews for current and future conflicts. The Need for action is to accommodate 175 WG training requirements for a reliable and realistic training environment in which to conduct training in accordance with AFI 11-2A-OA-10V1 and A-10 Ready Aircrew Program.

The 175 WG has 29 pilots on the Letter of Qualifications. Pilots are expected to maintain proficiency in all qualifications or continue to upgrade their qualifications as they gain experience. The AFI 11-2A-OA10V1 specifies Low Altitude Step-Down training (LASDT) requirements for experienced pilots to fly at altitudes below 500 ft above ground level (AGL). The LASDT categories (500 ft AGL to 300 ft AGL to 100 ft AGL) and come into play during specific mission sets. Currently 79% of 175 WG pilots have been qualified to fly below 500 ft AGL, while 58% of pilots are qualified to fly down to 100 ft AGL.

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

- Vertical limits of 100 ft AGL to 7,999 ft above MSL.
- Altitude mitigation over sensitive resource areas of 500 and 1000 ft AGL (see Attachment 2 Figure 2).
- An exclusion area avoiding Wellsboro Airport Class E airspace within the eastern side of the Duke Low MOA.
- Expected activation of two hours per day, one hour at a time, approximately 170 days per year with no more than six total aircraft at once
- Intermittent action times by Notice to Airmen (NOTAM) with limited weekend and nighttime operations.
- No supersonic operations, release of chaff and flares, ordnance deployment, or weapons firing in the Duke Low MOA.

The Proposed Action would (1) be within 200 miles of Martin State Airport, (2) provide sufficient low-level airspace to accommodate A-10C pilot training requirements, and (3) be adequate for 175 WG

Attachment 1: Description of Proposed Action for Modification of Duke Military Operations Airspace-Continued

Letter of Qualifications. The EA will analyze the Proposed Action and the No Action Alternative as well as provide a thorough discussion on all alternatives that were considered but dismissed. These alternatives considered but dismissed include consideration of modifying other existing military airspace within 200 miles as well as use of existing military training routes. Through the process of interagency and intergovernmental coordination for environmental planning (IICEP), the ANG is notifying relevant federal, state, and local agencies, and federally recognized tribes to request their environmental concerns specific to the Proposed Action. The Draft EA will be available on the 175 WG website and sent to regional libraries to invite additional public participation during a 30-day comment period in late summer or fall of 2021.

Attachment 2: Figures

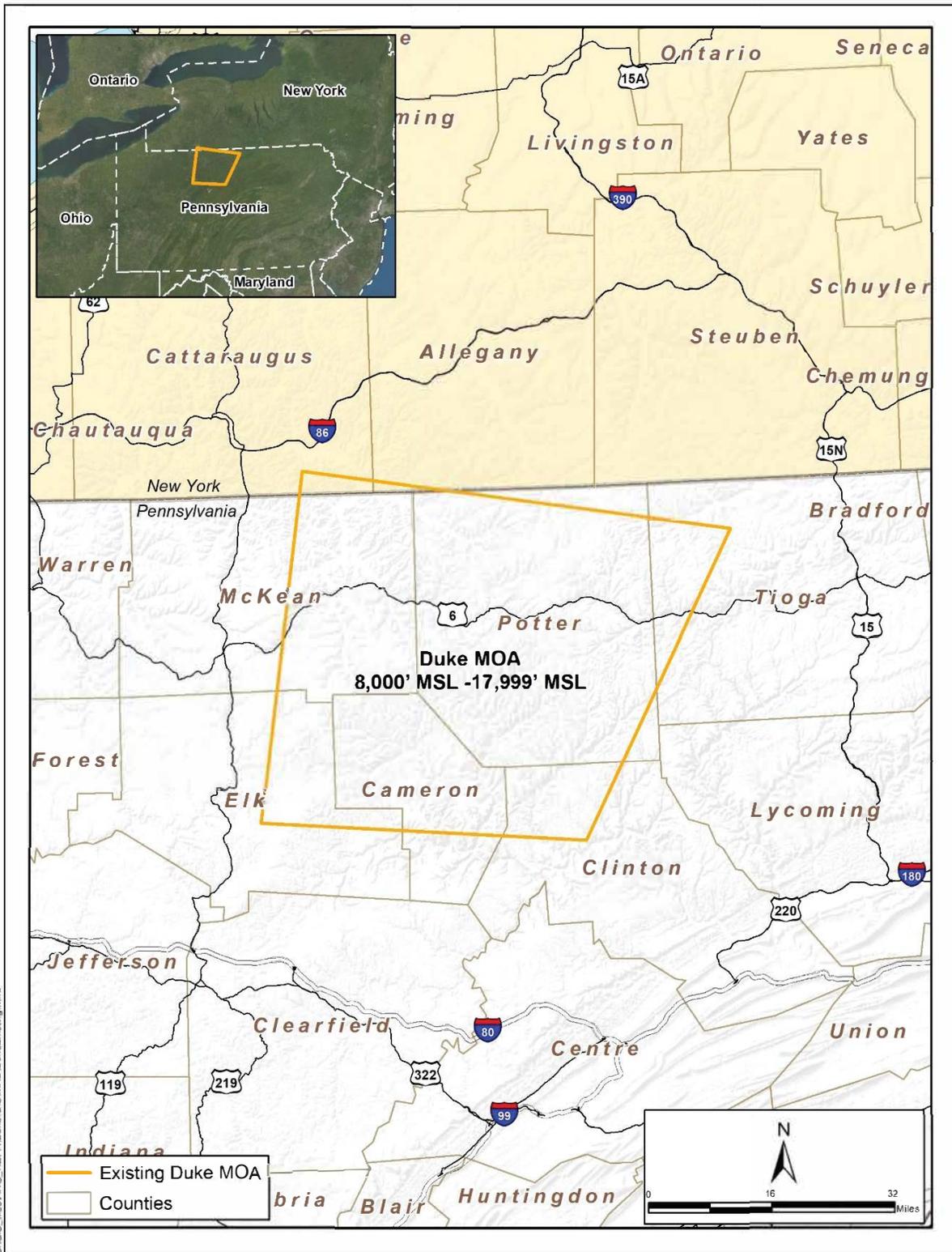
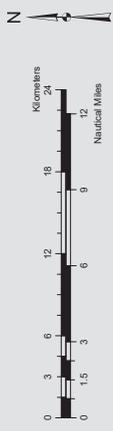


Figure 1

Proposed Duke Low Altitude Mitigation Map State Parks & State Forests

- Existing Duke MOA
 - Proposed Duke Low MOA
 - State Parks
 - State Forests
 - Natural & Wild
 - Main Road
 - Rivers & Creeks
 - Existing FAA Airways (4000' or Greater MSL)
- Altitude**
- 1000' AGL
 - 500' AGL
 - Dam Location



Coordinate Systems
 Horizontal Datum: NAD83 Pennsylvania North Meters
 Vertical Datum: WGS84
 Sources: National Guard Bureau/444M
 Corrections and additions should be brought to the attention of the person below:
 Prepared By: Justin Figueroa
 ANGC Geointegration Office
 Commercial: 248-632-9830



This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data located from Air National Guard installation, part bases, various City, County and State Offices and other sources, affecting the area shown, and is to be used for reference purposes only. The ANGC Geointegration Office is not responsible for any inaccuracies herein.



Figure 2

This was an attachment sent with the ICEP letters.

Attachment 3: ICEP Recipient List

Pennsylvania & New York

(Existing Duke MOA)

Agency	Prefix	First Name	Last Name	Title	Organization	Address 1	Address 2	City	State	Zip Code	Email Address
FEDERAL											
USFWS	Ms.	Sonja	Jahrsdoerfer	Supervisor	Pennsylvania Ecological Services Field Office	110 Radnor Road Suite 101		State College	PA	16801-7987	Sonja_Jahrsdoerfer@fws.gov
USFWS	Ms.	Anne	Rothrock	Wildlife Biologist	New York Ecological Services Field Office	3817 Luker Road		Cortland	NY	13045-9385	anne.rothrock@dec.ny.gov
USACE				Deputy District Commander	U.S. Army Corps of Engineers - Baltimore District	Tioga-Hammond-Cowanesque Office	710 Ives Run Lane	Tioga	PA	16946	
USDA, Forest Service	Ms.	Jamie	Davidson	Forest Supervisor	Allegheny National Forest	4 Farm Colony Drive		Warren	PA	16365	
USDA, Rural Development	Mr.	Curt	Cocodrilli	State Director	USDA, Rural Development Pennsylvania	359 E. Park Drive, Suite 4		Harrisburg	PA	17111	www.rd.usda.gov/pa
U.S. Geological Service (NY)	Mr.	Robert	Breault	Center Director	New York Water Science Center	425 Jordan Road		Troy	NY	12180-8349	
U.S. Geological Service (PA)				Director	U.S. Geological Survey	439 Hepburn Street		Williamsport	PA	17701	
USEPA (NY)	Mr.	Peter	Lopez	Regional Administrator	USEPA, Region 2	290 Broadway		New York	NY	10007-1866	
USEPA (PA)	Mr.	Cosmo	Servidio	Regional Administrator	USEPA, Region 3	1650 Arch Street		Philadelphia	PA	19103-2029	
TRIBES											
Federally recognized on HUD.gov/TDAT website: https://egis.hud.gov/TDAT/											
Delaware Nation, Oklahoma	Ms.	Nekole	Alligood	Historic Preservation/106	Delaware Nation, Oklahoma	PO Box 825		Anadarko	OK	73005	nalligood@delawarenation.com
Delaware Tribe of Indians	Dr.	Brice	Obermeyer	Director	Delaware Tribe of Indians	1Kellog Circle		Emporia	KS	66801	bobermeyer@delawaretribe.org
Seneca Nation of Indians	Dr.	Joe	Stahlman	THPO	Seneca Nation of Indians	Cultural Center	82 W. Hetzel Street	Salamanca	NY	14779	joe.stahlman@sni.org
Seneca-Cayuga Nation	Mr.	William	Tarrant	THPO	Seneca-Cayuga Nation	PO Box 453220		Grove	OK	74344	wtarrant@sctribe.com
Tonawanda Band of Seneca	Mr.	Roger	Hill	Chief	Tonawanda Band of Seneca	7027 Meadville Road		Basom	NY	14013	tonseneca@aol.com
STATE											
Department of Environmental Protection	Mr.	Marcus	Kohl	Regional Director	Department of Environmental Protection	North Central Regional Office	208 West Third St., Suite 101	Williamsport	PA	17701	mkohl@pa.gov
Department of Environmental Protection	Mr.	James	Miller	Regional Director	Department of Environmental Protection	North West Regional Office	230 Chestnut Street	Meadville	PA	16335	jamesmill@pa.gov
New York State Department of Environmental Conservation	Ms.	Abby	Snyder	Regional Director	Region 9 NY State Dept. of Environmental Conservation	270 Michigan Ave.		Buffalo	NY	14203-2915	region9@dec.ny.gov
SHPO (Pennsylvania)	Ms.	Andrea	MacDonald	Bureau Director/Deputy SHPO	Pennsylvania Historical & Museum Commission - SHPO	400 North Street	Commonwealth Keystone Bldg, 2nd	Harrisburg	PA	17120-0093	
SHPO (New York)	Mr.	Roger	Mackay	Deputy State Historical Preservation Officer	NY State Division for Historic Preservation	Peebles Island Resource Center	One Delaware Ave North	Cohoes	NY	12047	
PA Dept. of Transportation (Aviation Division)	Mr.		McCloskey	Director	PennDOT - Bureau of Aviation	400 North Street		Harrisburg	PA	17120	
PA Air National Guard	Col	Terrence	Koudelka	Commander	193 SOW	81 Constellation Ct	Harrisburg IAP	Middletown	PA	17057	terrence.koudelka@us.af.mil
Dept. of Forestry	Mr.	John	Norbek	Deputy Secretary	PA DCNR Bureau of Forestry	Rachel Carson State Office Building, 6th Floor	PO Box 8552	Harrisburg	PA	17105	PaForester@pa.gov
Dept. of Conservation and Natural Resources Pennsylvania	Ms.	Cindy	Adams Dunn	Secretary	Dept. of Conservation and Natural Resources Pennsylvania	7th Floor, RCSOB	400 Market Street	Harrisburg	PA	17105	

PA Wilds	Mr.	Jim	weaver	Chairperson	PA Wilds Planning Team	PA Wilds Center	PO Box 285	Sugargrove	PA	16350	Jmwvr69@gmail.com
PA Great Outdoors	Mr.	John	Straitiff	Executive Director	Visitors Bureau	2801 Maplevale Rd		Brookville	PA	15825	John@VisitPAGO.com
Dept of Agriculture	Mr.	Russell	Redding	Secretary	Pennsylvania Dept. of Agriculture	2301 North Cameron Street		Harrisburg	PA	17110	
Wildlife Resources Division	Ms.	Bryan	Burhans	Executive Director	Pennsylvania Game Commission - NC Region	1566 South Route 44 Highway	PO Box 5038	Jersey Shore	PA	17740	
LOCAL BY COUNTY											
Elk County											
Elk County Commissioners	Ms.	Fritz	Lecker	Commissioner	Elk County Commissioners	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	flecker@countyofelkpa.com
Elk County Commissioners	Mr.	Joe	Daghir	Commissioner	Elk County Commissioners	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	jdaghir@countyofelkpa.com
Elk County Commissioners	Mr.	Matt	Quensenberry	Commissioner	Elk County Commissioners	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	mquensenberry@countyofelkpa.com
Elk County Planning Dept.	Ms.	Jodi	Foster	Director	Elk County Planning Dept.	Elk County Courthouse	300 Center Street	Ridgway	PA	15853	jfoster@countyofelkpa.com
Ridgway Industrial Development Corporation	Mr.	Steve	Cleveland	Director	Ridgway Industrial Development Corporation	PO Box 176		Ridgway	PA	15853	elkcountyfoods@gmail.com
Ridgway Industrial Development Corporation	Ms.	Jane	Bryndel	Director	Ridgway Industrial Development Corporation	PO Box 176		Ridgway	PA	15853	janebryndel@msn.com
Keystone Elk Country Alliance	Mr.	Rawley	Cogan	CEO	Keystone Elk Country Alliance	134 Homestead Dr.		Benezette	PA	15821	info@experienceelkcountry.com
Western Pennsylvania Conservancy	Mr.	Matt	Marusiak	Land Manager	Western Pennsylvania Conservancy	159 Main Street		Ridgway	PA	15853	mmarusiak@paconserve.org
Ridgway Township	Ms.	Michelle	Bogacki	Secretary	Ridgway Township	1537-A Montmorenci Road		Ridgway	PA	15853	rwytwp@windstream.net
City of St. Marys Community Planning	Ms.	Tina	Gradizzi	Director	City of St. Marys Community Planning	11 LaFayette Street		St. Marys	PA	15857	tina@cityofstmarys.com
Ridgway-Elk County Chamber of Commerce	Mr.	Steve	Caggese	President	Ridgway-Elk County Chamber of Commerce	300 Main Street		Ridgway	PA	15853	info@ridgwaychamber.com
St. Marys Chamber of Commerce	Ms.	Ann	Gabler	Managing Director	St. Marys Chamber of Commerce	53 South St. Marys Street		St. Marys	PA	15857	info@stmaryschamber.org
Elk County Farm Bureau	Mr.	Ernie	Mattiuz	Director	Elk County Farm Bureau	133 Frey Road		Kersey	PA	15846	emattiuz@windstream.net
Ridgway Borough Council	Ms.	Abbi	Peters	Council Member	Ridgway Borough Council	Ridgway Borough Office	108 Main Street	Ridgway	PA	15853	apeters@pawildscenter.org
Elk County Catholic School System	Mr.	Sam	MacDonald	President	Elk County Catholic School System	Elk County Catholic High School	600 Maurus Street	St. Marys	PA	15857	sammacdonald@comcast.net
Ridgway Area School District	Ms.	Heather	Vargas	Superintendent	Ridgway Area School District	RASD Main Office	62 School Drive	Ridgway	PA	15853	mcmahonheather@ridgwayedu.com
St. Marys Area School District	Mr.	Brian	Toth	Superintendent	St. Marys Area School District	SASD Main Office	977 S. St. Marys Road	St. Marys	PA	15857	bthoth@smasd.org
Johnsonburg Area School District	Mr.	Dennis	Crotzer	Superintendent	Johnsonburg Area School District	JASD Main Office	315 High School Road	Johnsonburg	PA	15845	dcrotzer@johnsonburgareaschooldistrict.net
Elk County Conservation District	Ms.	Katie	Wehler	District Manager	Elk County Conservation District	850 Washington Street		St. Marys	PA	15857	kwehler@countyofelkpa.com
PA Wild Turkey Federation	Mr.	Andy	Olson	Elk County Representative	PA Wilds Turkey Federation	181 Timberline Road		St. Marys	PA	15857	Aolson181@gmail.com
County Board of Commissioners				Chairperson	Elk County Courthouse Annex	300 Center Street	PO Box 448	Ridgeway	PA	15853	
Chamber of Commerce	Mr.	Gennaro	Aiello	President	Ridgeway-Elk County Chamber of Commerce	300 Main Street		Ridgeway	PA	15853	info@ridgwaychamber.com
Forrest County											
Forest County Commissioners	Mr.	Mark	Kingston	Chair, Commissioner	Forest County Commissioners	Forest County Commissioners Office	526 Elm Street, #3	Tionesta	PA	16353	mkingston@co.forest.pa.us
Forest County Commissioners	Mr.	Basil	Huffman	Commissioner	Forest County Commissioners	Forest County Commissioners Office	526 Elm Street, #3	Tionesta	PA	16353	bhuffman@co.forest.pa.us
Forest County Commissioners	Mr.	Robert	Snyder, Jr.	Commissioner	Forest County Commissioners	Forest County Commissioners Office	526 Elm Street, #3	Tionesta	PA	16353	rsnyder@co.forest.pa.us
Forest County Conservation District and Planning Department	Ms.	Donna	Zofcin	Manager	Forest County Conservation District and Planning Department	Forest County Conservation District & Planning Dept. Office	526 Elm Street, #3	Tionesta	PA	16353	dzofcin@co.forest.pa.us

Forest Area School District	Ms.	Amanda	Hetrick	Superintendent	Forest Area School District		22316 Route 62, Box 16	Tionesta	PA	16353	ahetrick@forestareaschools.org
McKean County											
McKean County Commissioners	Ms.	Carol	Duffy	Commissioner	McKean County Commissioners	McKean County Courthouse	300 West Main Street	Smethport	PA	16749	ceduffy@mckeancountypa.org
McKean County Commissioners	Mr.	Cliff	Lane	Commissioner	McKean County Commissioners	McKean County Courthouse	300 West Main Street	Smethport	PA	16749	cdlane@mckeancountypa.org
McKean County Commissioners	Mr.	Tom	Kreiner	Commissioner	McKean County Commissioners	McKean County Courthouse	300 West Main Street	Smethport	PA	16749	tfkreiner@mckeancountypa.org
McKean County Planning Commission	Mr.	Jeremy	Morey	Planning Director	McKean County Planning Commission	17137 Route 6		Smethport	PA	16749	jsmorey@mckeancountypa.org
Allegheny National Forest Vacation Bureau	Ms.	Linda	Devlin	Director	Allegheny National Forest Vacation Bureau	80 Corydon Street		Bradford	PA	16701	devlin@visitanf.com
McKean County Conservation District	Ms.	Sandy	Thompson	District Manager	McKean County Conservation District	17137 Route 6		Smethport	PA	16749	sdthompson@mckeancountypa.org
Kane Area School District	Mr.	Brock	Benson	Superintendent	Kane Area School District	KASD Main Office	400 West Hemlock Avenue	Kane	PA	16735	superintendent@kasd.net
Bradford Area School District	Ms.	Katharine	Pude	Superintendent	Bradford Area School District	BASD Main Office	150 Lorana Avenue	Bradford	PA	16701	kpude@bradfordareaschools.org
Smethport Area School District	Mr.	David	London	Superintendent	Smethport Area School District	SASD Main Office	414 South Mechanic Street	Smethport	PA	16749	dllondon@smethportschools.com
County Board of Commissioners				Chairperson	500 W Main Street			Smethport	PA	16749	PJBurlingame@mckeancountypa.org
Economic Development	Mr.	Robert	Veilleux	Director	McKean County Economic Development	17137, Route 6		Smethport	PA	16749	raveilleux@mckeancountypa.org
Potter County											
County Board of Commissioners	Mr.	Paul	Heimel	Vice-Chair	Potter County Commissioners	Gunzburger	One North Main St.	Coudersport	PA	16915	pheimel@pottercountyhpa.net
County Board of Commissioners	Mr.	Barry	Hayman	Commissioner	Potter County Commissioners	Gunzburger	One North	Coudersport	PA	16915	bhayman@pottercountypa.net
Potter County Conservation District	Mr.	Jason	Childs	District Manager	Potter County Conservation District		107 Market Street	Coudersport	PA	16915	j.childs@pottercd.com
Potter County Community Development	Ms.	Ellen	Russell	Director	Potter County Community Development	Gunzburger Building Suite 200	One North Main St.	Coudersport	PA	16915	erussell@pottercountypa.net
County Board of Commissioners	Ms.	Nancy	Grupp	Chairperson	Gunzburger Building	One North Main Street	Suite 203	Coudersport	PA	16915	ngrupp@pottercountypa.net
Chamber of Commerce & Economic Development				Board of Directors	Coudersport Area Chamber of Commerce	227 N Main St	PO Box 261	Coudersport	PA	16915	chamber@coudersport.org
County Planning	Mr.	Will	Hunt	County Planning	Potter County Planning	Gunzburger Building One N Main	Suite 105	Coudersport	PA	16915	whunt@pottercountypa.net
Cameron County											
County Board of Commissioners	Mr.	James	Moate	Commissioner	Cameron County Commissioners	Cameron County Courthouse	20 East 5 th Street	Emporium	PA	15834	jmoate@cameroncountypa.com
County Board of Commissioners	Ms.	Ann	Losey	Commissioner	Cameron County Commissioners	Cameron County Courthouse	20 East 5 th Street	Emporium	PA	15834	alosey@cameroncountypa.com
DCNR	Mr.	Alan	Lichtenwalner	Regional Park Manager	DCNR	DCNR Regional Office	260 Sizerville Road	Emporium	PA	15834	alichtenw@pa.gov
Cameron County Area School District	Mr.	Keith	Wolfe	Superintendent	Cameron County Area School District	CCSD Main Office	601 Woodland Avenue	Emporium	PA	15834	Keith.wolfe@camcosd.org
Cameron County Conservation District	Mr.	Todd	Deluccia	District Manager	Cameron County Conservation District	Cameron County Courthouse	74 East 3 rd Street	Emporium	PA	15834	tdeluccia@cameroncd.org
County Board of Commissioners	Ms.	Lori	Reed	Chairperson	Cameron County Courthouse	20 East 5th Street		Emporium	PA	15834	lreed@cameroncountypa.com
Chamber of Commerce	Ms.	Tina	John Solak	Executive Director	Cameron County Chamber of Commerce	34 East 4th Street		Emporium	PA	15834	cameronchamber@gmail.com
Economic Development	Mr.	Cliff	Clark	Director	Cameron County Community & Economic Development	20 East 5th Street		Emporium	PA	15834	cclark@cameroncountypa.com
Tioga County											
County Board of Commissioners	Mr.	Roger	Bunn	Commissioner	Tioga County Government	County of Tioga	118 Main Street	Wellsboro	PA	16901	commissioners@tiogacountypa.us
County Board of Commissioners	Mr.	Mark	Hamilton	Commissioner	Tioga County Government	County of Tioga	118 Main Street	Wellsboro	PA	16901	commissioners@tiogacountypa.us
County Board of Commissioners	Mr.	Erik	Coolidge	Commissioner	Tioga County Government	County of Tioga	118 Main Street	Wellsboro	PA	16901	commissioners@tiogacountypa.us
Tioga County Conservation District	Ms.	Erica	Tomlinson	District Manager	Tioga County Conservation District		1807 Shunway Hill Road	Wellsboro	PA	16901	etomlinson@tiogacountypa.us
Tioga County Planning Commission	Ms.	Deb	Crawford	Director	Tioga County Planning Commission	County of Tioga	118 Main Street	Wellsboro	PA	16901	dcrawford@tiogacountypa.us
Develop Tioga PA	Ms.	Kristin	Hamilton	Executive Director	Develop Tioga PA		33 Pearl St.	Wellsboro	PA	16901	info@developingtioaga.org
County Board of Commissioners	Mr.	Marc	Rice	Chairperson	Tioga County Government	118 Main Street		Wellsboro	PA	16901	commissioners@tiogacountypa.us
Warren County											
Warren County Commissioners	Mr.	Ben	Kafferlin	Commissioner	Warren County Commissioners	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	bkafferlin@warren-county.net
Warren County Commissioners	Ms.	Tricia	Durbin	Commissioner	Warren County Commissioners	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	tdurbin@warren-county.net

Warren County Commissioners	Mr.	Jeff	Eggleston	Commissioner	Warren County Commissioners	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	jeff@warren-county.net
Warren County Planning Department	Mr.	Dan	Glutz	Dept. Head	Warren County Planning Department	Warren County Courthouse	204 4 th Avenue	Warren	PA	16365	dglutz@warren-county.net
Warren County Conservation District	Ms.	Heather	Wilcox	District Manager	Warren County Conservation District		4000 Conewango Avenue	Warren	PA	16365	smoore@wccconservation.net
Warren County Visitors Bureau	Mr.	Dave	Sherman	Executive Director	Warren County Visitors Bureau		22045 US Route 6	Warren	PA	16365	info@wcvb.net
Wellsboro City (Tioga)											
Wellsboro Chamber of Commerce	Ms.	Julie	VanNess	Executive Director	Wellsboro Chamber of Commerce	114 Main Street, Suite #1		Wellsboro	PA	16901	
Clinton County											
County Board of Commissioners	Mr.	Jeff	Snyder	Commissioner	Clinton County Commissioners	Commissioners Office	2 Piper Way, Suite 300	Lock Haven	PA	17745	jsnyder@clintoncountypa.com
County Board of Commissioners	Ms.	Angela	Harding	Commissioner	Clinton County Commissioners	Commissioners Office	2 Piper Way, Suite 300	Lock Haven	PA	17745	aharding@clintoncountypa.com
Clinton County Conservation District	Mr.	Wade	Jodun	Manager	Clinton County Conservation District	Conservation District Office	45 Cooperation Lane	Mill Hall	PA	17751	wjodun@clintoncountypa.com
Clinton County Planning Commission	Ms.	Katie	de Silva	Planning Director	Clinton County Planning Commission	2 Piper Way	Suite 244	Lock Haven	PA	17745	kdesilva@clintoncountypa.com
Keystone Central School District	Ms.	Jacquelyn	Martin	Superintendent	Keystone Central School District	Keystone Central School District Office	85 Administration Drive	Mill Hall	PA	17751	jmartin@kcsd.us
Chamber of Commerce & Economic Development	Mr.	Michael	Flanagan	President, CEO	Clinton County Economic Partnership	212 North Jay Street	PO Box 506	Lock Haven	PA	17745	ceo@clintoncountyinfo.com
County Board of Commissioners	Mr.	Miles	Kessinger	Chairperson	County Commissioners Office	2 Piper Way, Suite 300		Lock Haven	PA	17445	
Allegany (New York)											
Chamber of Commerce	Ms.	Gretchen	Hanchett	Executive Director	Greater Allegany County Chamber of Commerce, Inc.	Crossroads Commerce Center	6087 NYS Route 19N - Suite 120	Belmont	NY	14813	
Economic Development	Ms.	Angela	McKay	Assistant Director	Allegany County Dept. of Planning	Crossroads Commerce Center	6087 NYS Route 19N - Suite 100	Belmont	NY	14813	
Cattaraugus (New York)											
Chamber of Commerce & Economic Development	Ms.	Crystal	Abers	Director	Cattaraugus County Dept. of Economic Development, Planning and Tourism	Second Floor	303 Court St.	Little Valley	NY	14755	
Regional											
PA Wilds Center	Ms.	Ta	Enos	CEO	PA Wilds Center	PO Box 286		Sugar Grove	PA	16350	tenos@pawildscenter.org
PA Wilds Planning Team	Ms.	Candi	Hand	Administrative Assistant	PA Wilds Planning Team	219 Edison Bates Drive		Port Allegany	PA	16734	chand@pcedcouncil.org
Trout Unlimited	Ms.	Kelly	Williams	NW Regional VP	Trout Unlimited	PO Box 5148		Bellefonte	PA	16823	kwilliamssccd@atlanticbbn.net
Trout Unlimited	Mr.	Troy	McDunn	Cornplanter #526 Chapter Representative	Trout Unlimited	79 Buena Vista Blvd.		Warren	PA	16365	hdpartsman@verizon.net
PA Wild Turkey Federation	Mr.	Skip	Motts	Regional Director	PA Wilds Turkey Federation	68 Railroad Grade Road		Smethport	PA	16749	smotts@nwf.net
PA Wild Turkey Federation	Mr.	Heath	Nace	PA President	PA Wild Turkey Federation	1354 Pisgah State Road		Shermans Dale	PA	17090	devildoghn89@gmail.com
Central PA Pheasants Forever	Mr.	Howard	Olay	Chapter Representative	Central PA Pheasants Forever	225 Old Kersey Road		Kersey	PA	15846	contact@pheasantsforever.org
Friends of the Allegheny Wilderness	Mr.	Kirk	Johnson	Executive Director	Friends of the Allegheny Wilderness	220 Center Street		Warren	PA	16365	kjohnson@pawild.org
The Conservation Fund	Ms.	Kendra	Briechle	Manager, Community & Economic Development	The Conservation Fund	National Conservation Training Center	698 Conservation Way	Shepherdstown	WV	25443	kbriechle@conservationfund.org
North Central PA Regional Planning & Development Commission	Mr.	Jim	Chorney	Executive Director	North Central PA Regional Planning & Development Commission	49 Ridgmont Drive		Ridgway	PA	15853	jchorney@ncentral.com
Northwest Commission	Ms.	Jill	Foys	Executive Director	Northwest Commission	395 Seneca Street		Oil City	PA	16301	jillf@northwestpa.org
Norther Tier Regional Planning & Development Commission	Mr.	Kevin	Abrams	Executive Director	Norther Tier Regional Planning & Development Commission	312 Main Street		Towanda	PA	18848	adbrams@northertier.org
PA Farm Bureau	Ms.	Brittany	Eisenman	Region 6 Director	PA Farm Bureau	510 South 31 st Street		Camp Hill	PA	17011	breisenman@pfb.com
Headwaters Charitable Trust	Ms.	Janie	French	Executive Director	Headwaters Charitable Trust	434 State Street		Curwensville	PA	16833	jfrench@hwct.org
PA Senate	Sen.	Cris	Dush	Senator	PA Senate		75 South White Street	Brookville	PA	15825	
PA House	Rep.	Martin	Causer	Representative	PA House		78 Main Street	Bradford	PA	16701	
PA House	Rep.	Mike	Armanini	Representative	PA House	DuBois Area Plaza, Suite 10	1221 East DuBois	DuBois	PA	15801	
PA Great Outdoors	Mr.	John	Stratiff	Director	PA Great Outdoors	2801 Maplevale Road		Brookville	PA	15825	John@visitpago.com
AIRPORTS											
Bradford Regional (BFD)	Ms.	Alicia	Dankesreiter	Airport Manager	Bradford Regional Airport Authority	212 Airport Dr, Ste E		Lewis Run	PA	16738	
St Marys Municipal (OYM)	Mr.	Joe	Kerchinski	Airport Manager	City of St Marys	159 Cessna Rd		St Marys	PA	15857	
Wellsboro Johnston (N38)	Mr.	Shaw	Siglin	Airport Manager	Grand Canyon Airport Authority	112 Runway Rd		Wellsboro	PA	16901	

Freefal Oz (06PA)	Mr.	Ashley	Easdon-Smith	Airport Owner	Freefal Oz (06PA)	296 Faulkner Rd		Shinglehouse	PA	16748	
Adams (90PA)	Mr.	Merrill	Adams	Airport Owner	Adams (90PA)	21 Carrigan Ave		Spring City	PA	19475	
Greeley (PN15)	Mr.	Barton	Greeley	Airport Owner	Greeley (PN15)	119 Bowers Rd		Coudersport	PA	16915	
Johnson (2PA5)	Mr.	Merle	Johnson	Airport Owner	Johnson (2PA5)	25425 Troon Ave		Sorrento	FL	32776	
Ranch-Aero (PN90)	Mr.	James	Yates	Airport Owner	Ranch-Aero (PN90)	PO Box 75		Roulette	PA	16746	
Sharretts (PN91)	Mr.	Fred	Sharretts	Airport Owner	Sharretts (PN91)	97 Johnson Rd		Westfield	PA	16950	
Cole Mem Heliport (PN09)	Mr.	Melvin	Blake	Airport Manager	Charles Cole Memorial Hospital	1001 East Second St		Coudersport	PA	16915	
Cameron Co Jr/Sr High (8PN7)		N/A	N/A		Cameron County Jr/Sr High School	601 Woodland Ave		Emporium	PA	15634	
Elk Rgnl Med Ctr Heliport (7PS9)	Mr.	Keith	Van Horn	Airport Manager	Elk Regional Health Center	763 Johnsonburg Rd		St Marys	PA	15857	
SPECIAL INTEREST GROUPS											
NBAA	Ms.	Brittany	Davies	NE Region	National Business Aviation Association	1200 G St. NW, Suite 1100		Washington	DC	20005	bdavies@nbaa.org
AOPA	Mr.	Jim	McClay	Director Airspace, Air Traffic & Security	Aircraft Owners & Pilots Association	50 F Street NE, Suite 750		Washington	DC	20001	airtrafficservices@aopa.org
American Wind Energy Association	Mr.	Tom	Vinson	Vice President	American Wind Energy Association	1501 M Street NW, Suite 900		Washington	DC	20005	tvinson@awea.org

PA Wilds Planning Team-Email Recipients

First Name	Last Name	Email	Organization	County
Jason	Albright	jasalbrigh@pa.gov		
Kristi	Amato	kamato@co.clarion.pa.us		
Kaye	Aumick	kaumick@tiogacountypa.us	Planning Specialist	Tioga
Mary	Baker	mary.baker3@usda.gov		
Jodi	Brennan	jbrennan@clearfieldco.org	Planning	Clearfield
Julie	Brennan	tourismdirector@clintoncountyinfo.com		Clinton
Josh	Bridge	jbridge@fs.fed.us		
Bill	Callahan	wcallahan@pa.gov	PHMC	
Renee	Carey	rcarey@npcweb.org	North Central PA Conservancy	Lycoming
Trish	Carothers	tcarothers@susquehannagreenway.org	Susquehanna Greenway Partenship	
Eric B.	Cowden	ecowden@marcelluscoalition.org		
Dana	Crisp	rcrisp@pa.gov	DCNR - State Parks Region I	
Lori D.	Dabbondanza	ldabbon@pacounties.org	County Commissioners Association of PA	
Brittany	Dittemore	bdittemore@headwatersrcd.net		
Kristi	Ditz	kditz@co.clarion.pa.us	Planning & Development	Clarion
James	Dunn	jdunn2492@comcast.net		
Corey	Ellison	cellison@susquehannagreenway.org	Susquehanna Greenway Partenship	
Jennifer	F.	jenniferf@northwestpa.org		
Wes	Fahringer	mfahringer@pa.gov	DCNR - North Central Regional Office	
Gregory A.	Faller	gafaller@gmail.com	Commissioner	Clarion
Rob	Fallon	rfallon@fs.fed.us	Marienville District Ranger	
Jackie	Felion	jfelion@state.pa.us		
Jason	Fellon	jfellon@pa.gov	DEP - North Central Regional Office	Lycoming
Marissa	Galeotti	mgaleotti@pa.gov		
Sue	Hannegan	shannegan@co.centre.pa.us	Planning Commission	Centre
Colleen	Hanson	colleen@visitpottertioga.com	Visit Potter Tioga	Tioga
Doug	Hill	dhill@pacounties.org	County Commissioners Association of PA	
Meredith	Hill	mehill@pa.gov	DCNR	
Candace	Hillyard	candace@paroute6.com	PA Rt 6 Heritage Corporation	Potter
Tim	Holladay	thollada@clintoncountypa.com	Planning Commission	Clinton
Mary Jo	Hughes	manager@downtowndubois.com	Downtown DuBois Revitalization Group	Clearfield
Bob	Imhof	bwi@ncentral.com		
Josiah	Jones	jjones@visitclearfieldcounty.org	Visit Clearfield County	Clearfield
Mike	Keller	mkeller@psats.org	PSATS	
Allen	Kerkeslager	akerkesl@sju.edu	OntarioSusquehanna Greenway Trail	
Amy	Kessler	amy@exchange.ncentral.com		Elk

Ed	Knittel	eknittel@boroughs.org	PA State Assoc. of Boroughs	
Holly	Komonczi	hkomonczi@visitclearfieldcounty.org	Recreation & Tourism	Clearfield
Jackie	Koons-Felion	jfelion@pa.gov	PennDOT	
Lisa	Kovalick	lkovalick@clearfieldco.org	Planning	Clearfield
John	Lavelle	jlavelle@lyco.org	Planning & Development	Lycoming
Jamie	Lefever	jamie@callclarionpa.com		
Elizabeth	Lose	ealose@centercountypa.gov		Centre
Andrea	MacDonald	amacdonald@pa.gov	PHMC	
Nicholas	Mackereth	nmackereth@pa.gov	DCEC	Allegheny
Paul	McCloskey	pmccloskey@clearlyahead.com		
Doty	McDowell	domcdowell@pa.gov		
Michele	Moore	mmoore@pcedcouncil.org	Potter County Education Council	Potter
Mark	Murawski	mmurawski@lyco.org	Planning Director	Lycoming
Wendy	Nickerson	wnickerson@boroughs.org	PA State Assoc. of Boroughs	
Rosemary	Orner	rorner@seda-cog.org	SEDA-COG	
Mike	Piaskowski	mpiaskowsk@pa.gov		
Jenny	Picciano	jpicciano@lyco.org	Planning & Development	Lycoming
Deborah	Pontzer	debpontzer@windstream.net	Congressman Thompson's Office	Elk
Deborah	Pontzer	deborah.pontzer@mail.house.gov	Congressman Thompson's Office	
Dennis	Puko	dennypuko@dpukoplanning.com	Planning Consultant	Allegheny
Josh	Roth	josroth@pa.gov	Lumber Heritage Museum	
Lisa	Schaefer	lschaefer@pacounties.org		
Bill	Setree	bsetree@jeffersoncountypa.com		Jefferson
Jim	Seyler	jseyler@fs.fed.us		
Dave	Sherman	dave@wcvb.net	Warren County Visitor's Bureau	
Sue	Smith	susans@nwcommission.org	NW Regional Planning	
Ron	Steffey	rsteffeyavlt@gmail.com	Allegheny Valley Land Trust	
Raymond	Stolinas	rjstolinas@centercountypa.gov		Centre
Laurie	Storrar	lstorrar@ncentral.com	Jones Twp	Elk
Jessica	Trimble	jtrimble@pa.gov		
Rick	Viglione	rickviglione@padowntown.org	Western Region PA Downtown Center	Elk
Dan	Vilello	dvilello@pa.gov	DEP - North Central Regional Office	Lycoming
Jerry	Walls	jerry@jwallsaicp.com	AICP Professional Planner	Lycoming
Jim	Weaver	jmwwr69@gmail.com		Tioga
Jason L.	Weigle, Ph.D.	jason.weigle@gmail.com		
Kim	Wheeler	kwheeler@seda-cog.org	SEDA-COG	Lycoming
Erin	Wiley Moyers	ewiley@pa.gov	DCNR - Northwest Region	
Rachel	Wolfel	rwolfel@exchange.ncentral.com	North Central	Elk
Farley	Wright	farley.wright@gmail.com	Experience Works	

PNDI # N/A

USFWS Project # 2019-1418

U.S. FISH AND WILDLIFE SERVICE
110 Radnor Road, Suite 101, State College, PA 16801

This responds to your inquiry about a PNDI Internet Database search that resulted in a potential conflict with a federally listed, proposed or candidate species.

PROJECT LOCATION INFORMATION

County: Elk, Cameron, Clinton, McKean, Potter, & Tioga Counties

Township: Multiple

MISC INFORMATION

Date received by FWS: 3/31/2021

ACTIVE ARCHIVE

USFWS COMMENTS EMAILED MAILED

Email: Christopher.mayor.3@us.af.mil

To: Lt Col Christopher Mayor

Affiliation: United States Air Force

SPECIFIC PROJECT Duke Low Military Operations Airspace

- Other than occasional transient species, no federally listed species under our jurisdiction is known or likely to occur in the project area. This determination is valid for two years. Should project plans change, or if additional information on listed species become available, this determination may be reconsidered.
- It appears there have been no changes in the project or on-site biological information; therefore, the agency's comments, as detailed in our letter of 9/16/19 remain unchanged.
- We have already provided comments on this project (See PNDI Receipt); therefore, no further correspondence will be sent by this agency. If there is a change in the project, please re-screen the project on-line, and contact this office if the PNDI receipt directs you to do so.

The above determination is valid for two years from the date of this letter. In addition, this response relates only to federally listed, proposed, and candidate species under our jurisdiction, based on an office review of the proposed project's location and anticipated impacts. No field inspection of the project area has been conducted by this office. Consequently, comments on this form are not to be construed as addressing other Service concerns under the Fish and Wildlife Coordination Act or other authorities. *Please reference the above PNDI # and USFWS Project # in any future correspondence regarding this project.*

This review was conducted by the biologist listed below. He/she can be contacted at 814-206-(Extension).

Melinda Turner (x7449)
 Richard Novak (x7477)

Nicole Ranalli (x7455)
 Alison Whitlock (x7461)

Jennifer Kagel (x7451)
 Pamela Shellenberger (x7459)

ROBERT ANDERSON Digitally signed by ROBERT ANDERSON
Date: 2021.05.04 10:28:30 -04'00'

SIGNATURE: _____

Supervisor, Pennsylvania Field Office



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201-2930

April 22, 2021

Operations Division

National Guard Bureau
Lt. Col. Christopher Jesus Mayor
NGB/A4AM-Plans and Requirements
3501 Fetchet Avenue
Joint Base Andrews 20762-5157

Dear Lt. Col. Mayor:

This is in response to the National Guard Bureau letter dated March 30, 2021, regarding preparation of the Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA) to accommodate the training requirements of the 175th Wing, Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. The MOA modification area is proposed to be established within all or parts of the low-altitude airspace 100 feet above ground level to 7,999 feet above mean sea level underlying the lateral footprint of the existing MOA above Elk, Cameron, Clinton, McKean, Potter, and Tioga counties in Pennsylvania and Cattaraugus and Allegany counties in New York. No infrastructure changes are proposed.

The proposed airspace modification would not impede operations or future maintenance of the federal Civil Works Alvin R. Bush Dam in Clinton County, or Tioga-Hammond and Cowanesque Lakes in Tioga County, and would not result in any restriction of use beyond existing condition. Therefore, this office has determined that the proposed work would not impair the usefulness of the federal projects and we do not expect to provide any further comment on the EA. If any of the information contained in the proposal and/or plans is later revised, this determination may be subject to modification or revocation. It is requested that you notify this office if the project is revised to potentially impact the federal lake projects identified above.

Thank you for coordinating with this office. If you have any questions concerning this matter, please contact Mr. Phil Cwiek, at 410-962-6010 or Phil.Cwiek@usace.army.mil.

Sincerely,

Steven M. Brown
Chief, Flood Risk Management Branch

Enclosures

From: [Greene, Raquel - RD, Harrisburg, PA](#)
To: [MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR](#)
Cc: [Wilson, Jeremy - RD, Harrisburg, PA](#)
Subject: [Non-DoD Source] RESPONSE: Modification of Duke Military Operations MOA
Date: Monday, April 19, 2021 11:20:41 AM
Attachments: [image001.jpg](#)
[image002.png](#)
[image003.png](#)
[image004.jpg](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.jpg](#)

Hi Lt Col Mayor,

I reviewed the letter regarding the Duke Military Operations MOA Project. Based on the nature of the proposed activities, the USDA Rural Development does not have any involvement and can be removed from future scoping lists.

If you have any questions, please contact me.

Thank you,

Kelly Greene
Special Projects Coordinator | State Environmental Coordinator
Pennsylvania State Office | Rural Development
United States Department of Agriculture
359 East Park Drive, Suite 4
Harrisburg, PA 17111-2747
desk 717-237-2176 | cell 570-492-0629 | fax 855-813-2864
www.rd.usda.gov/pa | "Together, America Prospers"

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From: Gustafson, Staci <gustafson@pa.gov>
Sent: Wednesday, April 28, 2021 11:12
To: MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR [REDACTED]
Cc: Kohl, Marcus J <mkohl@pa.gov>; Holden, John <johholden@pa.gov>; Dressler, Jared <jardressle@pa.gov>; Babb, Brian <bbabb@pa.gov>; Ryder, John <jryder@pa.gov>
Subject: [Non-DoD Source] IICEP Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA) -PA DEP Review

Good Morning:

The Department of Environmental Protection (Department) has reviewed the proposed actions and associated attachments related to the modification of the Duke MOA. We bring to your attention the presence of oil and gas activities within the MOA. Attached is a map of locations where, since January 1, 2019, the Department has issued permits for drilling rigs that could use a "triple", a rig exceeding 100 feet in height. Additional well sites may be approved within the MOA. Should you have any questions, please contact Brian Babb, Subsurface Permits Environmental Program Manager with the Department's Oil and Gas Program, at 814.332.6857 or bbabb@pa.gov.

Submitted on behalf of:

Marcus Kohl | Regional Director
Department of Environmental Protection |
North Central Regional Office
208 West Third Street Suite 101 | Williamsport PA 17701
Phone: 570.327.3695 | Fax: 570.327.3565
www.dep.pa.gov

John A. Holden PE | Acting Regional Director
Department of Environmental Protection
Northwest Regional Office
230 Chestnut Street | Meadville, PA 16335
Phone: 814-332-6661 | Fax 814-332-6121
www.dep.pa.gov

Regards,

Staci Gustafson | Assistant Regional Director
Department of Environmental Protection | Field Operations
230 Chestnut Street | Meadville, PA 16335
Phone: 814.332.6935 | Fax: 814.332.6125 www.dep.pa.gov
The 24-hour toll free Emergency Response number is: 1-800-541-2050

From: Faraguna, Nicole <nfaraguna@pa.gov>

Sent: Wednesday, May 5, 2021 11:23 AM

To: ANDRIEU, JEFFREY M Maj USAF ANG ANGRC/A4AD [REDACTED]

Subject: [Non-DoD Source] FW: [External] Fwd: IICEP Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA)

Please see additional contacts below. I sent to LT Col Mayor but received an email that he's no longer in this position. Thanks,

John P. Kline

On behalf of Backwoods Anglers and Hunters

2001 North Front Street, Bldg. 3, Suite 233

Harrisburg, PA 17102

717.230.8050 (o)

717.514.0404 (m)

john@klineassociatesltd.com

Sara Nicholas

Policy Strategist

PA Association of Sustainable Agriculture

sara@pasafarming.org

Mike Nerozzi, Policy Director

PA Fish & Boat Commission

mnerozzi@pa.gov

Nicole Faraguna

Director, Office of Planning & Policy

Pennsylvania Department of

[Conservation & Natural Resources](#)

P.O. Box 4767 | Harrisburg, PA 17101

Nicole Faraguna

From: [Denk, David \(DEC\)](#)
To: [MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR](#)
Subject: [Non-DoD Source] RE: IICEP Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA)
Date: Friday, April 9, 2021 2:15:16 PM
Attachments: [image001.jpg](#)
[image002.jpg](#)
[image003.png](#)

Good afternoon Lt. Col. - -

This office has no additional comments at this time. Please keep us informed as the EA progresses.

Thank you,
Dave

David S. Denk
Regional Permit Administrator
he/him/his
New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, NY 14203-2915
P: 716-851-7165 | david.denk@dec.ny.gov

www.dec.ny.gov | |



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

April 27, 2021

Lt. Col Christopher Mayor
USAF
3501 Fetchet Ave
Andrews AFB PA 207620000

RE: ER Project # 2019PR03920.003, PROPOSED ACTION FOR MODIFICATION OF DUKE MILITARY OPERATIONS AIRSPACE, Department of Defense, Multi-Municipals, Cameron County

Dear Lt. Col Mayor,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

Thank you for providing the revised proposed Modifications of Duke Military Operations Airspace and the request for comments.

The PA SHPO has the following questions and comments:

Thank you for providing the PA Wilds Planning Team list that appears to incorporate many of the potential consulting parties the PA SHPO recommended in 2019. However, were all the parties on that list contacted, or is the list just showing who is on the planning team? We understand that the PA Wilds Planning Team as an entity was contacted. Was the Section 106 consultation process explained to them?

If the following were not specifically contacted please contact the following, as well as elevating them to local agencies/entities on Attachment 3:

Lumber Heritage Region (Cameron County Courthouse, 20 East Fifth Street, Emporium PA 15834)

PA Route 6 Alliance/Heritage Corridor (PO Box 180, Galeton PA 16922)

Also, did the Austin Dam Memorial Association (PA-872, Austin, PA 16720) respond to your inquiry regarding potential consulting party status? They should be contacted if you did not reach out to them.

We appreciate the park mitigation map, however that does not necessarily address the PA SHPO's inquiries regarding historic resources (see our questions regarding identification of historic properties in our 2019 letter). Did any of the state or federal agencies provide information regarding concern about this project and historic resources?

What is the current AGL for the existing Duke MOA? How does one measure the potential to affect historic resources - noise related impact to historic resources at 500 AGL or 1000 AGL (Attachment 2, Figure 2)?

While the proposed flyover will not utilize supersonic operations, the Austin Dam is within a proposed 500' AGL - what measures can be implemented to protect the fragile nature of the historic ruin?

Why can't the MD ANG continue to train where they are currently training?

Is there documentation as to why the MD ANG cannot use another existing, low MOA?

Have the training needs of the MD ANG changed to justify creating a new, low MOA?

Why can't the MD ANG request a low MOA be created in Maryland?

Why can't the MD ANG use the low MOA at Evers?

How is a 'less than significant adverse effect' determined and by whom? What is meant by "less than significant adverse effect?" and are you using this terminology for the potential to affect historic resources, or for other types of resources such as wildlife, etc.? 'Expected usage' is vague language, are there any limiting parameters?

If approved, can any other ANG unit use this airspace?

For questions concerning above ground resources, please contact Cheryl Nagle at chnagle@pa.gov.

Archaeological Resources

No Archaeological Concerns - Environmental Review - No Historic Properties - Archaeological

Thank you for submitting information concerning the above-referenced project. In our opinion and based on the information received and available in our files, there are no archaeological resources present. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to notify the PA SHPO at pashare@pa.gov and provide the revised designs for review and comment.

For questions concerning archaeological resources, please contact Kimberly Sebestyen at ksebestyen@pa.gov.

Sincerely,



Douglas C. McLearn
Chief Division of Environmental Review

From: [Critz, Mark](#)
To: [MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR](#)
Cc: [ANDRIEU, JEFFREY M Maj USAF ANG ANGRC/A4AD](#); [FLANDERS, JAMIE A GS-13 USAF ANG NGB/A2/3/6/10TA](#); [GOTTHARDT, ZACHARY E CTR USAF ANGRC NGB/A4](#)
Subject: [Non-DoD Source] RE: EA for Duke MOA
Date: Tuesday, April 27, 2021 10:40:03 AM

Thank you for your prompt reply. And my hope for you is that your transition is to position you to become Col. Mayor!

Anyway, I have circulated your reply among our staff here for discussion. I will update you when I receive updated guidance on how to proceed. We are trying to coordinate with other state agencies and the Governor's office which is not the quickest process. Stay tuned.

Thanks and good luck!

Mark

From: MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR [REDACTED]
Sent: Tuesday, April 27, 2021 10:06 AM
To: Critz, Mark <mcritz@pa.gov>
Cc: ANDRIEU, JEFFREY M Maj USAF ANG ANGRC/A4AD [REDACTED] FLANDERS, JAMIE A GS-13 USAF ANG NGB/A2/3/6/10TA [REDACTED] GOTTHARDT, ZACHARY E CTR USAF ANGRC NGB/A4 [REDACTED]
Subject: RE: EA for Duke MOA

Good Morning,

Thank you for your response. We appreciate your interest in our Duke MOA action. While we have a 30 day IICEP coordination process, we do not stop accepting comments from government agencies until we are nearing the Draft Final EA stage. The 30 day period allows us to move on to the next Preliminary Draft EA and ensure we are completing the EA in a timely manner. I will be transitioning to a new position in the next couple days, so please reply all to ensure the right personnel are able to answer your reply.

We would like to discuss with you over the phone to help answer some of your questions. Could you please provide a few days/times that work and we will set it up a meeting.

Thank you.

Lt Col Mayor

IMPORTANT NOTE: I have recently migrated to Cloud Hosted Enterprise Services. Please update your email address for me to point to [REDACTED]

CHRISTOPHER "BUBBA" J. MAYOR, Lt Col, USAF
NGB/A4AM - Plans and Requirements (SharePoint [here](#))
3501 Fetchet Ave
Andrews AFB, MD 20762

[REDACTED]
[REDACTED]

From: Critz, Mark <mcritz@pa.gov>

Sent: Monday, April 26, 2021 15:04

To: MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR [REDACTED]

Subject: [Non-DoD Source] EA for Duke MOA

Lt. Col. Mayor:

Your 03/30/2021 letter to PA Dep. of Agriculture Sec. Russell Redding just landed on my desk. I see we have a 30-day window to respond, which would be 04/29/2021, this Thursday.

I represent western PA for the PA Dep. of Agriculture and the entire PA portion of the Duke MOA falls in my territory. I also represent this area on the PA Gov's Rural Development Council. The reason I tell you this is that I'd like the opportunity to reach out to the local elected officials and the local ag leaders to gain their opinion of this proposed change before weighing in on your request.

If you would, please let me know who has already responded to your request. I assure you I will start my outreach today and hope to have answers quickly, but am unsure if those I'm contacting will understand what exactly is being asked. Any extension of time would be appreciated.

Since this area is heavily forested and contains a great deal of farmland, the existence of tall trees and tall structures is possible. Also, what impacts this proposed change could have on livestock and wildlife in the area is unknown to me.

If you have any information on other areas where the A-10 trains at such low altitudes, that would be very helpful. I ask as your proposal seeks to set aside two hours per day, for 170 days per year.

Just as an FYI also, I'm a former member of Congress, a former member of HASC, and a recipient of the Patrick Henry Award from the USNG. Considering PA's large Guard contingent, and our strong support of our military's actions here and abroad, I've been a strong advocate and champion of our National Guard and I want to be helpful in achieving your mission.

Thank you for your help and guidance.

Mark Critz
Exec. Dir. Rural Dev. Council
Western Reg. Dir. PA Dept. of Agriculture
2301 N. Cameron St.
Harrisburg, PA 17110
(717) 743-8696, cell/direct

From: [Michelle Bogacki](#)
To: [MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR](#)
Subject: [Non-DoD Source] RE: IICEP Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA)
Date: Tuesday, March 30, 2021 4:18:39 PM

Sir,

Thank you so much for this information. I have been educating the region of Ridgway, PA, Elk County on this topic. I have gathered this same information that you have indeed sent to me. The outcome of my research finds that this may not be too much of an impact to our community after all. It is always best to get the right information so that it does not raise upset and suspicion.

Michelle Bogacki, Secretary
Ridgway Township
1537 A Montmorenci
Ridgway PA 15853
814-773-5625

From: Linda Devlin [REDACTED]
Sent: Tuesday, November 2, 2021 10:27 AM
To: NGB A4/A4A NEPA COMMENTS Org <NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil>
Subject: [Non-DoD Source] RE: No Low fly zones or training flights over the Allegheny National Forest Region

Dear Sir:

The Allegheny National Forest Visitors Bureau, is a non-profit organization, a Destination Marketing Organization, consisting of over 250 member organizations, small businesses, large corporations, museums, state parks, and local attractions. Our purpose is to promote the Allegheny National Forest as one of the best recreational destinations on the East Coast.

The Allegheny National Forest Region, which consists of McKean, Elk, Warren & Forest counties, is not being given any consideration as to what the low MOA flights will do to the abundant wildlife, or to the human recreational activities occurring in our region.

Visitors come to our region to experience nature's beauty, the sound of birds chirping, the flight of an eagle overhead, and the crunch of leaves underfoot as they hike along a trail. They come here to escape from the noise of civilization.

The Allegheny National Forest Region should not be accessed by your organization as a "low" population area. The idea of low altitude flights when people are camping, or hiking, or enjoying the beauty of nature is unacceptable. A 100 foot ceiling is low!!! Even the sound of planes overhead is something this region is unaccustomed to.

Furthermore the number of flights in your plan is excessive. If this was a high income residential area, this flight schedule would never be proposed. It is being proposed with no input or outreach from the local residents or to the over 3 million visitors per year who come here to recreate.

As a unit, we do not want this low-fly zone to be implemented above the Allegheny National Forest. We are the only national Forest in Pennsylvania, and it is sacred that the natural and wild zones of the Forest not be impacted by the noise of the proposed flights.

I would like to know who was in charge in deciding the ANF Region would be the place for these flights, and on what criteria was our area selected?

Also, who is in charge of the 175th Wing, please provide an email and phone number for this person.

Sincerely,
Linda Devlin

Linda Devlin
Executive Director
Allegheny National Forest Visitors Bureau

[REDACTED]
www.visitANF.com

From: Barry Hayman <bhayman@pottercountypa.net>
Sent: Thursday, April 29, 2021 12:26
To: MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR [REDACTED]
Cc: 'Nancy Grupp' <ngrupp@pottercountypa.net>; pheimel@pottercountypa.net; 'Endeavor' <endeavor_media@zitomedia.net>
Subject: [Non-DoD Source] Low-Level Modifications to the Duke MOA

Good afternoon, Lt. Col. Mayor,
I am responding individually, and in no way represent the entire board of Potter County Commissioners. Thank you for reaching out to us to let us know of your plans and to give us an opportunity to have input regarding our concerns. I was particularly stuck with the new ceiling of 100 feet. While most of my constituents are not aware of that modification, they certainly will be should you begin to conduct training at that elevation. From the few folks who have expressed concerns about this modification, essentially, they have directed our attention to the possible deleterious effects on wildlife and livestock, local pilots were concerned about the constraints this will put on their activities, some expressed concern for residents who suffer form PTSD (particularly veterans), and finally, the overall negative effect these flights will have on the local standard of living (peace and quiet). Some felt the training missions over the past few years were indeed low and loud, but they may be shocked to learn that the new ceiling is considerably lower, and I would assume, much louder.

Again, this is in no way a representation of the position of the entire board of commissioners, nor is it a comprehensive list of environmental concerns. I hope every effort will be made to completely consider all the implications and ramifications low-level training may have on the residents of Potter County.

Sincerely,

Barry Hayman

Potter County Commissioner
Gunzburger Building
1 North Main Street
Coudersport, PA 16915
814-274-8290, Ext. 201
bhayman@pottercountypa.net
www.pottercountypa.net



From: Nancy Grupp <ngrupp@pottercountypa.net>
Sent: Thursday, April 29, 2021 13:11
To: MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR [REDACTED]
Cc: ngrupp@pottercountypa.net
Subject: [Non-DoD Source] Low Level Modifications to the Duke MOA

Good afternoon Lt Col Mayor. I am writing to voice my concerns regarding the training proposal along with the new ceiling of the 100 foot elevation over most of Potter County. My concerns are on several levels. First, is for our local hospital, and the LIFE FLIGHT helicopters that can fly in and out of UPMC Cole Hospital on a daily basis. These flights are not "scheduled", but are for medical events that require a patient to be flown to another facility, and can cover many different routes. Second, is for our local pilots. They do not file flight paths when going up to check on crops or animals, or for a short joy ride. This could pose a very dangerous situation. Third is our serene lifestyle. Thousands of visitors come to Potter County every year to get away from the noise pollution of the cities, and now it could possibly follow them here! A major portion of our business and tourism community rely on those visitors for their very livelihood. This proposal will be detrimental to those businesses. Fourth I am concerned if there were to be a major accident or mid air collision. Potter County does not have the resources to tackle an incident of this nature nor magnitude. Lastly, tho I cannot speak from an expertise in this area, I wonder what kind of affect this continued training will have on our wildlife and livestock population? There are concerns being voiced about this, and the other concerns I listed. I hope that you will take these into consideration as you continue to review the plan for training. Thank you.

Nancy Grupp
Potter County Commissioner
Chair

From: Nancy Grupp <ngrupp@pottercountypa.net>
Sent: Friday, May 7, 2021 1:03 PM
To: ANDRIEU, JEFFREY M Maj USAF ANG ANGRC/A4AD
Cc: ngrupp@pottercountypa.net
Subject: [Non-DoD Source] Proposed Modification to Duke MOA
Attachments: letters.pdf

Good afternoon. As a Commissioner to Potter County, Pa, I am very concerned about the proposed modification to Duke MOA. We here in Potter County enjoy a slower and quieter pace of life. Many of our residents have sacrificially given up economic benefits to live here, and have been able to carve out a living by making adjustments to their earning capacity to be able to take advantage of all that our natural resources provides. I fear that with the 170 days of fly overs that are proposed our way of life will be shattered. Not only the number of days will be disruptive, but the lower levels down to 100 fee AGL will most definitely affect not only the residents, but also our wildlife and domestic animals will be adversely affected. The economic impact on one of our biggest industries, tourism, could be something we cannot recover from. After the last 14 months of negative economic impact from the COVID shut down, many of our small businesses are barely starting to recover! This will surely shutter those small businesses. What about our private pilots? How will this impact their ability to fly over their own land and farms? I fear some kind of catastrophic event which our local fire departments and emergency management dept will be unable to handle. I vehemently oppose the proposed modification and ask sincerely that you would reconsider any changes that will affect the lives of the residents here in Potter County. I have a attached letters that we had received that were addressed to Lt Col Christopher Jesus Mayor in error. Thank you.

Nancy Grupp
Potter County
Commissioner

Board of Commissioners

Miles D. Kessinger, III
Chairman
Jeffrey A. Snyder
Vice Chairman
Angela Harding
Commissioner



Jann R. Meyers, Chief Clerk
Larry E. Coploff, Solicitor

Phone: (570) 893-4000
(800) 509-6697
Fax: (570) 893-4041

April 15, 2021

Lt. Col. Christopher Jesus Mayor
3501 Fetchet Avenue
Joint Base Andrews, MD 20762

Dear Lt. Col. Mayor:

The Clinton County, PA Board of Commissioners is writing to express our deep concerns about the National Guard Bureau's plans to modify the Duke Military Operations Airspace to accommodate the training requirements of the 175th Wing of the Maryland National Guard. This modification would provide for low-altitude flights twice a day, 170 days of the year, including Saturdays, sometimes as low as 100 feet above ground. This flight modification proposes to use air space above the Northwest corner of Clinton County, Pennsylvania, a pristine region of parks, forests and natural areas, situated in the heart of the PA Wilds.

The Commissioners would like to express our strong opposition to this proposal. Although we support the military and the need for maintaining a well-trained flying force, we feel that another location would better suit your needs, and have less impact on our local environment. We feel the impacts on tourism in this area (a vital part of the local economy), wildlife (a large elk herd inhabits this area along with many other native species), wild and scenic waterways, and quality of life for our residents could only be detrimental. Hunters, anglers, hikers and other outdoor enthusiasts flock to this part of our County to enjoy the wild and untouched areas we are so proud of. In fact, we see no positive impacts that this change could have on Clinton County.

In addition, as the home of the Piper Municipal Airport and the Piper Aviation Museum, Clinton County has many private pilots and hosts numerous aviation events for small aircraft throughout the year. The proposed change to the MOA would severely impact the airspace for these pilots and events, as we are given to understand that other aircraft could be grounded during the ANG activities.

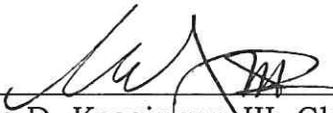
CLINTON COUNTY COMMISSIONERS
2 PIPER WAY, SUITE 300
LOCK HAVEN, PENNSYLVANIA 17745

For all of these reasons, we strongly recommend development of an alternative location for these low-level training activities. Is there not an area of Maryland that would serve the purpose as well, and be closer to your base of operations?

We would ask that the MOA not be approved as proposed, and that a full environmental impact study be ordered so that the proposed region for this plan can be more closely studied.

Sincerely,

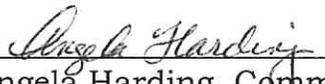
Clinton County Commissioners:



Miles D. Kessinger, III, Chairman



Jeffrey A. Snyder, Vice Chairman



Angela Harding, Commissioner

CC: Congressman Fred Keller
Congressman Glenn Thompson
Senator Bob Casey
Senator Pat Toomey
PA Representative Stephanie Borowicz
PA Senator Chris Dush



PA WILDS CENTER
FOR ENTREPRENEURSHIP

April 21, 2021

Lt Col Christopher Jesus Mayor
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Dear Lt. Col. Mayor,

On behalf of the PA Wilds Center for Entrepreneurship (PA Wilds Center), I am writing to express our deep concerns about the Maryland National Guard's plans to establish a Low Military Operations Airspace to fly low-level training flights repeatedly over vast parts of the Pennsylvania Wilds (PA Wilds) many days out of the year.

The PA Wilds is one of 11 official tourism regions in the Commonwealth. The region is also one of eight state-designated Conservation Landscapes because of its unique natural and heritage assets. Our 13-county region is home to the greatest concentration of public lands in Pennsylvania. We have 29 state parks, 8 state forests, 50 state game lands and PA's only National Forest, the Allegheny. We have the largest wild elk herd in the Northeast, two designated National Wild & Scenic Rivers, thousands of miles of land and water trails, and some of the darkest night skies in the country.

Our region is also economically distressed and has seen decades of population loss. To help address this, local, state and federal partners from the public and private sectors began working together more than 15 years ago to establish the PA Wilds as an outdoor recreation destination to help diversify rural economies, create jobs, inspire stewardship and improve quality of life. This ground-breaking effort, held up as a model in five national studies in the last two years alone, has involved side-by-side investments in small business development, marketing and branding, recreation infrastructure, community character stewardship, regional planning, and conservation.

Today, thanks to the work of many organizations, businesses and individuals, tourism is a driving economic force in the region -- a \$1.8B industry that makes up 11 percent of the region's economy. This sustainable industry is also helping to make our region's communities -- and major employers in them -- more competitive by helping to create and sustain the types of amenities that improve rural quality of life and help attract and retain a strong workforce.

As the coordinating nonprofit for the PA Wilds effort, we invest upwards of \$1M a year working with partners to build the PA Wilds as an outdoor recreation destination and lifestyle brand to help revitalize our region's rural communities. Go to PAwilds.com, our regional visitor site, and you'll see how the PA Wilds is positioned as an outdoor recreation destination. Visitors come to here to bike, hike, camp, paddle, hunt, fish and see our wildlife. Peace and quiet and access to wild places and public lands are some of our biggest draws. About half a million people live in the PA Wilds, but we see almost 15 times that -- 7.2M - in day trip visitors annually. More than 375 rural businesses and organizations participate in our entrepreneurial ecosystem, The Wilds Cooperative of PA (WildsCoPA.org), helping us to advance this transformative revitalization work for our rural region. Major investors in the PA Wilds strategy include the region's county governments, the PA Department of Conservation and Natural Resources, the PA Department of Community and Economic Development, the Appalachian Regional Commission, the U.S. Economic Development Administration, USDA and local and national foundations.



PA WILDS CENTER
FOR ENTREPRENEURSHIP

I have witnessed military aircraft in training at close range. It was impressive and humbling. But having up to six A-10Cs flying as low as 100 feet above ground over parts of the PA Wilds twice a day, up to 365 days a year – as proposed? This could have a devastating impact on nature tourism development efforts in the PA Wilds, and on the many rural residents who depend on this industry for their livelihoods. Conservation partners in our network have also raised concerns about the impacts to wildlife and ecosystems. We share these concerns. In addition, many veterans call our region home. We worry about the impact that loud, low-level military flights flown overhead repeatedly will have on veterans suffering from PTSD.

Please know our organization has great respect for our military. The PA Wilds is a patriotic region – so much so that ‘patriotism’ is called out as a theme in the *PA Wilds Design Guide for Community Character Stewardship*, an award-winning planning document in use in our region. I come from a family of veterans myself, and worked as a military reporter during my first career as a journalist. I covered National Guard deployments to Iraq and Afghanistan; Coast Guard rescue missions in Alaska; was embedded with an airborne battalion as it prepared to go to Iraq and with C-130 crews delivering relief in Indonesia during the Asian tsunami. I fully appreciate the job our military does, the dangers involved in flying aircraft like the A-10C, and the need for training missions like those being proposed.

But the negative impact of doing this type of training in the PA Wilds is very high. The PA Wilds Center respectfully requests that the Maryland National Guard find other locations, in Maryland or other states, where these trainings can take place. Short of that, we’d ask that all of the attached questions be answered for our communities prior to any decision being made.

For reference we’ve also attached maps showing Pennsylvania’s designated tourism regions and Conservation Landscapes.

Respectfully,

Tataboline Enos, CEO
PA Wilds Center for Entrepreneurship, Inc.
tenos@pawildscenter.org
814-757-9190

Cc:
Senator Robert Casey
Senator Patrick Toomey
Congressman Fred Keller
Congressman Glenn “GT” Thompson
Nicole Faraguna, Director of Policy, PA DCNR
PA Wilds Planning Team



Questions from PA Wilds communities:

Why is the Maryland Air National Guard (MD ANG) making this request?

What is the justification for such a request?

Why can't the MD ANG continue to train where they are currently training?

Is there documentation as to why the MD ANG cannot use another existing, low MOA?

Have the training needs of the MD ANG changed to justify creating a new, low MOA?

What is the process for making a request for a low MOA?

Why can't the MD ANG request a low MOA be created in Maryland?

Why can't the MD ANG use the low MOA at Evers?

Who makes the final decision? The FAA?

If the Environmental Assessment, done by the National Guard Bureau, returns 'a finding of no significant impact,' what happens?

How is a 'less than significant adverse effect' determined and by whom?

Is there an appeal process?

How can a community ensure that there is a full, Environmental Impact Study done?

'Expected usage' is vague language, are there any limiting parameters?

If approved, can any other ANG unit use this airspace?

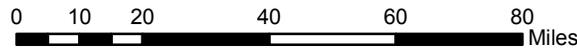
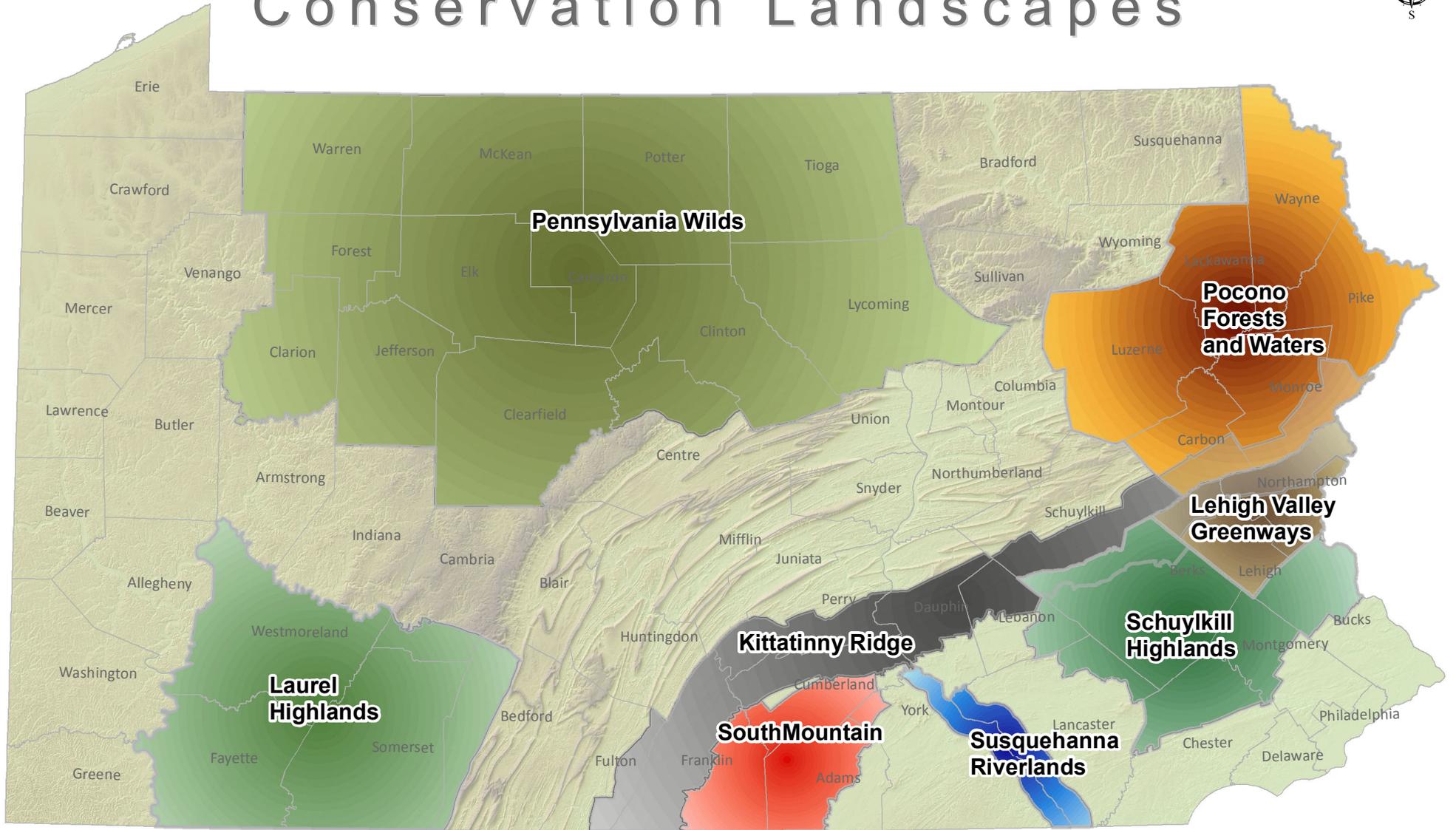
Will there be another EA if usage is more than 170 days?

Who will enforce/police the altitude buffers, the number of days and hours per day, etc.?

Will the local communities have advance notice?

What happens in the case of an accident?

Conservation Landscapes



Updated: January 10, 2019

Conservation Landscapes	DCNR Lead Contacts	Email
Kittatinny Ridge	Kristen Hand	khand@pa.gov
Laurel Highlands	Kathy Frankel & Mike Mumau	kfrankel@pa.gov & mmumau@pa.gov
Lehigh Valley Greenways	Rob Neitz	neitz@pa.gov
Pennsylvania Wilds	Meredith Hill	mehill@pa.gov
Pocono Forests and Waters	Tim Dugan & Christine Dettore	tidugan@pa.gov & cdettore@pa.gov
Schuylkill Highlands	Drew Gilchrist	agilchrist@pa.gov
South Mountain	Mike Eschenmann	meschenman@pa.gov
Susquehanna Riverlands	Lori Yeich	lyeich@pa.gov



From: [Kaye Aumick](#)
To: [MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR](#)
Subject: [Non-DoD Source] RE: IICEP Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA)
Date: Friday, April 23, 2021 1:26:45 PM

Good Afternoon,

I am responding with a few questions/concerns for this proposal. Tioga County is a quiet community and I am worried about issues that will be produced by these low flying aircrafts. 100 feet is not very high off the ground.

Questions:

1. What if there is an accident?
2. Will the local communities have any advanced notice?
3. How is a "less than significant adverse effect" determined and by whom?
4. How loud are these aircraft when passing over? I assume they are extremely loud.
5. With all the veterans in our county that are dealing with PTSD, how can they be prepared for each of these trainings. (Notification)
6. Nighttime operations? With the aging population in the County, I am not sure this would be a good idea. I fear that this would increase emergency calls as people would be woken up, startled and disoriented by the noise.

As I realize that our military needs to train, I just don't think that the quiet area of Northern Pennsylvania is the right place to perform these trainings.

Thank you,

Kaye Aumick

Tioga County Planning Specialist

Email: kaumick@tiogacountypa.us

Phone: 570-723-8252

Cell: 570-439-9074

From: [Pontzer, Deborah](#)
To: [MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR](#)
Cc: [Moore, Brad](#); [FLANDERS, JAMIE A GS-13 USAF ANG NGB/A2/3/6/10TA](#); [GRAWERT, KEITH J Lt Col ANG 201 AS/NGB LL](#)
Subject: Re: Continuing thread with updates for the Duke Low MOA Mailing List Re: [Non-DoD Source] Re: IICEP Contacts - Duke Low MOA
Date: Wednesday, March 24, 2021 8:44:56 PM
Attachments: [Cameron County Commissioners.pdf](#)
[McKean County Planning PA - Low-Alt MOA.pdf](#)

Lt Col Mayor ~ Bubba,

Thank you for letting me that know that you received the lists. I will copy you whenever I forward a copy of the IICEP letter so that you can continue to build a better database.

As I mentioned, attached please find the two constituent letters that I know were sent. Also, other correspondence that I receive regarding the Low MOA, I will be sure to send a copy to you.

I appreciate your willingness to, at the very least, acknowledge that their letters were received.

Please do not hesitate to call or email me with any questions or concerns.

Take care,

Deborah

Deborah Pontzer
Economic Development & Workforce Specialist
Rep. Glenn "GT" Thompson, PA-15
(202) 580-9775
Deborah.Pontzer@mail.house.gov
<http://thompson.house.gov>

On Mar 24, 2021, at 4:35 PM, MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR <christopher.mayor.3@us.af.mil> wrote:

Ma'am,

Thanks for the updates. We will be sure to update our listing to include the additional folks. I am ok with being cc'd on the emails that go out as you forward it to other concerned organizations. My information is on the IICEP letter for people to contact and will be able to receive those emails.

Thanks again and I'll keep an eye out for the follow on email.

Bubba

IMPORTANT NOTE: *I have recently migrated to Cloud Hosted Enterprise Services. Please update your email address for me to point to [REDACTED]*

CHRISTOPHER "BUBBA" J. MAYOR, Lt Col, USAF
NGB/A4AM - Plans and Requirements (SharePoint [here](#))
3501 Fetchet Ave
Andrews AFB, MD 20762
[REDACTED]
[REDACTED]

From: Pontzer, Deborah <Deborah.Pontzer@mail.house.gov>
Sent: Wednesday, March 24, 2021 16:03

To: MAYOR, CHRISTOPHER J Lt Col USAF ANG NGB/A7AR [REDACTED]
Cc: Moore, Brad <Brad.Moore@mail.house.gov>; FLANDERS, JAMIE A GS-13 USAF ANG NGB/A2/3/6/10TA [REDACTED]; GRAWERT, KEITH J Lt Col USAF ANG 201 AS/SE [REDACTED]
Subject: Continuing thread with updates for the Duke Low MOA Mailing List Re: [Non-DoD Source] Re: IICEP Contacts - Duke Low MOA

Bubba,

As promised, I have received a list from the PA Wilds Planning Team and have compiled a list of elected officials and others who have expressed an interest in receiving the IICEP Letter.

The PA Wilds Planning Team members asked to be included in the mailing; however, I only have the members emails. Also, I took the time to remove as many duplicates as I could find.

Together, the two lists number just over 160 names.

As I stated in my earlier email, I will forward the IICEP letters to other individuals or organizations that ask for a copy. Would you like to be copied on those requests?

And finally, under separate cover, I will forward the two letters that were sent to Ramon Ortiz: one from the Cameron County Commissioners and one from the McKean County planner. So look for those in your inbox. I do not believe either the commissioners nor the planner received a response or an acknowledgment of receipt.

Be sure to let me know how you would like me to handle further correspondence.

Thank you!

Deborah

Deborah Pontzer
Economic Develop. & Workforce Specialist
Rep. Glenn "GT" Thompson, PA-15
(202) 580-9775
Deborah.Pontzer@mail.house.gov
<http://thompson.house.gov>

On Mar 23, 2021, at 3:21 PM, Pontzer, Deborah <Deborah.Pontzer@mail.house.gov> wrote:

Lt. Col. Mayor ~ or, if I may, Bubba!

Thank you again for your time on Thursday. Brad and I appreciated your willingness to address a number of the concerns that have been raised throughout this process. A process that has certainly been protracted by changes in personnel as well as a global pandemic.

I am working on finalizing a list of stakeholders that have contacted me. I hope to have that to you by COB tomorrow.

Once I have a copy of the letter, I will forward it to others who indicate an interest in the Maryland National Guard's request for the low MOA in Pennsylvania.

Also, I am including a number of links you may find interesting. The area of the proposed low MOA is in the heart of the Pennsylvania Wilds (PA Wilds) a conservation landscape in which the the PA Department of Conservation and Natural Resources (DCNR) alone has invested over \$150 million in the last ten years. The federal government, through the US Department of Commerce's Economic Development Administration (EDA) recently awarded the PA Wilds Center \$860,000 in 2019 to grow the PA Wilds

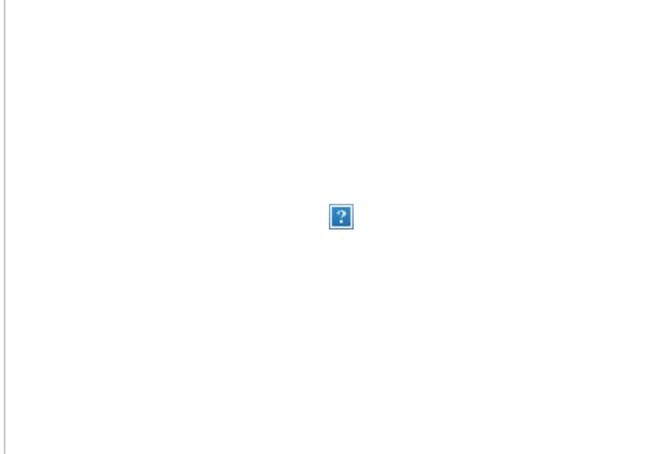
entrepreneurial economy. In addition to those examples, the Appalachian Regional Commission, the PA Department of Community and Economic Development (DCNR) and large private foundations have all contributed hundreds of thousands of dollars to revitalizing a rural economy, not to mention local, private investment in the region.

<https://www.pawildscenter.org/our-conservation-legacy/>

From the PA Wilds Center website:

Tourism currently accounts for about 11 percent of the region's economy. It is not the only piece of the pie, but it is an important piece, because in addition to the jobs it creates, it also creates amenities that make it easier for our region's larger employers to attract and retain talent, and improves quality of life for residents. Visitors currently spend an estimated **\$1.8 billion annually in the Pennsylvania Wilds**

map illustrating the counties in the Pa wilds



Many local partners are involved in the effort to grow nature and heritage tourism in the region as a way to create jobs, diversify local economies, inspire stewardship, improve quality of life. The PA Wilds Center is the coordinating entity among these partners.

The PA Wilds Center's work is sustained through program fees, philanthropic giving, government grants, and entrepreneurial activities related to the Pennsylvania Wilds brand.

<https://www.pawildscenter.org/our-conservation-legacy/>

Elk County is also home to largest, free-standing Elk herd in the northeast.

<https://pawilds.com/landscape/elk-country/#!directory/map/ord=rnd>

These links will help you to understand how important this landscape, the PA Wilds, is to growing our local economy.

In close, Brad and I look forward to working through this process with you and your colleagues.

Please let me know if you need any additional information.

Deborah

Deborah Pontzer
Economic Develop. & Workforce Specialist
Rep. Glenn "GT" Thompson, PA-15
(202) 580-9775
Deborah.Pontzer@mail.house.gov
<http://thompson.house.gov>

DAN MEUSER
9TH DISTRICT, PENNSYLVANIA



Congress of the United States

House of Representatives

Washington, DC 20515

Friday, October 1, 2021

Ms. Kristi Kucharek, GS-13
NGB/A4AM Plans and Requirements
Airspace NEPA Program Manager
Air National Guard Readiness Center
3501 Fletchet Avenue
Joint Base Andrews, MD 20762

Dear Ms. Kucharek:

I am writing to express concerns regarding a proposed modification to the Duke Military Operations Area (MOA) in Central Pennsylvania. I understand that the 175th Wing of the Maryland National Guard has requested a significant modification to this airspace that is currently under review.

The Duke MOA has been in use for several decades for military training with little noticeable impact on the vast region of Pennsylvania it covers. The Maryland National Guard's proposal, however, would lower the floor from 8,000 feet above ground level (AGL) to 100 feet AGL. The proposal would allow for 2-4 aircraft at a time to operate in the airspace for 1-2 hours per day several times per week. I am concerned that this proposed modification would severely disrupt the quality of life for Pennsylvanians living within the airspace and could have negative environmental impacts on state game lands and wildlife.

While I appreciate the need for pilots to train for low-altitude operations, I am concerned using the Duke MOA for such low-altitude operations would have a significant negative impact on this region of Pennsylvania. I appreciate the thorough environmental assessment that is underway on this proposal and I ask that an alternative arrangement be developed that does not risk the negative impact to quality of life, economic activity, and the environment and wildlife on state game lands.

Thank you for your review of this proposal and your consideration of my concerns. I ask that you please keep my office informed of the status of this proposal.

Sincerely,

A handwritten signature in black ink that reads "Dan Meuser".

DAN MEUSER
Member of Congress

Appendix B

Tribal Consultation



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 175TH WING (ANG)
BALTIMORE MARYLAND**

26 August 2019

Delaware Nation, Oklahoma
Ms. Nekole Alligood
Historic Preservation
PO Box 825
Anadarko, OK 73005

Dear Ms. Alligood,

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA). The project would accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment.

The National Guard Bureau (NGB) has invited the Federal Aviation Administration (FAA) to be a cooperating agency in the EA. The EA will assess the effects of the proposed action and will include analysis of the required no-action alternative. Enclosed, please find a description of proposed action (Att.1). In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we are writing this letter to advise you of this effort and to offer an invitation to consult with NGB on the project.

The Maryland ANG mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and also provide assistance to Allies during emergencies. The federal mission during peacetime has the combat-ready unit assigned to the Air Combat Command to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations. The 175 WG must have a reliable and realistic training environment in which to conduct upgrades and continuation training for aircrew.

The proposed Duke Low MOA would follow the lateral footprint of the Duke MOA as it currently exists except for the southwestern portion. The Duke Low MOA would be activated Tue - Fri between 1000-1200 and 1400-1600 hours and other times by Notice to Airmen (NOTAM). The vertical limits for the Duke Low MOA would be 100 feet Above Ground Level (AGL) to 7,999 feet above Mean Sea Level (MSL). The Duke Low MOA would be used only for sorties requiring the use of low altitude training. Weekend and night time operations at low-

altitude would be limited. The 175 WG flies one weekend per month with one week per month consisting of routine night training.

The ANG has reviewed the proposed project for potential effects on historic properties and, because there will be no associated ground disturbance, consider them to be minimal. Under the proposed action, there would be no infrastructure changes, no ground-disturbing activities, no weapons firing, and no ordnance deployment within the Duke MOA. No supersonic operations or release of chaff and flares would be conducted in the Duke Low MOA. Weekend and night time operations at all altitudes would be limited.

ANG intends to maximize the use of electronic transmittals during subsequent coordination phases of this project. A hard copy of the Draft and Final EA documents will be provided to your office for review. Enclosed is a copy of the distribution list for those agencies and organizations to be contacted regarding this EA (Att.2). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

In order for the ANG to address your concerns, in a timely manner for both the Tribe and the proposed undertaking, please respond within 30 days of receipt of this letter. Please provide any comments to Jennifer Harty, Cultural Resources Program Manager, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to [REDACTED]. Thank you for your assistance and we look forward to working with you on this undertaking.



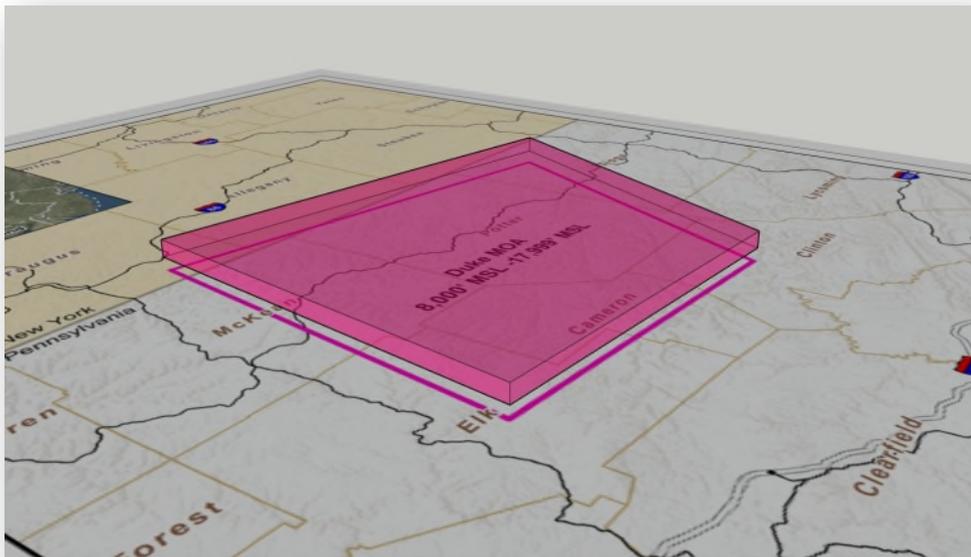
PAUL D. JOHNSON, Brig Gen, MDANG
Commander

2 Attachments:

1. Description of Proposed Action
2. IICEP Distribution List

The Air National Guard (ANG) is preparing an Environmental Assessment (EA) to consider the potential consequences to the human and natural environment associated with the modification of the Duke Military Operations Airspace (MOA) to establish low-altitude airspace for the Maryland Air National Guard A-10C Squadron to train and prepare for current and future conflicts. The Maryland Air National Guard, 175th Wing (175 WG) is stationed at Warfield Air National Guard Base, Martin State Airport near Baltimore, Maryland. The 175 WG's mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and to aid Allies during emergencies. The 104th Fighter Squadron (FS) is a unit of the 175th Operations Group at Warfield Air National Guard Base and the A-10C is the Primary Assigned Aircraft at the 175 WG.

Nearly all the existing Duke MOA is in Pennsylvania, the underlying counties include all or parts of Elk, Cameron, Clinton, McKean, Potter, and Tioga. A small fraction of the northwest corner of the MOA overlies portions of Cattaraugus and Allegany counties in New York. The existing Duke MOA does not provide airspace for low level training because the airspace begins at 8,000 feet (ft) above mean sea level (MSL). The proposed Duke Low MOA would underly the existing airspace.

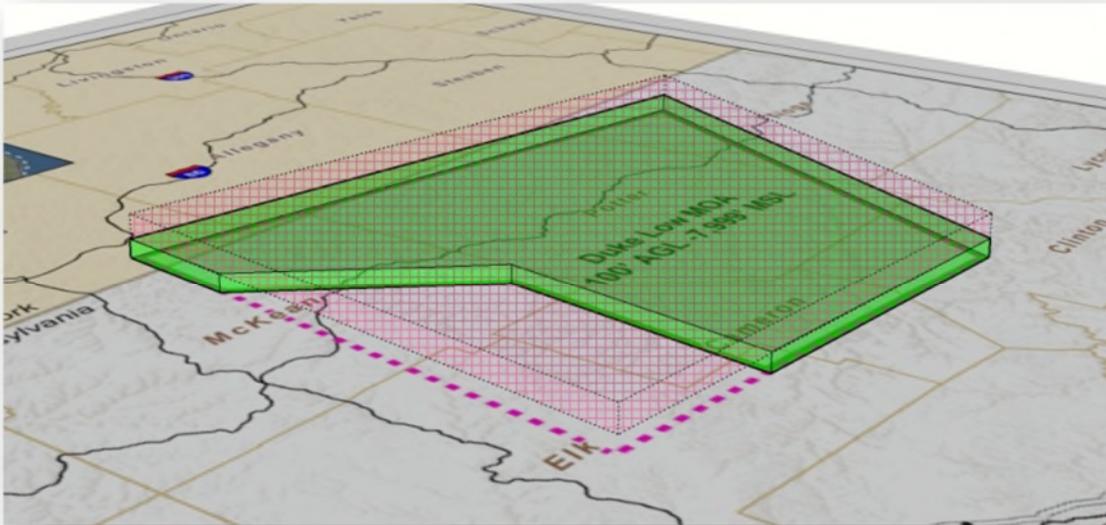


The purpose of the action is to establish low-level airspace beneath the existing Duke MOA to train and prepare military pilots and aircrews for current and future conflicts. The need for action is to accommodate 175 WG training requirements for a reliable and realistic training environment in which to conduct training for aircrews in accordance with AFI 11-2A-OA-10V1 and A-10 Ready Aircrew Program.

The 104 FS has 29 pilots on the Letter of Qualifications. Pilots are expected to maintain proficiency in all qualifications or continue to upgrade their qualifications as they gain experience. The AFI 11-2A-OA-10V1 specifies Low Altitude Step-Down training (LASDT) requirements for experienced pilots to fly at altitudes below 500 ft above ground level (AGL). The LASDT categories (500 ft AGL to 300 ft AGL to 100 ft AGL) and come into play during specific mission sets. Slightly more than half (58%) of 104 FS pilots have been qualified to fly down to 100 ft AGL. Availability of low-level training airspace is needed to avoid training shortfalls and a lack of combat readiness.

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:

- Vertical limits would be 100 ft AGL to 7,999 ft above MSL.
- Activation times would be intermittent by Notice to Airmen (NOTAM).
- A surface to 6,000 ft above MSL exclusion area would avoid Wellsboro Airport Class E airspace within the eastern side of the Duke Low MOA.
- Expected usage would be four hours per day, 170 days per year, two hours at a time, twice per day, with no more than six total aircraft.
- The Duke Low MOA would be scheduled separately from the Duke MOA and used only for sorties requiring the use of low altitude training.
- Weekend and night time operations at low-altitude would be limited.
- No supersonic operations, release of chaff and flares, infrastructure changes or ground disturbance, ordnance deployment, or weapons firing would be conducted in the Duke Low MOA.



Five action alternatives that were considered but were dismissed from detailed analysis because the alternatives did not meet the purpose and need for the action include modification of other existing airspace, creation of a new stand-alone MOA, use of existing Restricted Areas, and use of existing Military training Routes. The Proposed Action would (1) be within 200 miles of Martin State Airport, (2) provide sufficient low-level airspace to accommodate A-10C pilot training requirements, and (3) be adequate for 175 WG Letter of Qualifications. The EA will analyze the Proposed Action and the No Action Alternative. Under the No Action Alternative, local and deployed units would continue losing adequate training opportunities, thus degrading the combat capability of the 175 WG.

Through the process of interagency and intergovernmental coordination for environmental planning (IICEP), the ANG will notify relevant federal, state, and local agencies, and federally recognized tribes to request their environmental concerns specific to the Proposed Action. The Draft EA will be available on the 175 WG website and sent to regional libraries to invite public participation during a 45-day comment period. Historic resources under the proposed airspace are depicted in Figure 1.

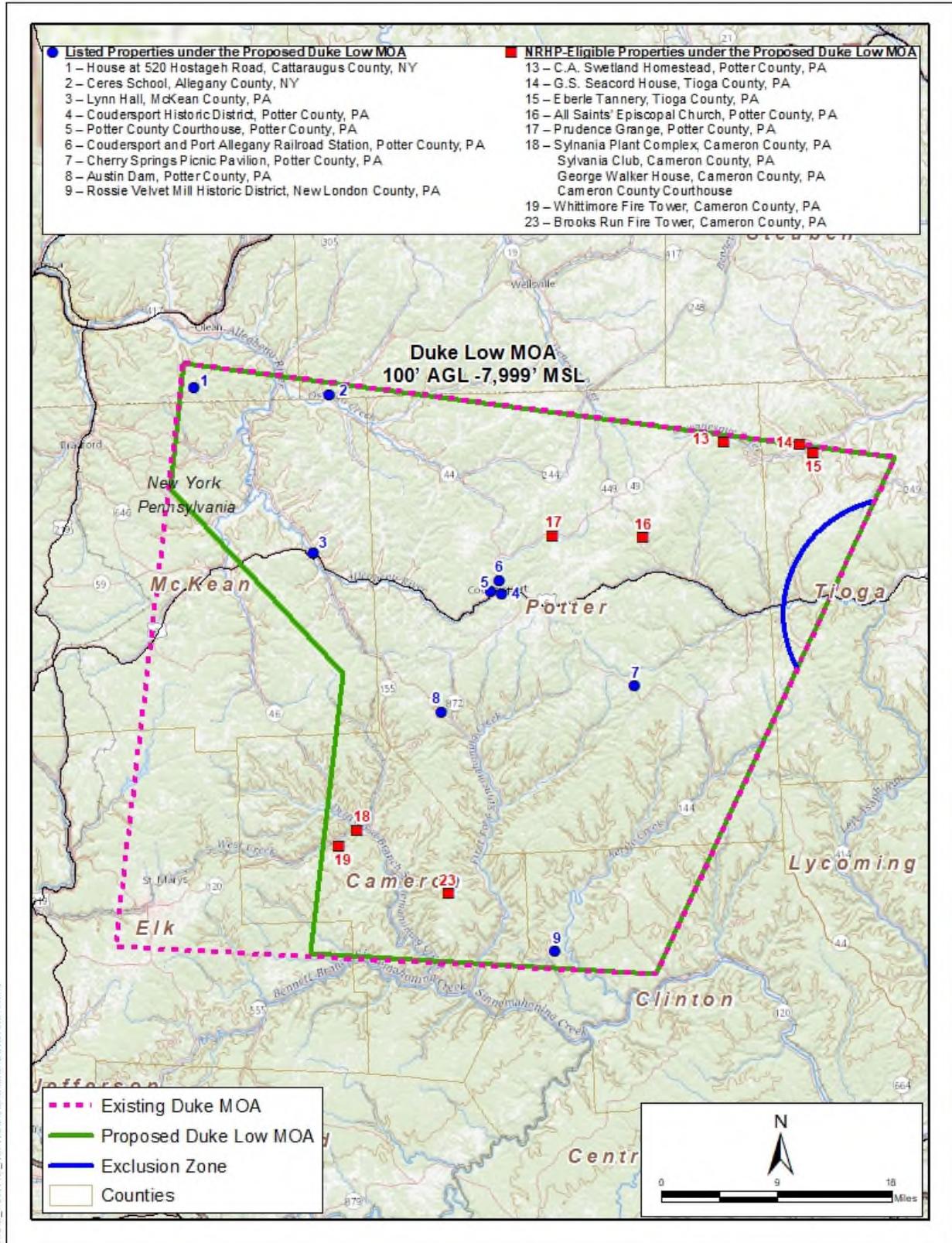


Figure 1. Historic Resources under the Proposed Duke Low MOA



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 175TH WING (ANG)
BALTIMORE MARYLAND**

26 August 2019

Delaware Tribe of Indians
Dr. Brice Obermeyer
Director
1 Kellog Circle
Emporia, KS 66801

Dear Dr. Obermeyer,

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA). The project would accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment.

The National Guard Bureau (NGB) has invited the Federal Aviation Administration (FAA) to be a cooperating agency in the EA. The EA will assess the effects of the proposed action and will include analysis of the required no-action alternative. Enclosed, please find a description of proposed action (Att.1). In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we are writing this letter to advise you of this effort and to offer an invitation to consult with NGB on the project.

The Maryland ANG mission is to maintain a well-trained and well-equipped A-10C squadron available for prompt mobilization during war and also provide assistance to Allies during emergencies. The federal mission during peacetime has the combat-ready unit assigned to the Air Combat Command to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations. The 175 WG must have a reliable and realistic training environment in which to conduct upgrades and continuation training for aircrew.

The proposed Duke Low MOA would follow the lateral footprint of the Duke MOA as it currently exists except for the southwestern portion. The Duke Low MOA would be activated Tue - Fri between 1000-1200 and 1400-1600 hours and other times by Notice to Airmen (NOTAM). The vertical limits for the Duke Low MOA would be 100 feet Above Ground Level (AGL) to 7,999 feet above Mean Sea Level (MSL). The Duke Low MOA would be used only for sorties requiring the use of low altitude training. Weekend and night time operations at low-

altitude would be limited. The 175 WG flies one weekend per month with one week per month consisting of routine night training.

The ANG has reviewed the proposed project for potential effects on historic properties and, because there will be no associated ground disturbance, consider them to be minimal. Under the proposed action, there would be no infrastructure changes, no ground-disturbing activities, no weapons firing, and no ordnance deployment within the Duke MOA. No supersonic operations or release of chaff and flares would be conducted in the Duke Low MOA. Weekend and night time operations at all altitudes would be limited.

ANG intends to maximize the use of electronic transmittals during subsequent coordination phases of this project. A hard copy of the Draft and Final EA documents will be provided to your office for review. Enclosed is a copy of the distribution list for those agencies and organizations to be contacted regarding this EA (Att.2). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

In order for the ANG to address your concerns, in a timely manner for both the Tribe and the proposed undertaking, please respond within 30 days of receipt of this letter. Please provide any comments to Jennifer Harty, Cultural Resources Program Manager, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or email to [REDACTED]. Thank you for your assistance and we look forward to working with you on this undertaking.



PAUL D. JOHNSON, Brig Gen, MDANG
Commander

2 Attachments:

1. Description of Proposed Action
2. IICEP Distribution List



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 175TH WING (ANG)
BALTIMORE MARYLAND**

26 August 2019

Seneca Nation of Indians
Dr. Joe Stahlman
THPO
82 W. Hetzel Street
Salamanca, NY 14779

Dear Dr. Stahlman,

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA). The project would accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment.

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altitude would be limited. The 175 WG flies one weekend per month with one week per month consisting of routine night training.

The ANG has reviewed the proposed project for potential effects on historic properties and, because there will be no associated ground disturbance, consider them to be minimal. Under the proposed action, there would be no infrastructure changes, no ground-disturbing activities, no weapons firing, and no ordnance deployment within the Duke MOA. No supersonic operations or release of chaff and flares would be conducted in the Duke Low MOA. Weekend and night time operations at all altitudes would be limited.

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PAUL D. JOHNSON, Brig Gen, MDANG
Commander

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**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 175TH WING (ANG)
BALTIMORE MARYLAND**

26 August 2019

Seneca-Cayuga Nation
Mr. William Tarrant
THPO
PO Box 453220
Grove, NY 74344

Dear Mr. Tarrant,

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA). The project would accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment.

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PAUL D. JOHNSON, Brig Gen, MDANG
Commander

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**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 175TH WING (ANG)
BALTIMORE MARYLAND**

26 August 2019

Tonawanda Band of Seneca
Mr. Roger Hill
Chief
7027 Meadville Road
Basom, NY 14013

Dear Mr. Hill,

The Air National Guard (ANG) at Joint Base Andrews, Maryland is preparing an Environmental Assessment (EA) for the proposed Modification of Duke Military Operations Airspace (MOA). The project would accommodate the training requirements of the 175th Wing (WG), Maryland ANG stationed at Warfield Air National Guard Base, Baltimore, Maryland. Pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321–4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500–1508), and 32 CFR Part 989, et seq., the ANG will prepare an EA that considers the potential consequences to human health and the natural environment.

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PAUL D. JOHNSON, Brig Gen, MDANG
Commander

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Appendix C

Record of Non-applicability in Accordance with the General Conformity Rule

RECORD OF NON-APPLICABILITY
In Accordance with the Clean Air Act - General Conformity Rule for the
Proposed Environmental Assessment for Modification and/or Addition of Airspace
Utilization of the Duke Military Operating Airspace

7 September 2021

This Record of Non-Applicability supports ANG's Environmental Assessment for Modification and/or Addition of Airspace Utilization of the Duke Military Operating Airspace. The Duke Low MOA would follow the lateral footprint of the Duke MOA as it currently exists except for the southwestern portion. The Duke Low MOA would be activated Monday through Friday between 1000-1200 / 1400-1600 and other times by NOTAM. Vertical limits for the Duke Low MOA would be 100 feet AGL to 7,999 feet MSL. The Duke Low MOA would be used only for sorties requiring the use of low altitude training. Weekend and night time operations at low-altitude would be limited. The 175th flies one weekend a month with 1 week a month consisting of routine night training.

General conformity under the Clean Air Act, Section 176 has been evaluated according to the requirements of 40 CFR §93, Subpart B. The requirements of this rule are not applicable to the Proposed Action because:

Activities would occur within areas designated full attainment for the National Ambient Air Quality Standards, and partially include emissions that were clearly de minimis, such as emissions from aircraft operations above the mixing height of 3,000 ft AGL (i.e. the height above which air emissions do not directly affect individuals on the ground.) (40 CFR §93.153 (c) (xxii)).

Supported documentation and emission estimates:

- Are Attached
- Appear in the NEPA Documentation
- Other (Not Necessary)

Appendix D

FAA Exemption 4371P



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

Aviation Safety

800 Independence Ave
Washington, DC 20591

January 23, 2020

Exemption No. 4371P
Regulatory Docket No. FAA-2000-8093

Lt. Col Orbelin Arreola
Flight Directives Division
HQ Air Force Flight Standards Agency
6500 South MacArthur Boulevard, Building 4
Oklahoma City, OK 73169

Dear Lt. Col Arreola:

This letter is to inform you that the Federal Aviation Administration (FAA) has granted your petition to extend Exemption No. 4371O. It transmits the FAA's decision, explains its basis, and gives you the conditions and limitations of the exemption, including the date it ends.

The Basis for the FAA's Decision

By letter dated November 20, 2019, you petitioned the FAA on behalf the Department of the Air Force (USAF) for an extension of Exemption No. 4371O. That exemption from §§ 91.177(a)(2) and 91.179(b)(1) of Title 14, Code of Federal Regulations (14 CFR) allows the USAF to conduct low-level operations without complying with enroute minimum altitudes for flight under instrument flight rules (IFR) or direction-of-flight requirements for IFR enroute segments in uncontrolled airspace.

In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the original exemption.

The FAA's Decision

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested extension of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to the USAF.

The FAA has determined that the justification for the issuance of Exemption No. 4371O remains valid with respect to this exemption and is in the public interest. Therefore, under the authority provided by 49 U.S.C. 106(f), 40113, and 44701, which the FAA Administrator has delegated to AFS-20-131339-E

me, I hereby grant the Department of the Air Force an exemption from §§ 91.177(a)(2) and 91.179(b)(1) of Title 14, Code of Federal Regulations, to the extent necessary to allow the USAF to conduct low-level operations without complying with enroute minimum altitudes for flight under IFR or direction-of-flight requirements for IFR enroute segments in uncontrolled airspace, subject to the following conditions and limitations.

Conditions and Limitations

1. Minimum altitude for fixed-wing, rotary-wing, and tilt-rotor aircraft:
 - a. All aircraft operating within Special Use Airspace (SUA) may operate to, but not below, the bottom of the SUA floor when authorized by the appropriate military authority.
 - b. Fixed-wing aircraft operating IFR outside SUA or Military Training Routes (MTRs):
 - i. Minimum altitude when employing Terrain Following/Terrain Avoidance (TF/TA) procedures will be no lower than 200 feet Set Clearance Plane (SCP).
 - ii. Minimum altitude when employing visual low-level procedures will be no lower than 100 feet above obstacles.
 - c. Rotary-wing aircraft operating IFR outside SUA or MTRs:
 - i. Minimum altitude when employing TF/TA procedures will be no lower than 100 feet SCP.
 - ii. Minimum altitude when employing visual low-level procedures will be no lower than 50 feet above obstacles.
 - d. Tilt-rotor aircraft operating IFR outside SUA or MTRs:
 - i. Minimum altitude when employing TF/TA procedures will be no lower than 100 feet SCP.
 - ii. Minimum altitude when employing visual low-level procedures in “Airplane” mode will be no lower than 100 feet above obstacles.
 - iii. Minimum altitude when employing visual low-level procedures in “Conversion” mode will be no lower than 50 feet above obstacles.
2. Operations under this exemption must be conducted under the procedural requirements of a letter of agreement (LOA) between the wing originating the route and the air traffic control facility with jurisdiction over the airspace of the route segment for which this exemption is exercised.

3. Operations in Glass G airspace may be conducted only if procedures have been established in an LOA that includes the requirements of § 91.126(d), *Communications with control towers*.
4. The LOA must include at least the following information:
 - a. The route definition in geographical coordinates and the maximum route width;
 - b. The route alignment that avoids Class B airspace;
 - c. The route alignment that minimizes disturbance to persons and property on the ground;
 - d. Provisions for military aircraft to flight check approved routes to ensure compliance with all provisions;
 - e. The maximum altitudes for all route segments;
 - f. Radar flight following or position reporting procedures, as applicable;
 - g. Provisions for lost communications procedures; and
 - h. The procedures whereby aircraft that are unable to continue the mission under the authority of this exemption are able to comply with the route and altitude requirements of part 91.
5. The USAF shall provide notice through the use of Notices to Airmen (NOTAMs) disseminated at least 6 hours in advance of scheduled exercises. The training airspace will be identified by name (if applicable) or by latitude/longitude. The NOTAMs will advise that during the course of flight planning, potential users of the operational area will be provided with information on the time and place of the proposed airdrop operations. The NOTAMs must be made available to the civil aviation community and must be capable of being disseminated among civil users of the National Airspace System.
6. All aircraft operating IFR outside SUA or MTRs under this exemption are limited to a maximum route length of 240 nautical miles (NM).
7. Any environmental assessments associated with operations conducted under this exemption are the responsibility of the USAF.

If you request an extension to this exemption, please submit your request by using the Regulatory Docket No. FAA-2000-8093 (<http://www.regulations.gov>). In addition, you should submit your request no later than 120 days prior to the exemption's expiration date listed below.

If you require an amendment to this exemption, please submit your request no later than 120 days prior to the date you need the amendment using the process indicated above.

Any extension or amendment request must meet the requirements of § 11.81 of 14 CFR.

The Effects of the FAA's Decision

The FAA's decision amends Exemption No. 4371O to 4371P and extends the termination date to July 31, 2022, unless sooner superseded or rescinded.

Sincerely,

/s/

Robert C. Carty

Deputy Executive Director, Flight Standards Service

Enclosure

Appendix E

Aeronautical Proposal

FAAO 7400.2M Section 3. SUA PROPOSALS

21-3-3. PROPOSAL CONTENT

a. Proponent's Transmittal Letter. See proceeding.

b. Area Description.

Modify Duke MOA, PA as follows:

Boundaries	Beginning	at lat. 42°02'40"N, long. 78°28'59"W; to lat. 41°54'30"N, long. 77°24'19"W; to lat. 41°19'55"N, long. 77°47'53"W; to lat. 41°21'53"N, long. 78°19'05"W; to lat. 41°23'00"N, long. 78°36'39"W; to lat. 41°54'12"N, long. 78°30'38"W to beginning
Using Agency		Air National Guard, Eastern Air Defense Sector, Rome, NY

All else remains the same

Duke Low MOA, PA

Boundaries	Beginning	at lat. 42°02'40"N, long. 78°28'59"W; to lat. 41°54'30"N, long. 77°24'19"W; to lat. 41°19'55"N, long. 77°47'53"W; to lat. 41°21'53"N, long. 78°19'05"W; to lat. 41°41'11"N, long. 78°15'04"W; to lat. 41°54'12"N, long. 78°30'38"W to beginning; excludes the Wellsboro- Johnston Airport Class E Airspace
Altitudes		100 feet AGL up to but not including 8,000 feet MSL
Times of Use		Intermittent by NOTAM
Expected Usage		2 hours per day, 170 days per year
Controlling Agency		FAA, Cleveland ARTCC
Using Agency		Air National Guard, Eastern Air Defense Sector, Rome, NY

c. Airspace Statement of Need and Justification.

1. Describe the purpose and need for the proposed airspace.

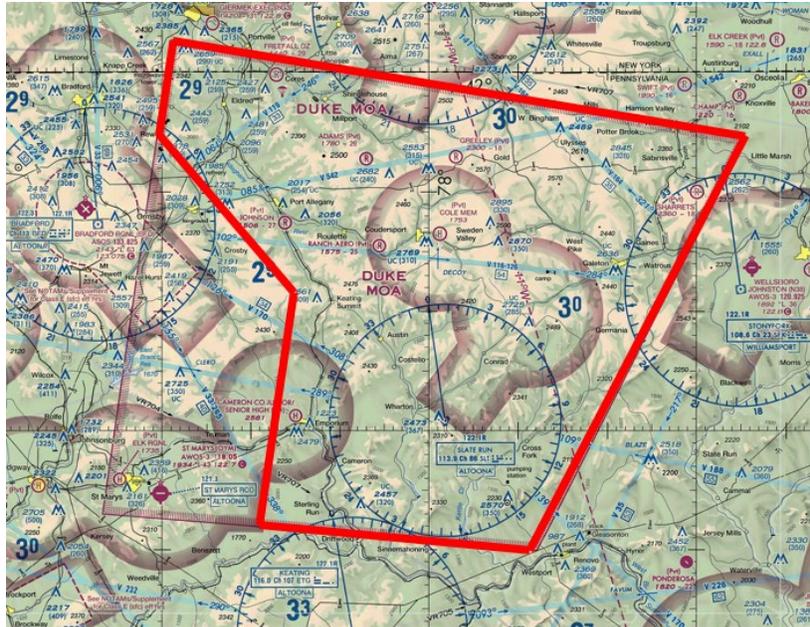
The Eastern Air Defense Sector (EADS) is tasked with the scheduling, management, and maintenance of Air National Guard (ANG)-assigned Special Use Airspace (SUA) and Military Training Routes (MTRs) in the Northeast United States. EADS requires low-altitude airspace to provide ANG units an environment to accurately train and prepare for current and future conflicts. Duke MOA, Pennsylvania is currently scheduled by multiple units to include the 175th Wing (175WG) (MA ANG). The 175WG operates A-10C aircraft which are responsible for CSAR, CAS, FAC (A), AI, and SAT. Each of these mission sets has a specific reason which requires the use of lower altitudes. Current world conflicts have kept the A-10C in demand but the amount of usable airspace for training has decreased. The 175th Wing must have a reliable and realistic training environment in which to conduct upgrades and continuation training for aircrew. Other potential users include the 193rd Special Operations Wing (PA ANG) which operates C-130s and the 177th Fighter Wing (NJ ANG) which operates F-16s. However, primary training needs will be focused on A-10 syllabus items.

PROPOSED ACTION

Create a Duke Low MOA that extends from 100' AGL up to 7,999' MSL that lays underneath the current Duke MOA with some carve outs for civilian traffic

The airspace will normally be activated for no more than one hour at a time, twice per day, with no more than 6 total aircraft (6 A-10's). The Duke MOA low will only be activated to meet mandatory low altitude training requirements driven by Air Force instructions. The Duke Low MOA could be activated separately from the Duke MOA as needed.

DUKE MOA	8k – 17,999 MSL
DUKE MOA low	100' AGL – 7,999 MSL



2. Joint use. The Airspace will be available for joint use. The FAA joint-use policy per FAAO 7400.2J para 21-1-8 will be recognized. A Letter of Agreement with Cleveland ARTCC will outline procedures for scheduling, activating, and de-activating the airspace.

d. Air Traffic Control Assigned Airspace (ATCAA). No additional ATCAAs are requested in association with the proposed Duke Low MOA

e. Activities.

1. For areas that will contain aircraft operations.

(a) Average number and types of aircraft that will use the area.

A-10: 3 sorties twice per day (6 aircraft total)

F-16: 2 sorties twice per day

C-130: 1 sortie per week

(b) Specific Activities and the maximum altitudes required for each type of activity planned.

Tactical combat maneuvering by fighter aircraft involving abrupt, unpredictable changes in altitude, attitude, and direction of flight. Duke Low MOA will be activated separately from the Duke MOA or concurrently as needed to facilitate low-level training requirements.

(c) Supersonic Flight. N/A. Supersonic flight operations will be prohibited in the DUKE MOA Low airspace.

(d) Firing, Ordnance Delivery Runs, and Weapons Impact areas. N/A. Weapons, Chaff, Flares, and Ordnance will not be used in the Duke MOA low.

2. Surface-to-surface or surface-to-air weapons firing. N/A.

f. Environmental and land use information.

1. Ms. Kristi Kucharek
Lead Environmental Planner, NGB/A4AM
JB Andrews, MD
kristi.kucharek@us.af.mil
(240) 612-9471

2. The 175th Wing agrees to provide reasonable and timely aerial access to the underlying public and private land. This access will be coordinated via a proposed direct communication line with the Eastern Air Defense Sector (EADS) scheduling office.

3. Not Applicable

g. Communications and Radar.

1. Ground and satellite based radar and radio communications will be used by Cleveland ARTCC to monitor the airspace.

2. N/A.

h. Safety considerations.

1. Activity will be contained within the MOA using geographic references, inertial navigation, global positioning systems and TACAN radial/DME references. In addition, the 175th Wing uses a Situational Awareness DATA Link (SADL) display in which airspace boundaries are depicted and area borders easily defined.

2. Malfunctions will be handled in accordance with aircraft technical orders, Service Directives, and FARs.

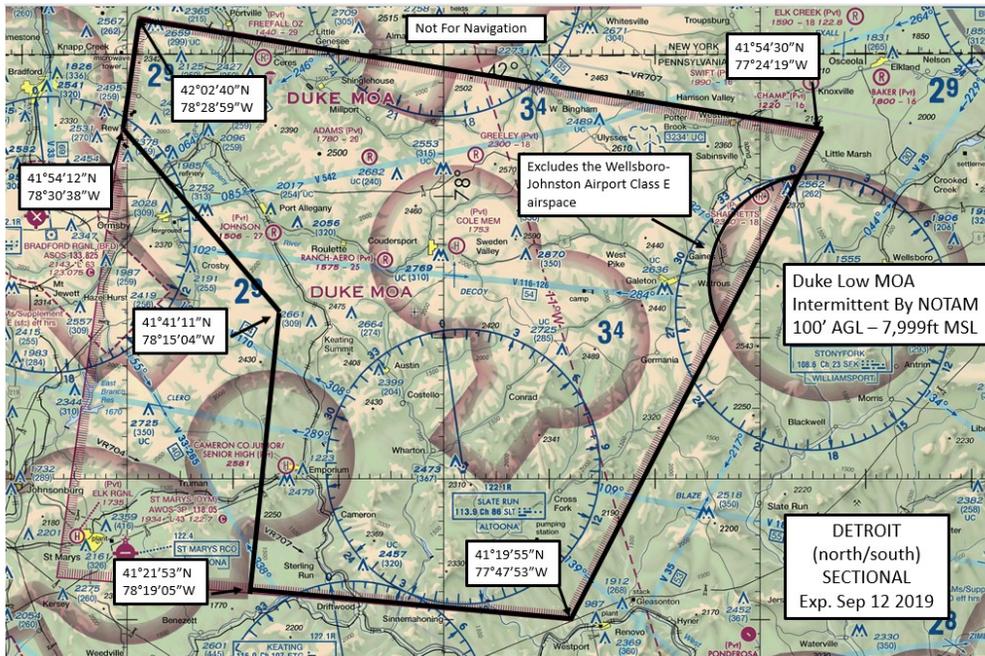
3. No ordnance trajectory envelopes are proposed for the Duke Low MOA.

i. Coordination summary.

NGB/A3/3/6/10TA, Mr. Jamie Flanders, Airspace Manager
NGB/A4AM, Ms. Kristi Kucharek, Technical Lead Environmental Planner
Air Force Representative, Lt Col Jeff Godzik
Cleveland ARTCC, Mr. Craig Cecil, Air Traffic Control

Cleveland ARTCC, Ms. Traci Moll, Airspace & Procedures
FAA, Ms. Kristi Regotti, FAA Environmental Specialist
FAA, Mr. Abran Dodge, FAA Central ATREP

j. Area Chart



k. Environmental Documents. All applicable environmental documents will be provided separately.

l. Graphic Notice Information. N/A.

m. Other. N/A

Appendix F

Noise Analysis

FINAL
Noise Analysis for
Modification of
Duke Military Operations Area

Maryland Air National Guard
175th Wing, Martin State Air National Guard Base
Baltimore, MD

May 2022



Guarding America - Defending Freedom



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ACRONYMS AND ABBREVIATIONS

AGL	above ground level
AFI	Air Force Instruction
ANG	Air National Guard
dB	decibels
dBA	A-weighted decibels
DNL	day-night sound level
DOD	Department of Defense
EA	environmental assessment
FAA	Federal Aviation Administration
ft	feet
FL	flight level
IFR	instrument flight rule
L_{dnmr}	onset-adjusted monthly DNL
L_{eq}	equivalent continuous sound level
L_{max}	maximum sound level
MSL	mean sea level
MOA	military operations area
MTR	military training route
NEPA	National Environmental Policy Act
NGB	National Guard Bureau
NAS	national airspace system
NM	nautical miles
NOTAM	notice to airmen
OSHA	Occupational Safety & Health Administration
SEL	sound exposure level
SUA	special use airspace
USAF	United States Air Force
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

This operational noise analysis is in support of the Environmental Assessment (EA) for the Modification of the Duke Military Operations Area. Specifically, this analysis includes acoustical noise modeling to identify the operational noise footprint and associated effects from the operations conducted in the Duke MOA and Proposed Duke Low MOA. This report includes modeling aircraft-generated sound under the proposed SUAs with and without the Proposed Action. It provides existing and future overall operational noise levels, as well as operational noise sound levels for individual overflights.

1.1 LOCATION AND BACKGROUND

The Maryland ANG, 175th Wing (175 WG) is stationed at Martin State (also known as Warfield) Airport near Baltimore, Maryland. The 175 WG is the primary user of the Duke MOA. The 175 WG's state mission is to maintain a well-trained and well-equipped A-10C squadron. The federal mission during peacetime has the combat-ready unit assigned to the Air Combat Command to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations worldwide. The 104th Fighter Squadron (FS) is a unit of the 175th Operations Group.

The A-10C is responsible for a variety of missions including Combat Search and Rescue (CSAR), Close Air Support (CAS), Forward Air Control (FAC), Air Interdiction (AI), and Surface Attack (SAT). Each of these mission sets requires the use of low altitude airspace.

The existing Duke MOA is located in Pennsylvania and a portion of southern New York (Figure 1-1). Nearly all the MOA is in Pennsylvania, the underlying counties include parts of Elk, Cameron, Clinton, McKean, Potter, and Tioga. A small fraction of the northwest corner of the MOA overlies portions of Cattaraugus and Allegany counties in New York. The existing Duke MOA does not provide airspace for low level training to meet the training requirements of the 175 WG. The proposed Duke Low MOA would underly the existing Duke airspace and is described in detail on Chapter 2, *Description of Proposed Action and Alternatives*.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This chapter presents a detailed description of the Proposed Action, including the requirement to provide an integrated, year-round, realistic training environment in accordance with A-10 RAP and AFI 11-2A-OA-10V1 training requirements.

2.1 PROPOSED ACTION

The proposed Duke Low MOA would be in Pennsylvania and New York (Figure 2-1). The modification and addition would follow the lateral footprint of the existing Duke MOA except for the southwestern portion to avoid regional airports. To further clarify the components of the

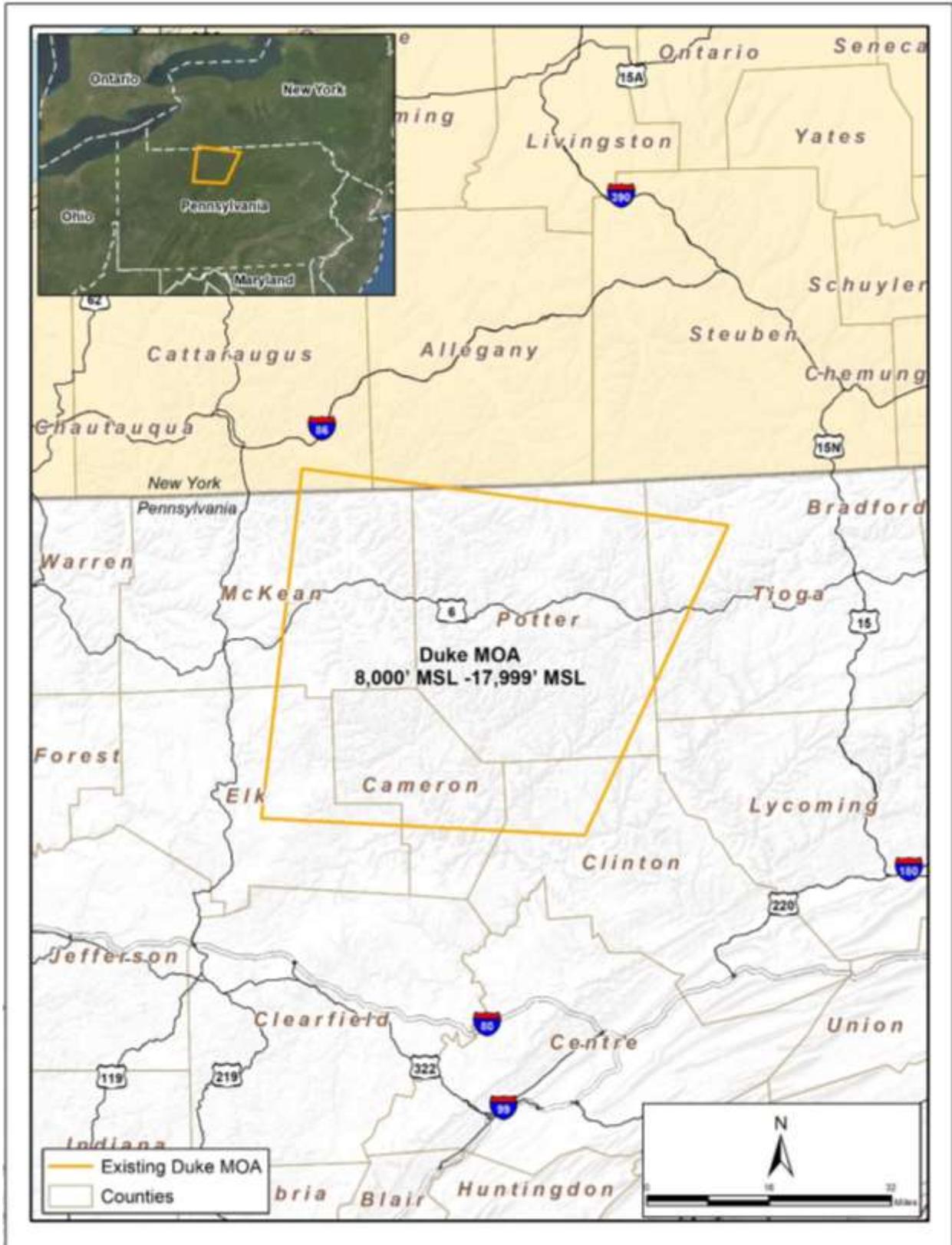


Figure 1-1. Existing Duke MOA

Proposed Action, NGB coordinated with the 175 WG and Pennsylvania Department of Conservation and Natural Resources (PA DCNR) to address the sensitive area concerns while ensuring the Maryland ANG A-10 training mission. The components of the Proposed Action include:

1. The vertical limits would be defined as 100 ft 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 Airmen (NOTAM).
4. Anticipated activation would be four hours per day, twice per day, two hours 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.
7. Nighttime operations (defined as sunset until 10:00 p.m.) at low altitude would be limited.
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 Instruction (AFI 11-202v3).

Published activation timeframes and actual usage time are different terms. 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. – 12:00 p.m. and one hour in the afternoon between the hours of 2:00 p.m. and 4 p.m. During the one hour of usage, the majority of flight time would be spent at higher altitudes (above 1,000 ft). 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 actually be at least 200 ft AGL over the areas.

Potter County contains most of the proposed Duke Low MOA and is representative of the landscape beneath the airspace. This region of the Appalachian Plateau is deeply dissected, having extensive areas of steeply sloping land separated by narrow ridges and valleys (Denny 1956). There is very little level land. Uplands rise to altitudes of more than 2,500 ft MSL and the maximum relief across the county is more than 1,500 ft but the local relief is generally 300 to 800

ft. Figure 2-2 indicates that the proposed low airspace would rise and fall according to the surface elevation to remain at least 100 ft AGL.

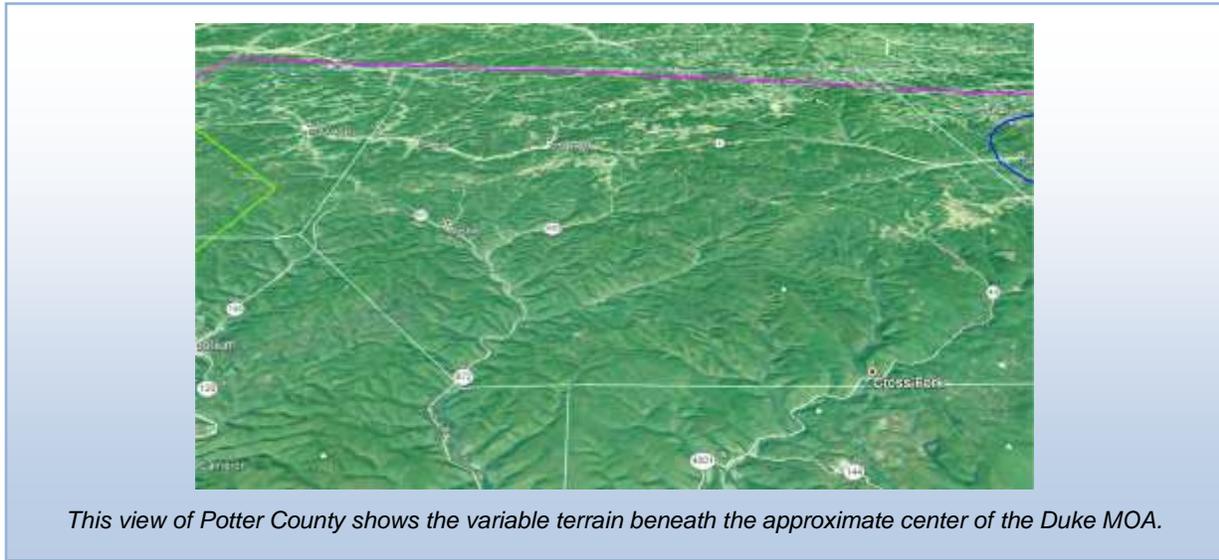


Figure 2-2. View of Variable Terrain Beneath the Existing Duke MOA

The proposed Duke Low MOA altitudinal mitigation map for state parks and state forests is presented in Figure 2-3. The altitudinal mitigation map was prepared by NGB in coordination with PA DCNR to address concerns for the most critical sensitive areas.

The Proposed Action would be implemented in accordance with FAA Regulation 7400.2, Paragraph 21-3-3.f.2, which states that proposals to establish SUA with a floor below 1,200 ft AGL where there is underlying private or public use land, must include a statement that the proponent agrees to provide reasonable and timely aerial access to such land. The Proposed Action would be implemented under FAA Exemption 4371, which allows the USAF to conduct low-level operations no lower than 100 ft above obstacles when employing visual low-level procedures. Operations under this exemption must be conducted under the procedural requirements of a letter of agreement between the 175 WG and the FAA Cleveland Air Route Traffic Control Center. The FAA exemption to fly below 500 ft AGL within SUAs is an operational feasibility exemption and does not address potential environmental effects.

A cross-section of the proposed Duke Low MOA is depicted in Figure 2-4. The vertical diagram shows the Low MOA beneath the existing Duke MOA except for the southwest corner avoidance area for St Mary's Municipal Airport. The existing Air Traffic Control Assigned Airspace above 18,000 ft MSL, which is not utilized by the 175 WG, is also shown. The lateral coordinates of the proposed airspace are presented in Appendix C.

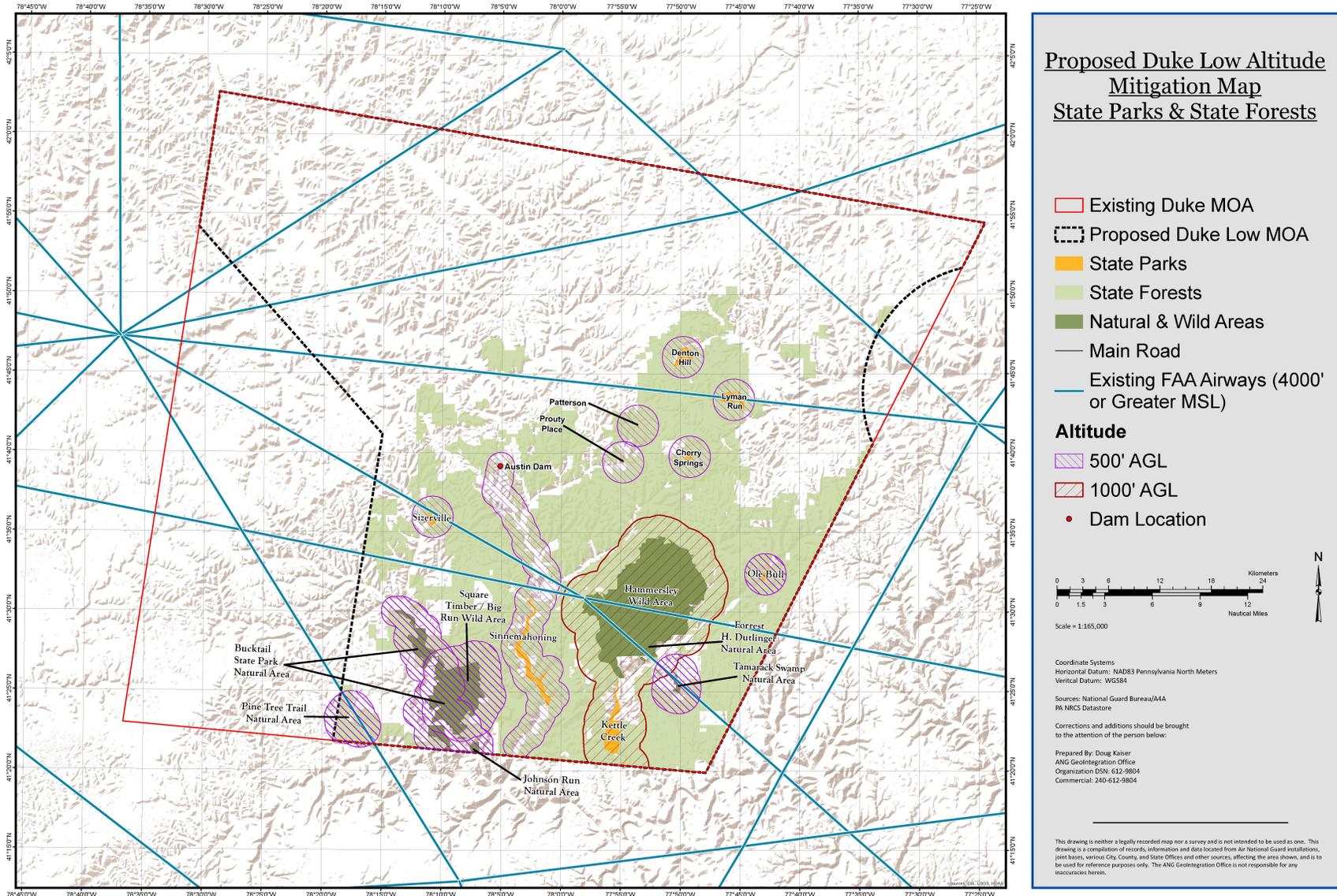


Figure 2-3. Duke Low MOA Altitudinal Mitigation Map for State Parks and State Forests

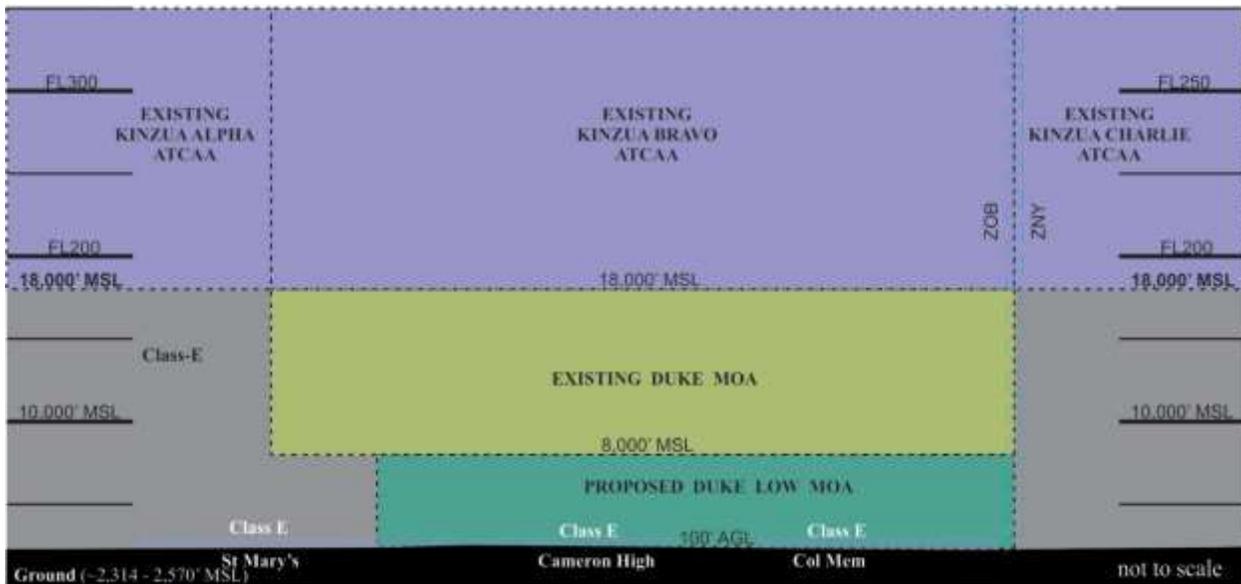


Figure 2-4. Cross-Section of Proposed Duke Low MOA

2.1.1 Aircraft Operations

The A-10C aircraft operations are defined in Table 2-1 and the definitions are taken from the various aeronautical proposals prepared for MOAs. Each of these mission sets has a specific reason which requires the use of lower altitudes.

Table 2-1. Aircraft Operations Defined

Aircraft Operation	Definition
Offensive Counter Air – Attack Operations (OCA-AO)	Exercise designed to imitate air-to-ground weapons employment against adversary aircraft and integrated air defense systems.
Combat Search and Rescue (CSAR)	Operations that are carried out within or near combat zones by a task force of helicopters, ground-attack aircraft, aerial refueling tankers and an airborne command post.
Close Air Support (CAS)	Aircraft operations with strike capabilities in support of ground maneuver operations.
Forward Air Control-Airborne (FAC-A)	Aircraft engaged in close air support of ground troops. The FAC-A is normally an airborne extension of the tactical air control party.
Air Interdiction (AI)	Aircraft operations to effect visual or electronic contact by a friendly aircraft with another aircraft.
Surface Attack (SAT)	A simulated surface attack mission designed to imitate the delivery of munitions to a ground target.

2.1.1.1 Other Expected Users

In addition to the 175 WG as the primary user, other expected users of the Duke Low MOA would include the 177 FW, 193 Special Operations Wing, and the 113 WG. The 177 FW and 113 WG operate F-16Cs. The 193 Special Operations Wing operates C-130s.

2.1.1.2 Air Operations

The projected aircraft utilization within the existing and proposed airspace is presented in Table 2-2. The percent time in each altitude block for each aircraft type is presented in Table 2-3. Operations conducted at 100 ft AGL would be a small percentage of the overall aircraft utilization. The LASDT operations would be to momentarily (several seconds) lower to 100 ft AGL, return to 300 ft AGL, and then return to 500 ft AGL. In a given hour of usage, A-10 aircraft would spend approximately ten minutes or less below 1,000 ft AGL. Overall, during each sortie, aircraft would be down in the low altitude ranges between 500 ft to 100 ft AGL for 2-3 minutes per activation. Pilots review the routes before low altitude flights occur to ensure safety and obstacle avoidance. CSAR training is the primary driver for low altitude airspace need. The existing Duke MOA is authorized for evening operations (sunset to 10:00 p.m.), including lights out nighttime flying with night-vision goggles as authorized by FAA (Exemption No. 7960I).

Table 2-2. Existing and Proposed Air Operations

Aircraft	Annual Usage		Individual Mission Parameters			
	Number of Missions	Time in Airspace (hours)	Single Aircraft Sorties	Percent Busiest Month	Average Aircraft Per Mission	Average Time Per Sortie (minutes)
Existing Duke MOA						
A-10C	100	65	200	25%	2	39
F-16C*	200	100	400	15%	2	30
F-16C**	15	10	30	15%	2	38
C-130J	50	59	50	15%	1	71
Duke MOA and Proposed Duke Low MOA						
A-10C	300	300	600	25%	2	60
F-16C*	150	111	300	15%	2	44
F-16C**	15	10	30	15%	2	38
C-130J	63	74	63	15%	1	71

* 177WG ** 113WG

Table 2-3. Percent Time in Each Altitude Block for Each Aircraft Type

Altitude Block	Percent Time in Each Altitude Block		
	A-10C	F-16C	C-130J
100'-500'	1%	0%	0%
500'-1000'	4%	5%	5%
1,000'-2,500'	20%	10%	10%
2,500'-7,000'	50%	10%	30%
Above 7,000'	25%	75%	55%

Note: Elevations under the Duke MOA range from approximately 1,000 ft to 2,000 ft MSL, and 6,000 ft AGL is approximately 8,000 ft to 9,000 ft MSL representative of the lower portions of the existing Duke MOA.

3.0 NOISE MODELING

3.1 NOISE OVERVIEW

Sound is a physical phenomenon consisting of vibrations that travel through a medium, such as air, and are sensed by the human ear. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to sound varies depending on the type and characteristics of the sound, distance between the noise source and the receptor, receptor sensitivity, and time of day. The soundscape of one's living or recreational space(s) are part of a community's quality of life and various sounds, from various sources, influence and impact each soundscape based upon their duration, frequency, and intensity.

Sound varies by both intensity and frequency. Sound pressure level, described in decibels (dB), is used to quantify sound intensity. The dB is a logarithmic unit that expresses the ratio of a sound pressure level to a standard reference level. Hertz are used to quantify sound frequency. The human ear responds differently to different frequencies. “A-weighting”, measured in A-weighted decibels (dBA), approximates a frequency response expressing the perception of sound by humans. Sounds encountered in daily life and their sound levels are provided in Table 3-1.

Table 3-1. Common Sounds and Their Levels

Outdoor	Sound Level (dBA)	Indoor
Jet flyover at 1,000 feet	100	Rock band
Gas lawnmower at 3 feet	90	Food blender at 3 feet
Downtown (large city)	80	Garbage disposal
Heavy traffic at 150 feet	70	Vacuum cleaner at 10 feet
Normal conversation	60	Normal speech at 3 feet
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room

Source: Harris 1998.

The ear does not respond equally to sounds of all frequencies, but is less efficient at low and high frequencies than it is at medium or speech range frequencies. Thus, to obtain a single number representing the sound pressure level of operational noise containing a wide range of frequencies in a manner approximating the response of the ear, it is necessary to reduce, or weight, the effects of the low and high frequencies with respect to the medium frequencies. Thus, the low and high frequencies are de-emphasized with the A-weighting, and is appropriate and often implied when describing sounds such as aircraft overflights. There are many sound level metrics used to describe operational noise levels, some are cumulative such as DNL, while other sound metrics describe the sound level heard during a single event; these include, but are not limited to:

- **Maximum Sound Level (Lmax)** – Lmax is the maximum sound level of an acoustic event in decibels (e.g. when an aircraft is directly overhead).

- Equivalent Sound Level (Leq) - Leq is the level of a constant sound, which, in a given situation and time period, has the same energy as does a time-varying sound. For noise sources, which are not in continuous operation, the equivalent sound level may be obtained by summing individual sound exposure level (SEL) values and normalizing over the appropriate time period.
- Sound Exposure Level (SEL) – A composite metric that represents both the magnitude and duration of a time-varying noise event, such as an aircraft overflight. The SEL is determined using a single number to account for the event as if it occurred during one second; it does not directly represent the sound level heard at any given time. Rather, it accounts for the noise heard through an entire event, beginning when the noise source first becomes audible, rising up to the maximum level at its closest point to the receiver, and ending when the sound diminishes.
- Day-night Sound Level (DNL) – DNL is the average sound energy in a 24-hour period with a adjustment added to the nighttime levels. Because of the potential to be particularly intrusive, noise events occurring between 10:00 p.m. and 7:00 a.m. are assessed a 10 dB penalty when calculating DNL. DNL is a useful descriptor for aircraft noise because: (1) it averages ongoing yet intermittent noise, and (2) it measures total sound energy over a 24-hour period. DNL provides a measure of the overall acoustical environment, but as with SEL, it does not directly represent the sound level at any given time.
- Onset-Adjusted DNL (L_{dnmr}) is the metric used for quantifying noise in special use airspace because aircraft operate differently than in the airport environment, often flying in a more sporadic manner and at low altitudes with speeds greater than 425 miles per hour creating the potential to surprise the receiver. With L_{dnmr} , the conventional day–night average sound level (DNL or L_{dn}) metric is adjusted to account for the “surprise” effect of the sudden onset of aircraft noise events. Each aircraft operating in SUA/ASU that exhibits a high onset rate has an adjustment or penalty ranging from 0 to 11 dB applied to the normal SEL. The DNL is then determined in the same manner as for conventional aircraft noise events and is designated as Onset-Rate Adjusted Day.

3.2 METHODOLOGY

The acoustical modeling for the operational noise analysis uses the MR_NMAP (v3.0) as part of the NoiseMAP computer suite to predict operational sound levels associated with aircraft operations beneath the proposed Duke Low MOA (USAF 2016a). The parameters considered in the modeling included aircraft type, airspeed, power settings, aircraft operations, vertical training profiles, and the time spent within each airspace block. Notably, MR_NMAP is the FAA-approved noise model for aircraft operations beneath special use airspace (FAA 2020).

Baseline data for the Duke MOA was collected during a site visit and personnel interviews in 2018. Air operational data for the proposed MOA was provided by ANG operational personnel and checked for consistency with the traditional use of the existing airspace. The primary users of the proposed Duke Low MOA would conduct exercises with A-10C, while the secondary users utilize F-16C, and C-130J aircraft. Appendix A contains the operational data used in MR_NMAP.

L_{dnmr} is the accepted sound metric for the DoD when determining noise levels from aircraft operations within SUA; however, average annual DNL is the accepted noise metric for the FAA when determining noise levels from aircraft operations within SUA. MR_NMAP was used to model the overall sound levels with both L_{dnmr} and DNL and both have been carried forward for use in this analysis to meet the requirements for both agencies. L_{dnmr} is based on average busiest month aircraft operations with rapid onset penalty, whereas DNL is based on annual air operations without rapid onset penalty. Due to the onset penalty and the use of busiest month operations, L_{dnmr} always equals or exceeds DNL.

As the action encompasses an area that is larger than the immediate vicinity of an airport and includes actions above 3,000 feet AGL, the operational noise analysis includes a discussion on a change-in exposure and examines the change in sound levels as compared to population and demographic information from the U.S. Census blocks. The assessment of (1) the population within areas exposed at or above DNL 65 dB, at or above DNL 60 but less than DNL 65 dB, and at or above DNL 45 dB but less than DNL 60 dB has been included in the discussion (FAA 2020). In addition, change-of-exposure tables were developed to identify where noise would change by 1.5, 3, and 5 dBA (FAA 2020). FAA Order 1050.1F defines the thresholds for “significant” noise impacts and the thresholds for “reportable” noise impacts. To make certain the ANG is meeting FAA requirements, during the release and transmittal of the Draft EA, the ANG will “report”, as necessary, greater than 5 dBA DNL increases in areas where DNL is between 45 and 60 dBA DNL.

Supplemental Metrics. Both the USAF and the FAA encourage the inclusion of supplemental noise metrics in the assessment of noise from airspace actions. It is understood that the sole use of DNL and land-use compatibility cannot accurately describe the nature and effects from aircraft noise. This is particularly true for airspace actions which have effects of low- to medium- intensity over large geographical areas, as opposed to high-intensity effects over a smaller area (e.g., noise near an airport or air installation). MR_NMAP was also used to calculate L_{max} and SEL for individual overflights within the proposed Duke Low MOA. These metrics were used to assess the potential for disturbance to speech, to determine if individual acoustic events would be loud enough to damage hearing or structures, and to provide the public with a better understanding of the specific effects.

DNL, L_{dnmr} , and the supplemental noise metrics outlined above were also carried forward to assess the effects on the natural environment. Effects of noise on land use, biological resources,

cultural resources, and socioeconomics are presented in those section of the environmental assessment.

3.3 AFFECTED ENVIRONMENT

3.3.1 Population and Sensitive Land Uses

U.S. Census block data was used to determine the population exposed to aircraft noise. Other than visual counts, this is the narrowest available geo-referenced data set. The Duke MOA is vast, covering 2,178 square miles, and the census block data was appropriate for this scale of activity. Table 3-2 and Figure 3-1 outline the population under the proposed Duke SUA Complex. There are approximately 55,000 individuals and 35,000 households beneath the existing Duke MOA, approximately two-thirds of which would reside beneath the proposed Duke Low MOA. In addition to individuals, there are 29,053 acres of state parks and 406,250 acres of state forests beneath the proposed Duke Low MOA (Figure 3-2).

Table 3-2. Estimated Population Beneath the Duke MOAs

Airspace	Population	Households	Area (square miles)
Existing			
Duke MOA	54,838	34,892	2,178
Proposed			
Duke Low MOA (including exclusion zone)	37,060	25,669	1,727
Exclusion Zone	745	941	37

Source: U.S. Census 2018.

3.3.2 Background Noise Levels

To provide context and a comparative baseline to gauge the intensity of the effects a review of the background noise levels below the proposed MOA was conducted. levels Figure 3-3 shows both representative locations and background overall sound levels (DNL) for the areas below the Duke MOA without any aircraft activities. Background sound levels range from 46 to 57 dBA DNL. The estimated background level includes biological, geophysical, climatic, and anthropogenic components. Most of the land beneath the proposed Duke MOA is rural; however, there are several small towns and villages. In general, background levels are above 50 dBA DNL in the population centers, and less than 50 dBA DNL in more remote areas, such as wilderness areas, state parks, and state forests.

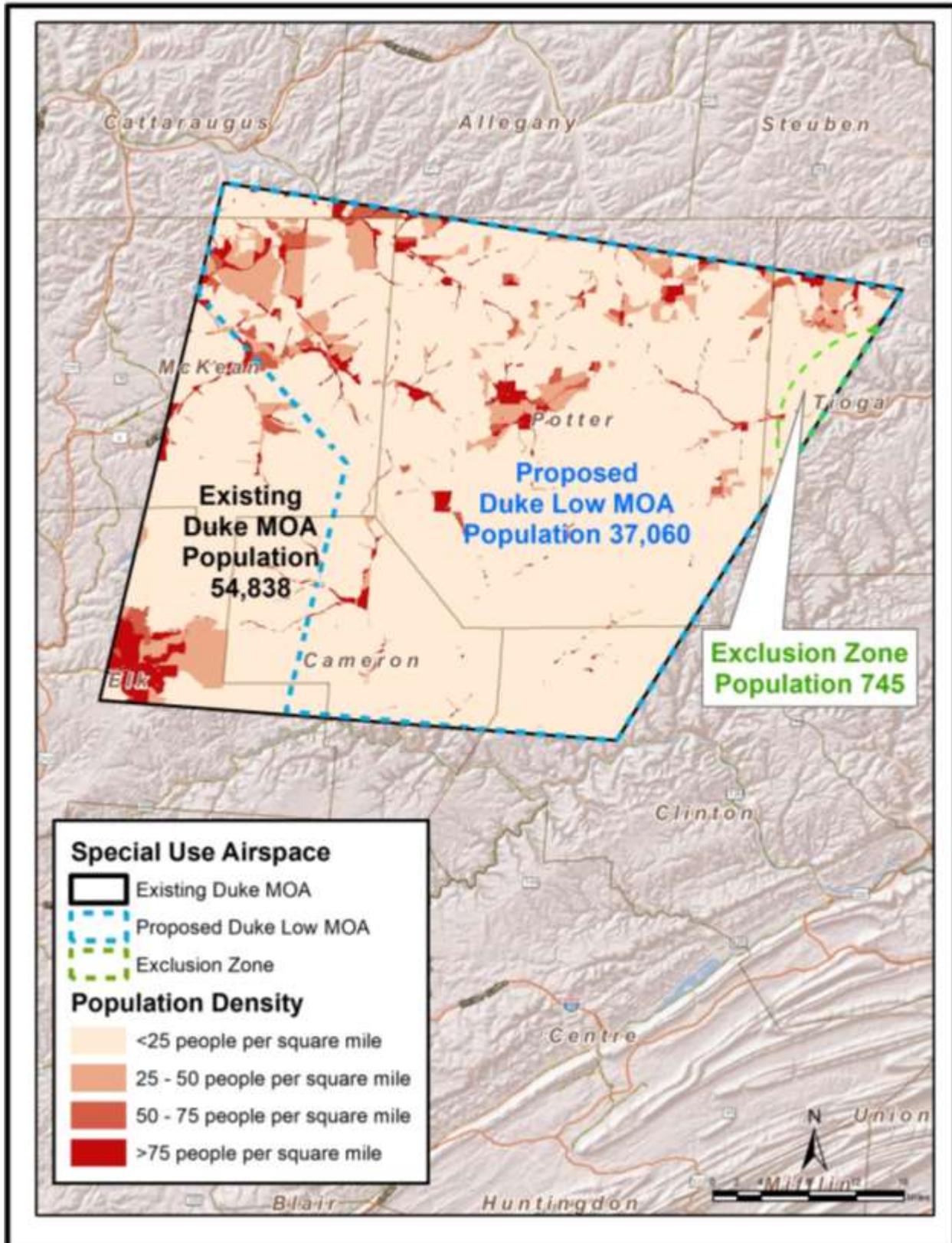
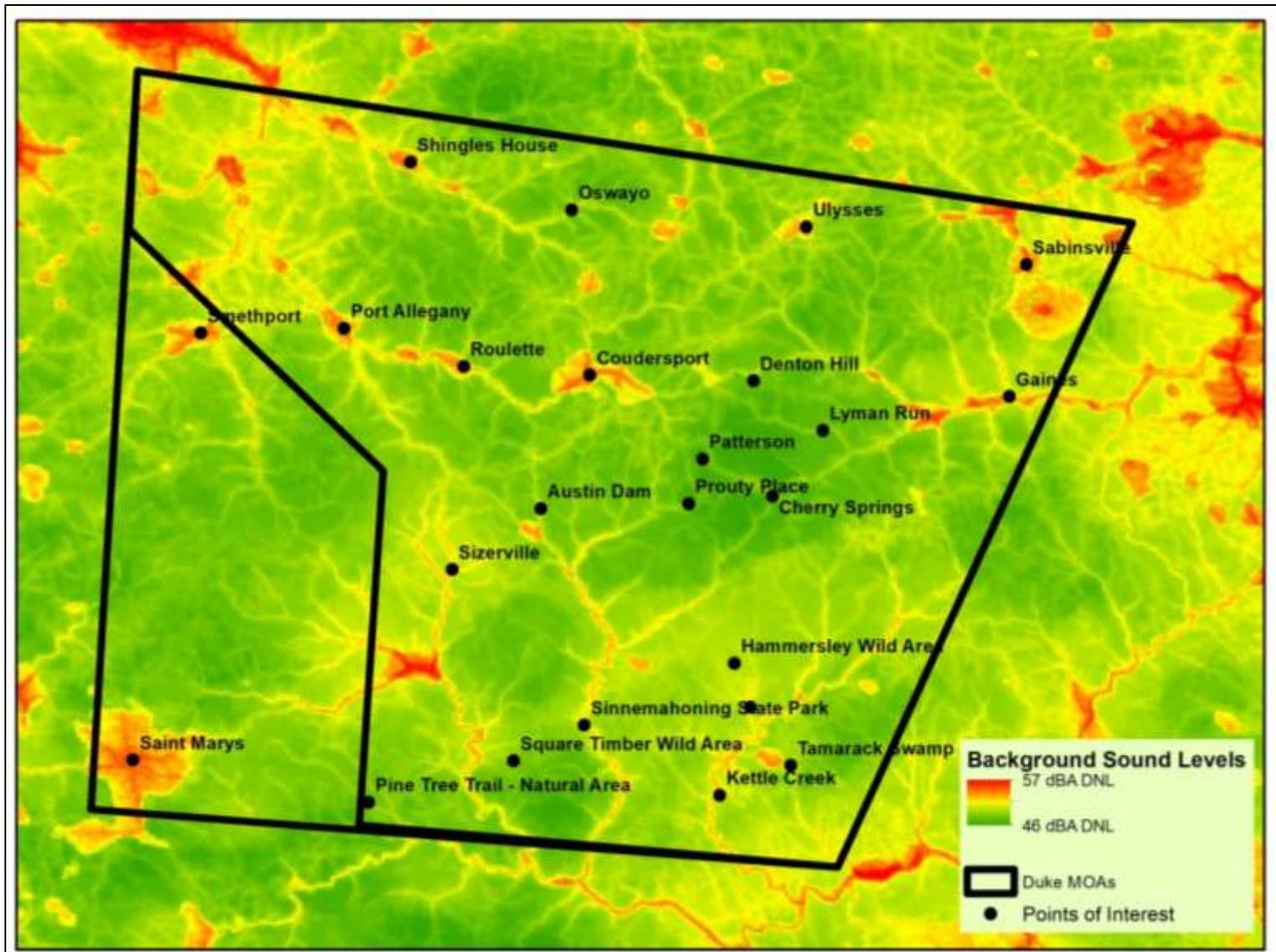


Figure 3-1. Population Density



Source: ASA 2013.

Figure 3-3. Points of Interest and Background Sound Levels

3.3.3 Existing Overall Aircraft Noise

DNL is the average sound energy in a 24-hour period with a penalty added to the nighttime levels. Ldnmr is equivalent to DNL with up-to an additional 11 dB penalty for overflights with rapid onset rates. The estimated DNL and Ldnmr from existing aircraft operations are both less than 35 dBA in areas beneath the Duke MOA. The overall average noise from aircraft operations is more than 10 dBA DNL lower than the background noise levels beneath the existing MOA, and do not contribute appreciably to the overall background levels throughout the region. In general, the aircraft operations are spread throughout the 2,178 square miles beneath the existing Duke MOA. Noise from existing aircraft operations does not exceed 65 dBA DNL, and is compatible with all land uses (USAF 2017 and FAA 2020).

3.3.4 Existing Individual Overflight Noise

Although operational noise levels are too low to result in incompatibility with existing land uses, noise from individual overflights generate distinct acoustical events. Table 3-3 outlines the L_{max} and SEL for individual aircraft overflights for the primary users of the existing Duke MOA. L_{max} and SEL are completely different from DNL. L_{max} is the maximum sound level of an acoustic event (e.g. when an aircraft is directly overhead). SEL is a measure of the total energy of an acoustic event. It represents the level of a one-second long constant sound that would generate the same energy as the actual time-varying noise event such as an aircraft overflight. Notably, elevations under the Duke MOA range from approximately 1,000 to 2,000 ft MSL, and 6,000 ft AGL outlined in Table 3-3 is representative of the lower portions of the existing Duke MOA (8,000 to 9,000 ft MSL).

Table 3-3. Estimated Sound Levels for Individual Overflights

Altitude (ft AGL)	L_{max} (dBA) ^a			SEL (dBA) ^b		
	A-10C ^c	F-16C ^d	C-130J ^e	A-10C ^c	F-16C ^d	C-130J ^e
6,000	74	78	62	81	87	72
10,000	64	70	54	74	80	66
20,000	-	58	44	-	70	57

Source: USAF 2016A.

Notes:

^a L_{max} is the maximum sound level during an individual overflight.

^b SEL is the sound level if the entire overflight was compressed into one second and does not represent the actual noise at any given time.

^c A-10 operating at 97% Engine Core RPM (NC) at 350 knots.

^d F-16C operating at 90% NC at 450 knots.

^e C-130J operating at 1400 HP at 200 knots.

Speech Interference. In general, low- to mid-altitude aircraft overflights can interfere with communication on the ground, and in homes, schools or other buildings directly under their flight path. The disruption of routine activities in the home, such as radio or television listening, telephone use, or family conversation, can give rise to frustration and irritation. The threshold at which aircraft noise may begin to interfere with speech and communication is 75 dBA (DNWG 2009). This level is consistent with, and more conservative than, the thresholds outlined in the American National Standards Institute's *Acoustical Performance Criteria, Design Requirements*,

and Guidelines for Schools (ANSI 2010). Table 3-3 outlines the L_{max} for individual aircraft overflights for the primary users of the existing Duke MOA. L_{max} at 6,000 ft AGL are 74 dBA for an A-10C, 78 dBA for an F-16C, and 62 for a C-130J. On occasions, F-16Cs operating in the lower levels of the existing Duke MOA are loud enough to cause brief interruptions in speech on the ground; whereas, A-10C and C-130J are not normally loud enough to interfere with communication on the ground.

Damage to Hearing. Noise-related hearing loss due to long-term exposure (i.e., many years) to continuous noise in the workplace has been studied extensively, but there has been little research on the potential for noise induced hearing loss on members of the community from exposure to aircraft noise. Unlike workplace noise, community exposure to aircraft overflights is not continuous, but consists of individual events where the sound level exceeds the background level for a limited time. Over 40 years, an individual would need to be exposed to average sound level of 75 dBA, 8 hours per day for 40 years to experience hearing loss (CHABA 1977), as such Occupational Safety & Health Administration (OSHA) and the ANG have adopted an exposure of 80 dBA for 8 hours per day as the threshold for hearing protection (USAF 2016b). As aircraft overflights are intermittent and not continuous, no individuals are exposed to sound levels exceeding 80 dBA for 8 hours per day beneath the Duke MOA. In addition, OSHA and the ANG have adopted a threshold of 140 dB instantaneous noise level as a threshold for short-term exposure that may induce hearing loss. As individual aircraft overflights within the Duke MOA are not supersonic, and do not generate sonic booms, no individuals beneath the MOA are exposed to instantaneous sound levels exceeding 140 dB.

Damage to Structures. Noise from low-level aircraft overflights can cause buildings under their flight path to vibrate, which the occupants experience as shaking of the structure and rattling of the windows. However, based on experimental data and models, noise and vibrations from subsonic aircraft overflights do not cause structural damage to buildings. An impact noise (i.e., blast noise or sonic boom) above 140 dB is required to generate sufficient energy to damage structures (Siskind 1989, and Bureau of Mines 1980). Individual overflights within the Duke MOA are not supersonic, and do not generate sonic booms above 140 dB; therefore, there is no potential to damage to structures.

3.4 SIGNIFICANCE THRESHOLD

Effects to noise would be less than significant unless the Proposed Action would (1) increase noise levels by more than 1.5 dBA DNL in a noise sensitive area exposed to noise above 65 dBA DNL, or (2) generate individual acoustic events loud enough to damage hearing or structures. Although effects would be less than significant under the above conditions, this EA includes a discussion of effects to both individuals and sensitive land uses from changes in the overall average noise and noise from individual overflights.

3.4.1 Proposed Action

The Proposed Action would have long-term minor adverse effects on the noise environment. Effects would be due to noise from the introduction of low-altitude military overflights in areas beneath the proposed Duke Low MOA. 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 (Ldnmr) between 0.1 and 1.3 dBA in areas beneath the proposed Duke Low MOA, this includes wilderness areas, state parks, and state forests.

3.4.1.1 Overall Aircraft Noise

DNL is the average sound energy in a 24-hour period with a penalty added to the nighttime levels. Ldnmr is the average sound energy in a 24-hour period with a 10 dB penalty added to the nighttime levels, and up-to an additional 11 dB penalty for overflights with rapid onset rates. Table 3-4 outlines the overall sound levels for representative locations under the Duke MOA and proposed Duke Low MOA. These estimates include the aircraft avoidance and mitigation areas shown in Figure 2-3. The existing range of background noise of 47.1 to 52.9 dBA DNL would increase to a range of 47.4 to 53.0 dBA DNL for the 24 representative locations under the proposed Duke Low MOA. The estimated Ldnmr (i.e., busiest month noise) would increase from a range of 47.1 to 52.9 dBA to 48.4 to 53.3 dBA beneath the proposed Duke Low MOA. The overall average noise environment would be similar to, but slightly greater than, existing background levels in areas beneath the proposed Duke Low MOA.

Table 3-4. Overall Sound Levels with and without the Proposed Action

Points of Interest	Overall Sound Levels (dBA)				
	Existing Background Level (DNL/Ldnmr)	DNL		Ldnmr	
		With Proposed Aircraft Noise	Change from Existing	With Proposed Aircraft Noise	Change from Existing
Population Centers					
Cherry Springs	47.8	48.0	0.2	48.9	1.2
Coudersport	52.6	52.7	0.1	53.0	0.4
Gaines	51.2	51.3	0.1	51.3	0.1
Oswayo	49.3	49.5	0.2	50.1	0.9
Port Allegany	52.2	52.3	0.1	52.7	0.5
Roulette	51.7	51.8	0.1	52.2	0.5
Sabinsville	52.9	53.0	0.1	53.3	0.4
Saint Marys	52.9	53.0	0.1	53.0	0.1
Shingles House	50.7	50.8	0.1	51.3	0.6
Smethport	52.1	52.2	0.1	52.2	0.1
Ulysses	51.8	51.9	0.1	52.3	0.5
Wildlife/Recreational Areas					
Austin Dam	49.2	49.4	0.2	50.1	0.9
Denton Hill State Park	47.4	47.6	0.3	48.6	1.2
Forrest Dutlinger Natural Area	49.4	49.5	0.2	49.8	0.5
Hammersley Wild Area	48.6	48.8	0.2	49.2	0.5
Kettle Creek	50.6	50.7	0.1	50.9	0.4
Lyman Run	48.3	48.6	0.2	49.4	1.0
Patterson State Park	47.1	47.4	0.3	48.4	1.3
Pine Tree Trail - Natural Area	48.2	48.4	0.2	49.1	0.9
Prouty Place State Park	47.3	47.6	0.3	48.6	1.3
Sinnemahoning State Park	52.3	52.4	0.1	52.8	0.4

Points of Interest	Overall Sound Levels (dBA)				
	Existing Background Level (DNL/Ldnmr)	DNL		Ldnmr	
		With Proposed Aircraft Noise	Change from Existing	With Proposed Aircraft Noise	Change from Existing
Sizerville State Park	49.9	50.0	0.2	50.6	0.7
Square Timber Wild Area	48.1	48.3	0.2	49.2	1.1
Tamarack Swamp	48.9	49.1	0.2	49.9	0.9

Land Use Compatibility. Noise from aircraft operations under the Proposed Action would not exceed 65 dBA DNL, and would be compatible with all land uses (USAF 2017 and FAA 2020). This includes being compatible with all wilderness areas, residential areas, churches, schools, and recreational areas underneath the proposed Duke Low MOA. Detailed guidelines for the compatibility of various land uses with noise exposure levels are included in Appendix B. These effects would be less than significant.

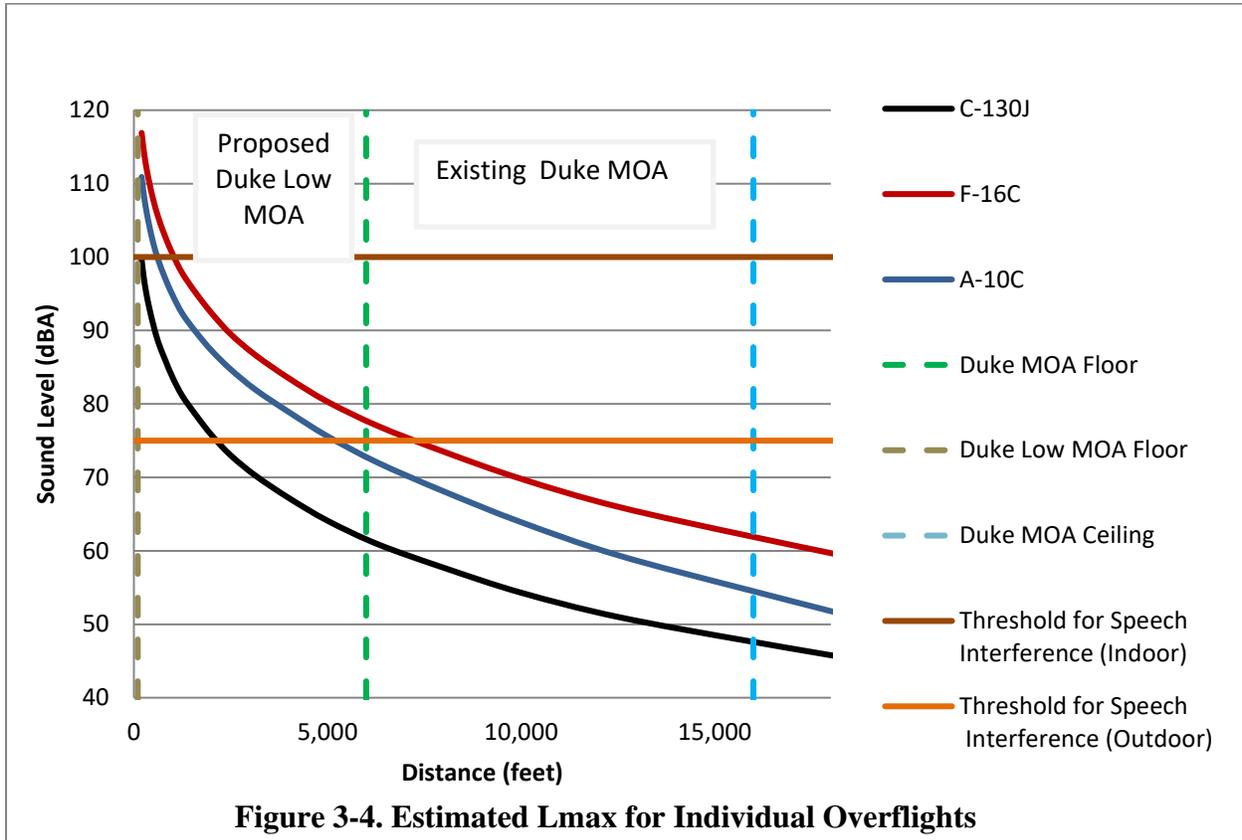
Change in Overall Noise. The Proposed Action would increase overall noise levels by between 0.1 and 1.3 dBA Ldnmr and 0.1 and 0.3 dBA DNL for areas beneath the proposed Duke Low MOA. These changes in noise levels would not be perceptible when compared to existing conditions, and noise from aircraft would continue not to contribute appreciably to the overall background levels throughout the region. These changes in noise would not meet the thresholds outlined in Section 3.2 and would not be "reportable" under FAA guidance, and these effects would be less than significant.

The Proposed Action would increase overall noise levels by between 0.4 and 1.3 dBA Ldnmr and 0.1 to 0.3 dBA DNL for all state parks and forests, and other wildlife and recreational areas under the proposed Duke Low MOA. This would constitute a negligible increase in the annual average noise when compared to existing conditions. The overall levels with the Proposed Action for all areas under the proposed Duke Low MOA would be well below the 65 dBA DNL threshold for land use restrictions (FICUN 1980, FAA 2020, and USAF 2020).

3.4.1.2 Individual Overflight Noise

Noise levels for individual overflights would be appreciably higher than existing conditions for areas beneath the Duke Low MOA. L_{max} and SEL are completely different from DNL. L_{max} is the maximum sound level of an acoustic event (e.g. when an aircraft is directly overhead). SEL is a measure of the total energy of an acoustic event. It represents the level of a one-second long constant sound that would generate the same energy as the actual time-varying noise event such as an aircraft overflight. Areas beneath the proposed MOA would intermittently experience aircraft overflights that would range from loud to very loud, exceeding 75 dBA L_{max} at any given point on the ground (Table 3-5 and Figure 3-4). Notably, elevations under the Duke MOA range from approximately 1,000 to 2,000 ft MSL, and 6,000 ft AGL outlined in Table 3-5 is representative of the lower portions of the existing Duke MOA (8,000 to 9,000 ft MSL). As stated earlier when discussing the existing conditions, individuals who are seeking out quiet outdoor natural areas (i.e. national parks) may be annoyed at individual overflights because they would be distinctly heard

in areas with lower ambient noise levels. However, the flying operations occur within a large land area such that it is infrequent that any given location is directly overflown and the overflights do not generate areas of incompatible land-use and are less than significant.



There would be approximately 1,163 individual sorties within the Duke MOA and Duke Low MOA each year spread throughout the region. Operations at 100 ft AGL would be a very small percentage of the overall aircraft utilization. The LASDT operations would be to momentarily (several seconds) lower to 100 ft AGL, return to 300 ft AGL, and then return to 500 ft AGL. In a given hour of usage, A-10C aircraft would spend approximately ten minutes or less below 1,000 ft AGL. Overall, during each sortie, aircraft would be down in the low altitude ranges between 500 ft to 100 ft AGL for 2-3 minutes per sortie. Some locations would experience these events more often; however, events would be offset with a one-to-one reduction in overflights at other locations.

Table 3-5. Estimated Sound Levels for Individual Overflights

Altitude (ft AGL)	L _{max} (dBA) ^a			SEL (dBA) ^b		
	A-10C ^c	F-16C ^d	C-130J ^e	A-10C ^c	F-16C ^d	C-130J ^e
100	114	-	-	113	-	-
500	102	108	91	104	110	94
1,000	95	100	84	98	105	89
6,000	74	78	62	81	87	72
10,000	64	70	54	74	80	66
20,000	-	58	44	--	70	57

Source: USAF 2016A.

Notes: ^a L_{max} is the maximum sound level during an individual overflight.

^b SEL is the sound level if the entire overflight was compressed into one second and does not represent the actual noise at any given time.

^c A-10 operating at 97% Engine Core RPM (NC) at 350 knots.

^d F-16C operating at 90% NC at 450 knots.

^e C-130J operating at 1400 HP at 200 knots.

Source: USAF 2016a and DNWG 2009.

Notes: L_{max} is the maximum sound level during the overflight.

Speech Interference. Table 3-6 outlines the lateral distance on the ground from a flight track where aircraft interfere with speech. For overflights at the indicated altitudes and lateral distances indicated, aircraft noise would be loud enough to briefly interfere with individuals talking. Individuals would need to briefly pause and allow the overflights to pass before continuing with general conversation. A F-16C operating in the Duke Low MOA would interfere with speech for individuals within approximately 0.9 to 1.3 miles of the flight track directly below the aircraft. An A-10C would interfere with speech for individuals within 0.9 miles, and a C-130J would interfere with speech for individuals within 0.3 to 0.4 miles of the flight track directly below the aircraft. It is possible that some locations would experience these events more often than others; however, louder events at these locations would be offset with a one-to-one reduction in overflights at other locations.

Table 3-6. Lateral Distance from Flight Track for Speech Interference

Aircraft	Overflight Altitude (ft AGL)		
	500	1,000	5,000
	Lateral Distance from Flight Track for Speech Interference [ft (miles)]		
A-10C	4,975 (0.9)	4,899 (0.9)	
F-16C	6,982 (1.3)	6,928 (1.3)	4,899 (0.9)
C-130J	1,936 (0.4)	1,732 (0.3)	

Source: USAF 2016a.

Damage to Hearing or Structures. As with existing conditions, and for similar reasons, aircraft overflights would not generate individual acoustic events loud enough to damage hearing or structures. Although aircraft overflights would not be loud enough to damage hearing or structures, individual low-level overflights would be loud and abrupt enough to startle individuals and cause readily perceptible vibrations in homes and buildings directly under their flight paths. These effects would be less than significant. It is important to note that a typical residential structure provides a noise level reduction of 15 dBA with doors or windows open and a reduction of 25 dBA with doors and windows closed (DNWG 2009).

In general, structural damage is possible only for non-impulsive sounds that last more than one second above an unweighted sound level of 130 dB (Committee on Hearing, Bioacoustics and Biomechanics, 1977). Noise at this intensity and duration does not typically occur anywhere except on the flightline immediately adjacent to aircraft. Sonic booms are impulsive sounds that are associated with an increased risk of structural damage at overpressures greater than four pounds

per square foot. Supersonic operations over land would not occur under the Proposed Action and would not generate sonic booms of sufficient intensity to pose a risk to structures. Under the Proposed Action, overflights within the Duke Low MOA would not be supersonic and would not generate sonic booms above 140 dB or for an extended period that could cause potential damage to structures. As such, the risk to structures associated with proposed aircraft operations is uniformly minimal and there is no potential for structural damage due to noise.

The primary source of impacts to cultural resources beneath the affected airspace is through sound and vibration. The noise analysis has identified no significant noise impacts associated with the Proposed Action (see Section 3.2.8 Noise, Environmental Consequences of the Proposed Action). Noise levels would remain below 65 dB Ldnmr throughout the proposed Duke Low MOA. The largest changes in noise levels would occur within the Patterson State Park and Prouty Place State Park, with increases of 1.3 dB Ldnmr, but levels would remain below 49 dB Ldnmr in these areas. As described above, scientific studies of the effects of noise and vibration on multiple types of historic properties have concluded that overpressures generated by subsonic overflight were well below established damage thresholds. No adverse effects to historic properties under the airspace are expected at these levels. Visual intrusions under the Proposed Action would be minimal and would not represent an increase sufficient to cause adverse effects to the settings of cultural resources since no construction or infrastructure changes would occur and given the low number of annual operations expected.

Conclusions. The Proposed Action would have long-term minor adverse effects on the noise environment. Effects would be due to noise from the introduction of low-altitude military overflights in areas beneath the proposed Duke Low MOA. 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 not increase noise levels by more than 5 dBA DNL in rural and remote areas beneath the proposed Duke Low MOA, this includes wilderness area, state parks, and state forests.

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5.0 LIST OF PREPARERS

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APPENDIX A – NOISE MODELING FILES

***** MOA RANGE NOISEMAP *****
Version 3.0
Release Date 2/7/2013

CASE INFORMATION
Case Name:Duke SUA Complex 2019 - Existing-DNL Scenario
Site Name:Duke

SETUP PARAMETERS
Number of MOAs and Ranges = 2Number of tracks = 0
Lower Left Corner of Grid in feet (X Y pair) = -424500., -624500.
Upper Right Corner of Grid in feet (X Y pair) = 424500., 624500.
Grid spacing =1000. feet Number of events above an SEL of 35.0 dB
Temperature = 59 F Humidity = 70Flying days per month = 30

MOA SPECIFICATIONS

MOA name DUKE MOA
Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810
41.38330 -78.61081
42.04441 -78.48311
Floor = 7000 feet AGL Ceiling = 17000 feet AGL

MOA name PROPOSED DUKE MOAS
Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810
41.36920 -78.31810
41.68640 -78.25471
41.90250 -78.50831
42.04441 -78.48311
Floor =100 feet AGL Ceiling = 17000 feet AGL

SPECIFIC POINT SPECIFICATION
Number of Specific points = 26
Latitude Longitude Name
41.66370 -77.82979CHERRY SPRINGS
41.77213 -78.01699COUDERSPORT
41.75296 -77.55875GAINES
41.92020 -78.01962OSWAYO
41.81402 -78.28237PORT ALLEGANY
41.78003 -78.15495ROULETTE
41.87117 -77.52574SABINSVILLE
41.42769 -78.55892SAINT MARYS
41.96270 -78.19164SHINGLES HOUSE
41.80990 -78.44032SMETHPORT
41.90487 -77.76322ULYSSES
41.65281 -78.08522WRA-AUSTIN DAM
41.76706 -77.83813WRA-DENTON HILL STATE PARK
41.47517 -77.87621WRA-FORREST DUTLINGER NATURAL AREA
41.51437 -77.88915WRA-HAMMERSLEY WILD AREA
41.39625 -77.91935WRA-KETTLE CREEK
41.72273 -77.76708WRA-LYMAN RUN
41.69724 -77.90243WRA-PATTERSON STATE PARK
41.38989 -78.30484WRA-PINE TREE TRAIL - NATURAL AREA
41.65726 -77.92252WRA-PROUTY PLACE STATE PARK
41.45893 -78.06063WRA-SINNEMAHONING STATE PARK
41.59818 -78.18914WRA-SIZERVILLE STATE PARK
41.42693 -78.14189WRA-SQUARE TIMBER WILD AREA
41.42295 -77.83857WRA-TAMARACK SWAMP
41.63885 -78.09351XXX - DUKE POI
41.56645 -78.41044XXX -DUKE LOW POI

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 23

Latitude (feet)	Longitude (feet AGL)	Radius	Floor	Name
41.66370	-77.82979	7899.	500	CHERRY SPRINGS
41.76706	-77.83813	7899.	500	DENTON HILL STATE PARK
41.51437	-77.88915	30381.	1000	HAMMERSLEY WILD AREA
41.40473	-77.93105	12152.	1000	KETTLE CREEK 1
41.36548	-77.93520	12152.	1000	KETTLE CREEK 2
41.72273	-77.76708	7899.	500	LYMAN RUN
41.69724	-77.90243	7899.	500	PATTERSON STATE PARK
41.65726	-77.92252	7899.	500	PROUTY PLACE STATE PARK
41.36680	-78.06384	7899.	500	SINNEMAHONING STATE PARK
41.42946	-78.04462	7899.	500	SINNEMAHONING STATE PARK_2
41.38349	-78.17331	7899.	500	SINNEMAHONING STATE PARK_3
41.46790	-78.06654	7899.	500	SINNEMAHONING STATE PARK_4
41.50116	-78.04964	7899.	500	SINNEMAHONING STATE PARK_5
41.54286	-78.03342	7899.	500	SINNEMAHONING STATE PARK_6
41.58174	-78.05846	7899.	500	SINNEMAHONING STATE PARK_7
41.61751	-78.08489	7899.	500	SINNEMAHONING STATE PARK_8
41.65434	-78.09440	7899.	500	SINNEMAHONING STATE PARK_9
41.59818	-78.18914	7899.	500	SIZERVILLE STATE PARK
41.38349	-78.17331	12152.	500	SQUARE TIMBER
41.41486	-78.18325	12152.	500	SQUARE TIMBER_2
41.45248	-78.19718	12152.	500	SQUARE TIMBER_3
41.48101	-78.21358	12152.	500	SQUARE TIMBER_4
41.72792	-77.38953	50432.	4000	WELLSBORO AIRPORT EXCLUSION ZONE

MISSION DATA

Mission name = E_A10C_2
 Aircraft code =FM0090100 Speed = 350 kias Power = 5333.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

Mission name = E_C130_2
 Aircraft code =FM0290400 Speed = 200 kias Power = 900.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

Mission name = E_F16C_119FS_2
 Aircraft code =FM0440200 Speed = 350 kias Power = 90.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

Mission name = E_F16C_121FS_2
 Aircraft code =FM0440200 Speed = 350 kias Power = 90.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

MOA OPERATION DATA

MOA name = DUKE MOA
 Daily MonthlyYearly
 Mission Day Night Day Night Day Night Time On Range
 NameOPS OPS OPS OPS OPS OPS (minutes)
 E_A10C_2 0.278 0.000 8.33 0.00 100. 0. 39.

E_C130_2	0.139	0.000	4.17	0.00	50.	0.	71.
E_F16C_119FS_2	0.556	0.000	16.67	0.00	200.	0.	30.
E_F16C_121FS_2	0.042	0.000	1.25	0.00	15.	0.	38.

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	Area	MOA	Uniform Distributed (sq statute miles)	Number of Sound Level (dB)	Daily Events Above SEL of 35.0 dB
DUKE MOA	2176.5	35.0	0.0		
PROPOSED DUKE MOAS	1725.3				No operations on this MOA!

AVOIDANCE AREA RESULTS

Area Name	Sound Level (dB)	Uniform Distributed	Daily Events Above SEL of 35.0 dB
CHERRY SPRINGS	35.0	2.9	
DENTON HILL STATE PA	35.0	2.8	
HAMMERSLEY WILD AREA	35.0	2.6	
KETTLE CREEK 1	35.0	2.0	
KETTLE CREEK 2	35.0	1.7	
LYMAN RUN	35.0	2.6	
PATERSON STATE PARK	35.0	3.2	
PROUTY PLACE STATE P	35.0	3.2	
SINNEMAHONING STATE	35.0	1.9	
SINNEMAHONING STATE	35.0	2.4	
SINNEMAHONING STATE	35.0	2.0	
SINNEMAHONING STATE	35.0	2.6	
SINNEMAHONING STATE	35.0	2.8	
SINNEMAHONING STATE	35.0	3.0	
SINNEMAHONING STATE	35.0	3.2	
SINNEMAHONING STATE	35.0	3.4	
SINNEMAHONING STATE	35.0	3.5	
SIZERVILLE STATE PAR	35.0	3.2	
SQUARE TIMBER	35.0	2.0	
SQUARE TIMBER_2	35.0	2.3	
SQUARE TIMBER_3	35.0	2.5	
SQUARE TIMBER_4	35.0	2.6	
WELLSBORO AIRPORT EX	35.0	0.8	

***** MOA RANGE NOISEMAP *****
RESULTS

SPECIFIC POINT RESULTS

Specific Point: CHERRY SPRINGS
Top 20 contributors to this level:

Sound Level	< Airspace	> MissionAircraft (dB)	HA (%)
DUKE MOA	E_F16C_119FS_2	F-16C < 35.0	
DUKE MOA	E_F16C_121FS_2	F-16C < 35.0	
DUKE MOA	E_C130_2	C-130J < 35.0	

DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: COUDERSPORT
Top 20 contributors to this level:

Sound Level

<	Airspace	>	MissionAircraft	(dB)	HA(%)
DUKE MOA	E_F16C_119FS_2		F-16C	<	35.0
DUKE MOA	E_F16C_121FS_2		F-16C	<	35.0
DUKE MOA	E_C130_2		C-130J	<	35.0
DUKE MOA	E_A10C_2		A-10A	<	35.0

Total Level < 35.0

Specific Point: GAINES
Top 20 contributors to this level:

Sound Level

<	Airspace	>	MissionAircraft	(dB)	HA(%)
DUKE MOA	E_F16C_119FS_2		F-16C	<	35.0
DUKE MOA	E_F16C_121FS_2		F-16C	<	35.0
DUKE MOA	E_C130_2		C-130J	<	35.0
DUKE MOA	E_A10C_2		A-10A	<	35.0

Total Level < 35.0

Specific Point: OSWAYO
Top 20 contributors to this level:

Sound Level

<	Airspace	>	MissionAircraft	(dB)	HA(%)
DUKE MOA	E_F16C_119FS_2		F-16C	<	35.0
DUKE MOA	E_F16C_121FS_2		F-16C	<	35.0
DUKE MOA	E_C130_2		C-130J	<	35.0
DUKE MOA	E_A10C_2		A-10A	<	35.0

Total Level < 35.0

Specific Point: PORT ALLEGANY
Top 20 contributors to this level:

Sound Level

<	Airspace	>	MissionAircraft	(dB)	HA(%)
DUKE MOA	E_F16C_119FS_2		F-16C	<	35.0
DUKE MOA	E_F16C_121FS_2		F-16C	<	35.0
DUKE MOA	E_C130_2		C-130J	<	35.0
DUKE MOA	E_A10C_2		A-10A	<	35.0

Total Level < 35.0

Specific Point: ROULETTE
Top 20 contributors to this level:

Sound Level

<	Airspace	>	MissionAircraft	(dB)	HA(%)
DUKE MOA	E_F16C_119FS_2		F-16C	<	35.0
DUKE MOA	E_F16C_121FS_2		F-16C	<	35.0
DUKE MOA	E_C130_2		C-130J	<	35.0
DUKE MOA	E_A10C_2		A-10A	<	35.0

Total Level < 35.0

Specific Point: SABINSVILLE
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: SAINT MARYS
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: SHINGLES HOUSE
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: SMETHPORT
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: ULYSSES
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-AUSTIN DAM
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J< 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-DENTON HILL STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J< 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-FORREST DUTLINGER NATURAL AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J< 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-HAMMERSLEY WILD AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J< 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-KETTLE CREEK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J< 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-LYMAN RUN
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-PATTERSON STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-PINE TREE TRAIL - NATURAL AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-PROUTY PLACE STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-SINNEMAHOING STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-SIZERVILLE STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-SQUARE TIMBER WILD AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-TAMARACK SWAMP
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: XXX - DUKE POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: XXX -DUKE LOW POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FS_2 F-16C < 35.0
DUKE MOA E_F16C_121FS_2 F-16C < 35.0
DUKE MOA E_C130_2 C-130J < 35.0
DUKE MOA E_A10C_2 A-10A < 35.0

Total Level < 35.0

<Run Log>

Date: 6/ 4/2021
Start Time: 10:54:20
Stop Time: 10:57:48
Total Running Time:3 minutes and 29 seconds.

***** MOA RANGE NOISEMAP *****
Version 3.0
Release Date 2/7/2013

CASE INFORMATION

Case Name:Duke SUA Complex 2019 - Existing-Ildnmr Scenario
Site Name:Duke

SETUP PARAMETERS

Number of MOAs and Ranges = 2Number of tracks = 0
Lower Left Corner of Grid in feet (X Y pair) = -424500., -624500.
Upper Right Corner of Grid in feet (X Y pair) = 424500., 624500.
Grid spacing =1000. feet Number of events above an SEL of 35.0 dB
Temperature = 59 F Humidity = 70Flying days per month = 30

MOA SPECIFICATIONS

MOA name DUKE MOA

Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810
41.38330 -78.61081
42.04441 -78.48311
Floor = 7000 feet AGLCeiling = 17000 feet AGL

MOA name PROPOSED DUKE MOAS

Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810
41.36920 -78.31810
41.68640 -78.25471
41.90250 -78.50831
42.04441 -78.48311
Floor =100 feet AGLCeiling = 17000 feet AGL

SPECIFIC POINT SPECIFICATION

Number of Specific points = 26

Latitude	Longitude	Name
41.66370	-77.82979	CHERRY SPRINGS
41.77213	-78.01699	COUDERSPORT
41.75296	-77.55875	GAINES
41.92020	-78.01962	OSWAYO
41.81402	-78.28237	PORT ALLEGANY
41.78003	-78.15495	ROULETTE
41.87117	-77.52574	SABINSVILLE
41.42769	-78.55892	SAINT MARYS
41.96270	-78.19164	SHINGLES HOUSE
41.80990	-78.44032	SMETHPORT
41.90487	-77.76322	ULYSSES
41.65281	-78.08522	WRA-AUSTIN DAM
41.76706	-77.83813	WRA-DENTON HILL STATE PARK
41.47517	-77.87621	WRA-FORREST DUTLINGER NATURAL AREA
41.51437	-77.88915	WRA-HAMMERSLEY WILD AREA
41.39625	-77.91935	WRA-KETTLE CREEK
41.72273	-77.76708	WRA-LYMAN RUN
41.69724	-77.90243	WRA-PATTERSON STATE PARK
41.38989	-78.30484	WRA-PINE TREE TRAIL - NATURAL AREA

41.65726 -77.92252WRA-PROUTY PLACE STATE PARK
 41.45893 -78.06063WRA-SINNEMAHONING STATE PARK
 41.59818 -78.18914WRA-SIZERVILLE STATE PARK
 41.42693 -78.14189WRA-SQUARE TIMBER WILD AREA
 41.42295 -77.83857WRA-TAMARACK SWAMP
 41.63885 -78.09351XXX - DUKE POI
 41.56645 -78.41044XXX -DUKE LOW POI

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 23

Latitude (feet)	Longitude (feet AGL)	Radius	Floor	Name
41.66370	-77.82979	7899.	500	CHERRY SPRINGS
41.76706	-77.83813	7899.	500	DENTON HILL STATE PARK
41.51437	-77.88915	30381.	1000	HAMMERSLEY WILD AREA
41.40473	-77.93105	12152.	1000	KETTLE CREEK 1
41.36548	-77.93520	12152.	1000	KETTLE CREEK 2
41.72273	-77.76708	7899.	500	LYMAN RUN
41.69724	-77.90243	7899.	500	PATTERSON STATE PARK
41.65726	-77.92252	7899.	500	PROUTY PLACE STATE PARK
41.36680	-78.06384	7899.	500	SINNEMAHONING STATE PARK
41.42946	-78.04462	7899.	500	SINNEMAHONING STATE PARK_2
41.38349	-78.17331	7899.	500	SINNEMAHONING STATE PARK_3
41.46790	-78.06654	7899.	500	SINNEMAHONING STATE PARK_4
41.50116	-78.04964	7899.	500	SINNEMAHONING STATE PARK_5
41.54286	-78.03342	7899.	500	SINNEMAHONING STATE PARK_6
41.58174	-78.05846	7899.	500	SINNEMAHONING STATE PARK_7
41.61751	-78.08489	7899.	500	SINNEMAHONING STATE PARK_8
41.65434	-78.09440	7899.	500	SINNEMAHONING STATE PARK_9
41.59818	-78.18914	7899.	500	SIZERVILLE STATE PARK
41.38349	-78.17331	12152.	500	SQUARE TIMBER
41.41486	-78.18325	12152.	500	SQUARE TIMBER_2
41.45248	-78.19718	12152.	500	SQUARE TIMBER_3
41.48101	-78.21358	12152.	500	SQUARE TIMBER_4
41.72792	-77.38953	50432.	4000	WELLSBORO AIRPORT EXCLUSION ZONE

MISSION DATA

Mission name = E_A10C
 Aircraft code =FM0090100 Speed = 350 kias Power = 5333.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

Mission name = E_C130
 Aircraft code =FM0290400 Speed = 200 kias Power = 900.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

Mission name = E_F16C_119FS
 Aircraft code =FM0440200 Speed = 350 kias Power = 90.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

Mission name = E_F16C_121FS
 Aircraft code =FM0440200 Speed = 350 kias Power = 90.0
 Altitude Distribution
 Lower Alt Upper AltPercent
 (feet AGL) (feet AGL) Utilization
 6000 17000 100.0

MOA OPERATION DATA

MOA name = DUKE MOA

Daily MonthlyYearly

Mission	Day	Night	Day	Night	Day	Night	Time On Range
Name	OPS	OPS	OPS	OPS	OPS	OPS	(minutes)
E_A10Cl.667	0.000	50.00	0.00	600.	0.	39.	
E_C1300.250	0.000	7.50	0.00	90.	0.	71.	
E_F16C_119FS	2.000	0.000	60.00	0.00	720.	0.	30.
E_F16C_121FS	0.150	0.000	4.50	0.00	54.	0.	38.

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	Area	Uniform	Number of Distributed	Daily Events Above
			Sound Level	SEL of 35.0 dB
			(sq statute miles)	(dB)
DUKE MOA	2176.5	35.0	0.1	
PROPOSED DUKE MOAS	1725.3			No operations on this MOA!

AVOIDANCE AREA RESULTS

Area Name	Uniform	Number of Distributed	Daily Events Above
		Sound Level (dB)	SEL of 35.0 dB
CHERRY SPRINGS	35.0	10.5	
DENTON HILL STATE PA	35.0	10.2	
HAMMERSLEY WILD AREA	35.0	9.4	
KETTLE CREEK 1	35.0	7.6	
KETTLE CREEK 2	35.0	6.4	
LYMAN RUN	35.0	9.7	
PATERSON STATE PARK	35.0	11.3	
PROUTY PLACE STATE P	35.0	11.4	
SINNEMAHONING STATE	35.0	6.8	
SINNEMAHONING STATE	35.0	8.8	
SINNEMAHONING STATE	35.0	7.4	
SINNEMAHONING STATE	35.0	9.7	
SINNEMAHONING STATE	35.0	10.2	
SINNEMAHONING STATE	35.0	10.8	
SINNEMAHONING STATE	35.0	11.6	
SINNEMAHONING STATE	35.0	12.2	
SINNEMAHONING STATE	35.0	12.5	
SIZERVILLE STATE PAR	35.0	11.5	
SQUARE TIMBER	35.0	7.4	
SQUARE TIMBER_2	35.0	8.3	
SQUARE TIMBER_3	35.0	9.3	
SQUARE TIMBER_4	35.0	9.7	
WELLSBORO AIRPORT EX	35.0	2.6	

***** MOA RANGE NOISEMAP *****
RESULTS

SPECIFIC POINT RESULTS

Specific Point: CHERRY SPRINGS
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: COUDERSPORT
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: GAINES
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: OSWAYO
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: PORT ALLEGANY
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: ROULETTE

Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: SABINSVILLE
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: SAINT MARYS
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: SHINGLES HOUSE
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: SMETHPORT
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: ULYSSES
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0
Total Level < 35.0

Specific Point: WRA-AUSTIN DAM
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0
Total Level < 35.0

Specific Point: WRA-DENTON HILL STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0
Total Level < 35.0

Specific Point: WRA-FORREST DUTLINGER NATURAL AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0
Total Level < 35.0

Specific Point: WRA-HAMMERSLEY WILD AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0
Total Level < 35.0

Specific Point: WRA-KETTLE CREEK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-LYMAN RUN
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-PATTERSON STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-PINE TREE TRAIL - NATURAL AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-PROUTY PLACE STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-SINNEMAHONING STATE PARK
Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-SIZERVILLE STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-SQUARE TIMBER WILD AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: WRA-TAMARACK SWAMP
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: XXX - DUKE POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

Specific Point: XXX -DUKE LOW POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)

DUKE MOA E_F16C_119FSF-16C < 35.0
DUKE MOA E_F16C_121FSF-16C < 35.0
DUKE MOA E_C130 C-130J< 35.0
DUKE MOA E_A10C A-10A < 35.0

Total Level < 35.0

<Run Log>

Date: 6/ 4/2021
Start Time: 10:33:54
Stop Time: 10:37:24
Total Running Time:3 minutes and 31 seconds.

***** MOA RANGE NOISEMAP *****
Version 3.0
Release Date 2/7/2013

CASE INFORMATION
Case Name:Duke SUA Complex 2019 - Proposed-DNL Scenario
Site Name:Duke

SETUP PARAMETERS
Number of MOAs and Ranges = 2Number of tracks = 0
Lower Left Corner of Grid in feet (X Y pair) = -424500., -624500.
Upper Right Corner of Grid in feet (X Y pair) = 424500., 624500.
Grid spacing =1000. feet Number of events above an SEL of 35.0 dB
Temperature = 59 F Humidity = 70Flying days per month = 30

MOA SPECIFICATIONS

MOA name DUKE MOA
Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810
41.38330 -78.61081
42.04441 -78.48311
Floor = 7000 feet AGLCeiling = 17000 feet AGL

MOA name PROPOSED DUKE MOAS
Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810
41.36920 -78.31810
41.68640 -78.25471
41.90250 -78.50831
42.04441 -78.48311
Floor =100 feet AGLCeiling = 17000 feet AGL

SPECIFIC POINT SPECIFICATION
Number of Specific points = 26
Latitude Longitude Name
41.66370 -77.82979CHERRY SPRINGS
41.77213 -78.01699COUDERSPORT
41.75296 -77.55875GAINES
41.92020 -78.01962OSWAYO
41.81402 -78.28237PORT ALLEGANY
41.78003 -78.15495ROULETTE
41.87117 -77.52574SABINSVILLE
41.42769 -78.55892SAINT MARYS
41.96270 -78.19164SHINGLES HOUSE
41.80990 -78.44032SMETHPORT
41.90487 -77.76322ULYSSES

41.65281 -78.08522WRA-AUSTIN DAM
 41.76706 -77.83813WRA-DENTON HILL STATE PARK
 41.47517 -77.87621WRA-FORREST DUTLINGER NATURAL AREA
 41.51437 -77.88915WRA-HAMMERSLEY WILD AREA
 41.39625 -77.91935WRA-KETTLE CREEK
 41.72273 -77.76708WRA-LYMAN RUN
 41.69724 -77.90243WRA-PATTERSON STATE PARK
 41.38989 -78.30484WRA-PINE TREE TRAIL - NATURAL AREA
 41.65726 -77.92252WRA-PROUTY PLACE STATE PARK
 41.45893 -78.06063WRA-SINNEMAHONING STATE PARK
 41.59818 -78.18914WRA-SIZERVILLE STATE PARK
 41.42693 -78.14189WRA-SQUARE TIMBER WILD AREA
 41.42295 -77.83857WRA-TAMARACK SWAMP
 41.63885 -78.09351XXX - DUKE POI
 41.56645 -78.41044XXX -DUKE LOW POI

AVOIDANCE SPECIFICATION

Number of Avoidance Areas = 23

Latitude (feet)	Longitude (feet AGL)	Radius	Floor	Name
41.66370	-77.82979	7899.	500	CHERRY SPRINGS
41.76706	-77.83813	7899.	500	DENTON HILL STATE PARK
41.51437	-77.88915	30381.	1000	HAMMERSLEY WILD AREA
41.40473	-77.93105	12152.	1000	KETTLE CREEK 1
41.36548	-77.93520	12152.	1000	KETTLE CREEK 2
41.72273	-77.76708	7899.	500	LYMAN RUN
41.69724	-77.90243	7899.	500	PATTERSON STATE PARK
41.65726	-77.92252	7899.	500	PROUTY PLACE STATE PARK
41.36680	-78.06384	7899.	500	SINNEMAHONING STATE PARK
41.42946	-78.04462	7899.	500	SINNEMAHONING STATE PARK_2
41.38349	-78.17331	7899.	500	SINNEMAHONING STATE PARK_3
41.46790	-78.06654	7899.	500	SINNEMAHONING STATE PARK_4
41.50116	-78.04964	7899.	500	SINNEMAHONING STATE PARK_5
41.54286	-78.03342	7899.	500	SINNEMAHONING STATE PARK_6
41.58174	-78.05846	7899.	500	SINNEMAHONING STATE PARK_7
41.61751	-78.08489	7899.	500	SINNEMAHONING STATE PARK_8
41.65434	-78.09440	7899.	500	SINNEMAHONING STATE PARK_9
41.59818	-78.18914	7899.	500	SIZERVILLE STATE PARK
41.38349	-78.17331	12152.	500	SQUARE TIMBER
41.41486	-78.18325	12152.	500	SQUARE TIMBER_2
41.45248	-78.19718	12152.	500	SQUARE TIMBER_3
41.48101	-78.21358	12152.	500	SQUARE TIMBER_4
41.72792	-77.38953	50432.	4000	WELLSBORO AIRPORT EXCLUSION ZONE

MISSION DATA

Mission name = P_A10C_2
 Aircraft code =FM0090100 Speed = 350 kias Power = 5333.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
100500	1.0	
500	1000	4.0
1000	2500	20.0
2500	6000	50.0
6000	17000	25.0

Mission name = P_C130_2
 Aircraft code =FM0290400 Speed = 200 kias Power = 900.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5.3
1000	2500	10.5
2500	6000	31.6
6000	17000	52.6

Mission name = P_F16C_119FS_2

Aircraft code =FM0440200 Speed = 350 kias Power = 90.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	AltPercent Utilization
500	1000	5.0
1000	2500	10.0
2500	6000	10.0
6000	17000	75.0

Mission name = P_F16C_121FS_2

Aircraft code =FM0440200 Speed = 350 kias Power = 90.0

Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	AltPercent Utilization
500	1000	5.0
1000	2500	10.0
2500	6000	10.0
6000	17000	75.0

MOA OPERATION DATA

MOA name = PROPOSED DUKE MOAS

Daily Monthly Yearly

Mission Name	Day OPS	Night OPS	Day OPS	Night OPS	Day OPS	Night OPS	Time On Range (minutes)
P_A10C_2	0.833	0.000	25.00	0.00	300.	0.	60.
P_C130_2	0.175	0.000	5.25	0.00	63.	0.	71.
P_F16C_119FS_2	0.417	0.000	12.50	0.00	150.	0.	44.
P_F16C_121FS_2	0.042	0.000	1.25	0.00	15.	0.	38.

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS

MOA Name	Area (sq statute miles)	Uniform MOA Sound Level (dB)	Number of Distributed Daily Events Above SEL of 35.0 dB
DUKE MOA	2176.5	No operations on this MOA!	
PROPOSED DUKE MOAS	1725.3	35.5	0.0

AVOIDANCE AREA RESULTS

Area Name	Sound Level (dB)	Number of Distributed Daily Events Above SEL of 35.0 dB
CHERRY SPRINGS	35.4	5.5
DENTON HILL STATE PA	35.4	5.5
HAMMERSLEY WILD AREA	35.0	4.9
KETTLE CREEK 1	35.0	4.1
KETTLE CREEK 2	35.0	3.2
LYMAN RUN	35.4	5.3
PATTERSON STATE PARK	35.4	5.7
PROUTY PLACE STATE P	35.4	5.7
SINNEMAHONING STATE	35.2	3.1
SINNEMAHONING STATE	35.4	4.4
SINNEMAHONING STATE	35.3	3.2
SINNEMAHONING STATE	35.4	4.7
SINNEMAHONING STATE	35.4	4.9
SINNEMAHONING STATE	35.4	5.2
SINNEMAHONING STATE	35.4	5.3

SINNEMAHONING STATE 35.4 5.4
 SINNEMAHONING STATE 35.4 5.5
 SIZERVILLE STATE PAR 35.4 4.7
 SQUARE TIMBER 35.3 3.2
 SQUARE TIMBER_2 35.4 3.8
 SQUARE TIMBER_3 35.4 4.2
 SQUARE TIMBER_4 35.4 4.1
 WELLSBORO AIRPORT EX 35.0 0.9

***** MOA RANGE NOISEMAP *****
 RESULTS

SPECIFIC POINT RESULTS

Specific Point: CHERRY SPRINGS
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
 PROPOSED DUKE MOAS P_C130_2 C-130J < 35.0

Total Level35.4 0.2

Specific Point: COUDERSPORT
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
 PROPOSED DUKE MOAS P_C130_2 C-130J < 35.0

Total Level35.5 0.2

Specific Point: GAINES
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_C130_2 C-130J < 35.0
 PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0

Total Level < 35.0

Specific Point: OSWAYO
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
 PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0

PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.5 0.2

Specific Point: PORT ALLEGANY
Top 20 contributors to this level:

Sound Level

< Airspace >	MissionAircraft(dB)	HA(%)
PROPOSED DUKE MOAS	P_F16C_119FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_F16C_121FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_A10C_2	A-10A < 35.0
PROPOSED DUKE MOAS	P_C130_2	C-130J< 35.0

Total Level35.5 0.2

Specific Point: ROULETTE
Top 20 contributors to this level:

Sound Level

< Airspace >	MissionAircraft(dB)	HA(%)
PROPOSED DUKE MOAS	P_F16C_119FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_F16C_121FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_A10C_2	A-10A < 35.0
PROPOSED DUKE MOAS	P_C130_2	C-130J< 35.0

Total Level35.5 0.2

Specific Point: SABINSVILLE
Top 20 contributors to this level:

Sound Level

< Airspace >	MissionAircraft(dB)	HA(%)
PROPOSED DUKE MOAS	P_F16C_119FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_F16C_121FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_A10C_2	A-10A < 35.0
PROPOSED DUKE MOAS	P_C130_2	C-130J< 35.0

Total Level35.5 0.2

Specific Point: SAINT MARYS
Top 20 contributors to this level:

Sound Level

< Airspace >	MissionAircraft(dB)	HA(%)
PROPOSED DUKE MOAS	P_F16C_119FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_F16C_121FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_A10C_2	A-10A < 35.0
PROPOSED DUKE MOAS	P_C130_2	C-130J< 35.0

Total Level < 35.0

Specific Point: SHINGLES HOUSE
Top 20 contributors to this level:

Sound Level

< Airspace >	MissionAircraft(dB)	HA(%)
PROPOSED DUKE MOAS	P_F16C_119FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_F16C_121FS_2	F-16C < 35.0
PROPOSED DUKE MOAS	P_A10C_2	A-10A < 35.0
PROPOSED DUKE MOAS	P_C130_2	C-130J< 35.0

Total Level35.5 0.2

Specific Point: SMETHPORT
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level < 35.0

Specific Point: ULYSSES
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.5 0.2

Specific Point: WRA-AUSTIN DAM
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-DENTON HILL STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-FORREST DUTLINGER NATURAL AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level < 35.0

Specific Point: WRA-HAMMERSLEY WILD AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level < 35.0

Specific Point: WRA-KETTLE CREEK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level < 35.0

Specific Point: WRA-LYMAN RUN
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-PATTERSON STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-PINE TREE TRAIL - NATURAL AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level < 35.0

Specific Point: WRA-PROUTY PLACE STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-SINNEMAHONING STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-SIZERVILLE STATE PARK
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-SQUARE TIMBER WILD AREA
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.4 0.2

Specific Point: WRA-TAMARACK SWAMP
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J< 35.0

Total Level35.5 0.2

Specific Point: XXX - DUKE POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J < 35.0

Total Level35.4 0.2

Specific Point: XXX -DUKE LOW POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FS_2 F-16C < 35.0
PROPOSED DUKE MOAS P_A10C_2 A-10A < 35.0
PROPOSED DUKE MOAS P_C130_2 C-130J < 35.0

Total Level < 35.0

<Run Log>
Date: 6/ 4/2021
Start Time: 10:57:49
Stop Time: 11:11: 4
Total Running Time: 13 minutes and 16 seconds.

***** MOA RANGE NOISEMAP *****
Version 3.0
Release Date 2/7/2013

CASE INFORMATION
Case Name:Duke SUA Complex 2019 - Proposed-Ldnmr Scenario
Site Name:Duke

SETUP PARAMETERS
Number of MOAs and Ranges = 2Number of tracks = 0
Lower Left Corner of Grid in feet (X Y pair) = -424500., -624500.
Upper Right Corner of Grid in feet (X Y pair) = 424500., 624500.
Grid spacing =1000. feet Number of events above an SEL of 35.0 dB
Temperature = 59 F Humidity = 70Flying days per month = 30

MOA SPECIFICATIONS

MOA name DUKE MOA
Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810
41.38330 -78.61081
42.04441 -78.48311
Floor = 7000 feet AGL Ceiling = 17000 feet AGL

MOA name PROPOSED DUKE MOAS
Lat Long
(deg) (deg)
42.04441 -78.48311
41.90831 -77.40530
41.33190 -77.79810

41.36920 -78.31810
 41.68640 -78.25471
 41.90250 -78.50831
 42.04441 -78.48311
 Floor =100 feet AGL Ceiling = 17000 feet AGL

SPECIFIC POINT SPECIFICATION
 Number of Specific points = 26

Latitude	Longitude	Name
41.66370	-77.82979	CHERRY SPRINGS
41.77213	-78.01699	COUDERSPORT
41.75296	-77.55875	GAINES
41.92020	-78.01962	OSWAYO
41.81402	-78.28237	PORT ALLEGANY
41.78003	-78.15495	ROULETTE
41.87117	-77.52574	SABINSVILLE
41.42769	-78.55892	SAINT MARYS
41.96270	-78.19164	SHINGLES HOUSE
41.80990	-78.44032	SMETHPORT
41.90487	-77.76322	ULYSSES
41.65281	-78.08522	WRA-AUSTIN DAM
41.76706	-77.83813	WRA-DENTON HILL STATE PARK
41.47517	-77.87621	WRA-FORREST DUTLINGER NATURAL AREA
41.51437	-77.88915	WRA-HAMMERSLEY WILD AREA
41.39625	-77.91935	WRA-KETTLE CREEK
41.72273	-77.76708	WRA-LYMAN RUN
41.69724	-77.90243	WRA-PATTERSON STATE PARK
41.38989	-78.30484	WRA-PINE TREE TRAIL - NATURAL AREA
41.65726	-77.92252	WRA-PROUTY PLACE STATE PARK
41.45893	-78.06063	WRA-SINNEMAHONING STATE PARK
41.59818	-78.18914	WRA-SIZERVILLE STATE PARK
41.42693	-78.14189	WRA-SQUARE TIMBER WILD AREA
41.42295	-77.83857	WRA-TAMARACK SWAMP
41.63885	-78.09351	XXX - DUKE POI
41.56645	-78.41044	XXX -DUKE LOW POI

AVOIDANCE SPECIFICATION
 Number of Avoidance Areas = 23

Latitude (feet)	Longitude (feet AGL)	Radius	Floor	Name
41.66370	-77.82979	7899.	500	CHERRY SPRINGS
41.76706	-77.83813	7899.	500	DENTON HILL STATE PARK
41.51437	-77.88915	30381.	1000	HAMMERSLEY WILD AREA
41.40473	-77.93105	12152.	1000	KETTLE CREEK 1
41.36548	-77.93520	12152.	1000	KETTLE CREEK 2
41.72273	-77.76708	7899.	500	LYMAN RUN
41.69724	-77.90243	7899.	500	PATTERSON STATE PARK
41.65726	-77.92252	7899.	500	PROUTY PLACE STATE PARK
41.36680	-78.06384	7899.	500	SINNEMAHONING STATE PARK
41.42946	-78.04462	7899.	500	SINNEMAHONING STATE PARK_2
41.38349	-78.17331	7899.	500	SINNEMAHONING STATE PARK_3
41.46790	-78.06654	7899.	500	SINNEMAHONING STATE PARK_4
41.50116	-78.04964	7899.	500	SINNEMAHONING STATE PARK_5
41.54286	-78.03342	7899.	500	SINNEMAHONING STATE PARK_6
41.58174	-78.05846	7899.	500	SINNEMAHONING STATE PARK_7
41.61751	-78.08489	7899.	500	SINNEMAHONING STATE PARK_8
41.65434	-78.09440	7899.	500	SINNEMAHONING STATE PARK_9
41.59818	-78.18914	7899.	500	SIZERVILLE STATE PARK
41.38349	-78.17331	12152.	500	SQUARE TIMBER
41.41486	-78.18325	12152.	500	SQUARE TIMBER_2
41.45248	-78.19718	12152.	500	SQUARE TIMBER_3
41.48101	-78.21358	12152.	500	SQUARE TIMBER_4
41.72792	-77.38953	50432.	4000	WELLSBORO AIRPORT EXCLUSION ZONE

MISSION DATA
 Mission name = P_A10C
 Aircraft code =FM0090100 Speed = 350 kias Power = 5333.0
 Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
100500	1000	1.0
500	1000	4.0
1000	2500	20.0
2500	6000	50.0
6000	17000	25.0

Mission name = P_C130
Aircraft code =FM0290400 Speed = 200 kias Power = 900.0
Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5.3
1000	2500	10.5
2500	6000	31.6
6000	17000	52.6

Mission name = P_F16C_119FS
Aircraft code =FM0440200 Speed = 350 kias Power = 90.0
Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5.0
1000	2500	10.0
2500	6000	10.0
6000	17000	75.0

Mission name = P_F16C_121FS
Aircraft code =FM0440200 Speed = 350 kias Power = 90.0
Altitude Distribution

Lower Alt (feet AGL)	Upper Alt (feet AGL)	Percent Utilization
500	1000	5.0
1000	2500	10.0
2500	6000	10.0
6000	17000	75.0

MOA OPERATION DATA
MOA name = PROPOSED DUKE MOAS
Daily MonthlyYearly

Mission Name	Day OPS	Night OPS	Day OPS	Night OPS	Day OPS	Night OPS	Time On Range (minutes)
P_A10C5.000	0.000	150.00	0.00	1800.	0.	60.	
P_C1300.314	0.000	9.42	0.00	113.	0.	71.	
P_F16C_119FS	1.500	0.000	45.00	0.00	540.	0.	44.
P_F16C_121FS	1.000	0.000	30.00	0.00	360.	0.	38.

***** MOA RANGE NOISEMAP *****
RESULTS

The noise metric is Ldnmr.

MOA RESULTS
Uniform Number of
MOA MOA Distributed Daily Events Above
NameArea Sound Level SEL of 35.0 dB
(sq statute miles) (dB)
DUKE MOA 2176.5 No operations on this MOA!

PROPOSED DUKE MOAS 1725.3 42.7 0.0

AVOIDANCE AREA RESULTS

UniformNumber of
 AvoidanceDistributed Daily Events Above
 Area Name Sound Level (dB) SEL of 35.0 dB

CHERRY SPRINGS	42.6	27.9
DENTON HILL STATE PA	42.6	27.6
HAMMERSLEY WILD AREA	39.9	25.3
KETTLE CREEK 1	39.9	21.1
KETTLE CREEK 2	39.7	16.7
LYMAN RUN	42.6	26.9
PATERSON STATE PARK	42.6	28.7
PROUTY PLACE STATE P	42.6	28.6
SINNEMAHONING STATE	42.4	16.1
SINNEMAHONING STATE	42.6	23.0
SINNEMAHONING STATE	42.5	16.6
SINNEMAHONING STATE	42.6	24.4
SINNEMAHONING STATE	42.6	25.3
SINNEMAHONING STATE	42.6	26.3
SINNEMAHONING STATE	42.6	27.1
SINNEMAHONING STATE	42.6	27.7
SINNEMAHONING STATE	42.6	28.1
SIZERVILLE STATE PAR	42.6	24.2
SQUARE TIMBER	42.5	16.6
SQUARE TIMBER_2	42.6	19.9
SQUARE TIMBER_3	42.6	22.0
SQUARE TIMBER_4	42.6	21.4
WELLSBORO AIRPORT EX	35.0	3.9

***** MOA RANGE NOISEMAP *****
RESULTS

SPECIFIC POINT RESULTS

Specific Point: CHERRY SPRINGS
Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)

PROPOSED DUKE MOAS	P_F16C_119FSF-16C	40.3	0.4
PROPOSED DUKE MOAS	P_F16C_121FSF-16C	37.9	0.3
PROPOSED DUKE MOAS	P_A10C A-10A	< 35.0	
PROPOSED DUKE MOAS	P_C130 C-130J	< 35.0	

Total Level42.6 0.6

Specific Point: COUDERSPORT
Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)

PROPOSED DUKE MOAS	P_F16C_119FSF-16C	40.3	0.4
PROPOSED DUKE MOAS	P_F16C_121FSF-16C	37.9	0.3
PROPOSED DUKE MOAS	P_A10C A-10A	< 35.0	
PROPOSED DUKE MOAS	P_C130 C-130J	< 35.0	

Total Level42.7 0.6

Specific Point: GAINES

Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C < 35.0
 PROPOSED DUKE MOAS P_F16C_121FSF-16C < 35.0
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level < 35.0

Specific Point: OSWAYO
Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.7 0.6

Specific Point: PORT ALLEGANY
Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.7 0.6

Specific Point: ROULETTE
Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.7 0.6

Specific Point: SABINSVILLE
Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.7 0.6

Specific Point: SAINT MARYS
Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FSF-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FSF-16C < 35.0
PROPOSED DUKE MOAS P_A10C A-10A < 35.0
PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level < 35.0

Specific Point: SHINGLES HOUSE
Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
PROPOSED DUKE MOAS P_A10C A-10A < 35.0
PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.7 0.6

Specific Point: SMETHPORT
Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FSF-16C < 35.0
PROPOSED DUKE MOAS P_F16C_121FSF-16C < 35.0
PROPOSED DUKE MOAS P_A10C A-10A < 35.0
PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level < 35.0

Specific Point: ULYSSES
Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
PROPOSED DUKE MOAS P_A10C A-10A < 35.0
PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.7 0.6

Specific Point: WRA-AUSTIN DAM
Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
PROPOSED DUKE MOAS P_A10C A-10A < 35.0
PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.6 0.6

Specific Point: WRA-DENTON HILL STATE PARK
Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.6 0.6

Specific Point: WRA-FORREST DUTLINGER NATURAL AREA
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 37.6 0.3
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 35.2 0.2
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level39.9 0.4

Specific Point: WRA-HAMMERSLEY WILD AREA
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 37.6 0.3
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 35.2 0.2
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level39.9 0.4

Specific Point: WRA-KETTLE CREEK
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 37.6 0.3
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 35.2 0.2
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level39.9 0.4

Specific Point: WRA-LYMAN RUN
 Top 20 contributors to this level:

Sound Level
 < Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.6 0.6

Specific Point: WRA-PATTERSON STATE PARK
 Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.6 0.6

Specific Point: WRA-PINE TREE TRAIL - NATURAL AREA
 Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 39.6 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.2 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.0 0.5

Specific Point: WRA-PROUTY PLACE STATE PARK
 Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.6 0.6

Specific Point: WRA-SINNEMAHONING STATE PARK
 Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.6 0.6

Specific Point: WRA-SIZERVILLE STATE PARK
 Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)
 PROPOSED DUKE MOAS P_F16C_119FSF-16C 40.3 0.4
 PROPOSED DUKE MOAS P_F16C_121FSF-16C 37.9 0.3
 PROPOSED DUKE MOAS P_A10C A-10A < 35.0
 PROPOSED DUKE MOAS P_C130 C-130J< 35.0

Total Level42.6 0.6

Specific Point: WRA-SQUARE TIMBER WILD AREA
 Top 20 contributors to this level:

Sound Level

< Airspace > MissionAircraft(dB) HA(%)

PROPOSED DUKE MOAS	P_F16C_119FSF-16C	40.3	0.4
PROPOSED DUKE MOAS	P_F16C_121FSF-16C	37.9	0.3
PROPOSED DUKE MOAS	P_A10C A-10A < 35.0		
PROPOSED DUKE MOAS	P_C130 C-130J< 35.0		

Total Level42.6 0.6

Specific Point: WRA-TAMARACK SWAMP
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)

PROPOSED DUKE MOAS	P_F16C_119FSF-16C	40.3	0.4
PROPOSED DUKE MOAS	P_F16C_121FSF-16C	37.9	0.3
PROPOSED DUKE MOAS	P_A10C A-10A < 35.0		
PROPOSED DUKE MOAS	P_C130 C-130J< 35.0		

Total Level42.7 0.6

Specific Point: XXX - DUKE POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)

PROPOSED DUKE MOAS	P_F16C_119FSF-16C	40.3	0.4
PROPOSED DUKE MOAS	P_F16C_121FSF-16C	37.9	0.3
PROPOSED DUKE MOAS	P_A10C A-10A < 35.0		
PROPOSED DUKE MOAS	P_C130 C-130J< 35.0		

Total Level42.6 0.6

Specific Point: XXX -DUKE LOW POI
Top 20 contributors to this level:

Sound Level
< Airspace > MissionAircraft(dB) HA(%)

PROPOSED DUKE MOAS	P_F16C_119FSF-16C	< 35.0	
PROPOSED DUKE MOAS	P_F16C_121FSF-16C	< 35.0	
PROPOSED DUKE MOAS	P_A10C A-10A < 35.0		
PROPOSED DUKE MOAS	P_C130 C-130J< 35.0		

Total Level < 35.0

<Run Log>
Date: 6/ 4/2021
Start Time: 10:37:25
Stop Time: 10:50:50
Total Running Time: 13 minutes and 25 seconds.

**APPENDIX B - US AIR FORCE LAND USE COMPATIBILITY
GUIDELINES**

The USAF guidelines for land use compatibility in aircraft noise zones is shown in the table below and are extracted from Appendix A of AFI 32-7084 32-7063 dated November 2017. These land use compatibility guidelines have been included for reference purposes (Table 1).

Table 1. Land Use Compatibility Guidelines

SLUCM NO.	LAND USE NAME	DNL 65-69	DNL 70-74	DNL 75-79	DNL 80-84	DNL 85+
10	Residential					
11	Household units	N1	N1	N	N	N
11.11	Single units: detached	N1	N1	N	N	N
11.12	Single units: semidetached	N1	N1	N	N	N
11.13	Single units: attached row	N1	N1	N	N	N
11.21	Two units: side-by-side	N1	N1	N	N	N
11.22	Two units: one above the other	N1	N1	N	N	N
11.31	Apartments: walk-up	N1	N1	N	N	N
11.32	Apartment: elevator	N1	N1	N	N	N
12	Group quarters	N1	N1	N	N	N
13	Residential hotels	N1	N1	N	N	N
14	Mobile home parks or courts	N	N	N	N	N
15	Transient lodgings	N1	N1	N1	N	N
16	Other residential	N1	N1	N	N	N
20	Manufacturing					
21	Food and kindred products; manufacturing	Y	Y2	Y3	Y4	N
22	Textile mill products; manufacturing	Y	Y2	Y3	Y4	N
23	Apparel and other finished products; products made from fabrics, leather, and similar materials; manufacturing	Y	Y2	Y3	Y4	N
24	Lumber and wood products (except furniture); manufacturing	Y	Y2	Y3	Y4	N
25	Furniture and fixtures; manufacturing	Y	Y2	Y3	Y4	N
26	Paper and allied products; manufacturing	Y	Y2	Y3	Y4	N
27	Printing, publishing, and allied industries	Y	Y2	Y3	Y4	N
28	Chemicals and allied	Y	Y2	Y3	Y4	N
29	Petroleum refining and related industries	Y	Y2	Y3	Y4	N
30	Manufacturing (continued)					
31	Rubber and misc. plastic products; manufacturing	Y	Y2	Y3	Y4	N
32	Stone, clay and glass products; manufacturing	Y	Y2	Y3	Y4	N
33	Primary metal products; manufacturing	Y	Y2	Y3	Y4	N
34	Fabricated metal products; manufacturing	Y	Y2	Y3	Y4	N
35	Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks	Y	25	30	N	N
39	Miscellaneous manufacturing	Y	Y2	Y3	Y4	N
40	Transportation, communication and utilities					
41	Railroad, rapid rail transit, and street railway transportation	Y	Y2	Y3	Y4	N
42	Motor vehicle transportation	Y	Y2	Y 3	Y4	N
43	Aircraft transportation	Y	Y2	Y3	Y4	N
44	Marine craft transportation	Y	Y2	Y3	Y4	N
45	Highway and street right-of-way	Y	Y	Y	Y	N
46	Automobile parking	Y	Y	Y	Y	N
47	Communication	Y	255	305	N	N

48	Utilities	Y	Y2	Y3	Y4	N
49	Other transportation, communication and utilities	Y	255	305	N	N
50	Trade					
51	Wholesale trade	Y	Y2	Y3	Y4	N
52	Retail trade – building materials, hardware and farm equipment	Y	25	30	Y4	N
53	Retail trade – including shopping centers, discount clubs, home improvement stores, electronics superstores, etc.	Y	25	30	N	N
54	Retail trade – food	Y	25	30	N	N
55	Retail trade – automotive, marine craft, aircraft and accessories	Y	25	30	N	N
56	Retail trade – apparel and accessories	Y	25	30	N	N
57	Retail trade – furniture, home,	Y	25	30	N	N
58	Retail trade – eating and drinking establishments	Y	25	30	N	N
59	Other retail trade	Y	25	30	N	N
60	Services					
61	Finance, insurance and real estate services	Y	25	30	N	N
62	Personal services	Y	25	30	N	N
62.4	Cemeteries	Y	Y2	Y3	Y4,11	Y6,11
63	Business services	Y	25	30	N	N
63.7	Warehousing and storage	Y	Y2	Y3	Y4	N
64	Repair services	Y	Y2	Y3	Y4	N
65	Professional services	Y	25	30	N	N
65.1	Hospitals, other medical facilities	25	30	N	N	N
65.16	Nursing homes	N1	N1	N	N	N
66	Contract construction services	Y	25	30	N	N
67	Government services	Y1	25	30	N	N
68	Educational services	25	30	N	N	N
68.1	Child care services, child development centers, and nurseries	25	30	N	N	N
69	Miscellaneous Services	Y	25	30	N	N
69.1	Religious activities (including places of worship)	Y	25	30	N	N
70	Cultural, entertainment and recreational					
71	Cultural activities	25	30	N	N	N
71.2	Nature exhibits	Y1	N	N	N	N
72	Public assembly	Y	N	N	N	N
72.1	Auditoriums, concert halls	25	30	N	N	N
72.11	Outdoor music shells, amphitheaters	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	Y	Y	N	N	N
73	Amusements	Y	Y	N	N	N
74	Recreational activities	Y	25	30	N	N
75	Resorts and group camps	Y	25	N	N	N
76	Parks	Y	25	N	N	N
79	Other cultural, entertainment and recreation	Y	25	N	N	N
80	Resource production and extraction					
81	Agriculture (except live- stock)	Y8	Y9	Y10	Y10,11	Y10,11
81.5-81.7	Agriculture-Livestock farming including grazing and feedlots	Y8	Y9	N	N	N
82	Agriculture related activities	Y8	Y9	Y10	Y10,11	Y10,11
83	Forestry activities	Y8	Y9	Y10	Y10,11	Y10,11
84	Fishing activities	Y	Y	Y	Y	Y

85	Mining activities	Y	Y	Y	Y	Y
89	Other resource production or extraction	Y	Y	Y	Y	Y

KEY:

SLUCM – Standard Land Use Coding Manual, U.S. Department of Transportation

Y (Yes) – Land use and related structures compatible without restrictions.

N (No) – Land use and related structures are not compatible and should be prohibited.

Y_x – Yes with restrictions. The land use and related structures generally are compatible. However, see note(s) indicated by the superscript.

N_x – No with exceptions. The land use and related structures are generally incompatible. However, see note(s) indicated by the superscript.

25, 30, or 35 – The numbers refer to noise level reduction (NLR) levels. NLR (outdoor to indoor) is achieved through the incorporation of noise attenuation into the design and construction of a structure. Land use and related structures are generally compatible; however, measures to achieve NLR of 25, 30, or 35 must be incorporated into design and construction of structures. However, measures to achieve an overall noise reduction do not necessarily solve noise difficulties outside the structure and additional evaluation is warranted. Also, see notes indicated by superscripts where they appear with one of these numbers.

DNL – Day-Night Average Sound Level.

CNEL – Community Noise Equivalent Level (normally within a very small decibel difference of DNL)

L_{dn} – Mathematical symbol for DNL.

NOTES:

1. General

a. Although local conditions regarding the need for housing may require residential use in these zones, residential use is discouraged in DNL 65-69 and strongly discouraged in DNL 70-74. The absence of viable alternative development options should be determined and an evaluation should be conducted locally prior to local approvals indicating that a demonstrated community need for the residential use would not be met if development were prohibited in these zones. Existing residential development is considered as pre-existing, non-conforming land uses.

b. Where the community determines that these uses must be allowed, measures to achieve outdoor to indoor NLR of at least 25 decibels (dB) in DNL 65-69 and 30 dB in DNL 70-74 should be incorporated into building codes and be considered in individual approvals; for transient housing, an NLR of at least 35 dB should be incorporated in DNL 75-79.

c. Normal permanent construction can be expected to provide an NLR of 20 dB, thus the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation, upgraded sound transmission class ratings in windows and doors, and closed windows year round. Additional consideration should be given to modifying NLR levels based on peak noise levels or vibrations.

d. NLR criteria will not eliminate outdoor noise problems. However, building location, site planning, design, and use of berms and barriers can help mitigate outdoor noise exposure particularly from ground level sources. Measures that reduce noise at a site should be used wherever practical in preference to measures that only protect interior spaces.

2. Measures to achieve NLR of 25 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

3. Measures to achieve NLR of 30 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

4. Measures to achieve NLR of 35 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

5. If project or proposed development is noise sensitive, use indicated NLR; if not, land use is compatible without NLR.

6. Buildings are not permitted.

7. Land use is compatible provided special sound reinforcement systems are installed.

8. Residential buildings require an NLR of 25

9. Residential buildings require an NLR of 30.

10. Residential buildings are not permitted.

11. Land use that involves outdoor activities is not recommended, but if the community allows such activities, hearing protection devices should be worn when noise sources are present. Long-term exposure (multiple hours per day over many years) to high noise levels can cause hearing loss in some unprotected individuals.

Appendix G

Previously Recorded Cultural Resources

		Allegany Township	Potter	Unevaluated
	School	Allegany Township	Potter	Unevaluated
		Allegany Township	Potter	Unevaluated
		Allegany Township	Potter	Unevaluated
		Allegany Township	Potter	Unevaluated
	Ford Hill Cemetery	Allegany Township	Potter	Unevaluated
Building	Buck Eye Red Lion Lodge	Bingham Township	Potter	Unevaluated
Building	DeWane property	Bingham Township	Potter	Unevaluated
Building		Bingham Township	Potter	Unevaluated
Building		Bingham Township	Potter	Unevaluated
Building	Truax property	Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
	West Bingham Church	Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
Building	Thompson Road Farm	Bingham Township	Potter	SHPO: Not Eligible
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Clara Township	Potter	Unevaluated
	Fishing Creek Church & Cemetery	Clara Township	Potter	Unevaluated
		Clara Township	Potter	Unevaluated
Building	Clark, Nelson	Eulalia Township	Potter	Unevaluated
Building	Jones property	Eulalia Township	Potter	Unevaluated
	N Eulalia Baptist Church	Eulalia Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
		Genesee Township	Potter	Unevaluated
		Genesee Township	Potter	Unevaluated
		Genesee Township	Potter	Unevaluated
		Genesee Township	Potter	Unevaluated
		Genesee Township	Potter	Unevaluated
		Genesee Township	Potter	Unevaluated
		Genesee Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building	Fall Brook Railroad: Station	Harrison Township	Potter	Unevaluated
	Stevens, J.W. Store & Post Office	Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
	Clover Farm Store	Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
		Harrison Township	Potter	Unevaluated
Site	Mills Cemetery	Harrison Township	Potter	Unevaluated
Building	Dick Curfman property	Hebron Township	Potter	Unevaluated
Building	Harland Saulter property	Hebron Township	Potter	Unevaluated
Building	Olmstead property	Hebron Township	Potter	Unevaluated
Building		Hebron Township	Potter	Unevaluated
Building	Forrest Brought property	Hebron Township	Potter	Unevaluated

	West Residence	Sharon Township	Potter	Unevaluated
	Pearsal	Sharon Township	Potter	Unevaluated
	Thompson	Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
	Perry, Earle	Sharon Township	Potter	Unevaluated
	Nichols, B.F.	Sharon Township	Potter	Unevaluated
	William, Floyd Poliss App	Sharon Township	Potter	Unevaluated
	Stone	Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
		Sharon Township	Potter	Unevaluated
	Grange, Sharon 1247	Sharon Township	Potter	Unevaluated
	Anderson, Mrs. D.	Stewardson Township	Potter	Unevaluated
	Olson Youth Fellowship	Stewardson Township	Potter	Unevaluated
Building	Schoonover and Knefly Farm	Sweden Township	Potter	SHPO: Not Eligible
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
	Sweden Church	Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
	Sweden Hill Cemetery	Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
Building	All Saints' Episcopal Church	Ulysses Township	Potter	SHPO: Eligible
Building	Harvey, A. L. (1893)	Ulysses Township	Potter	Unevaluated
Building	Raymond House	Ulysses Township	Potter	SHPO: Not Eligible
Building	Blake property	Ulysses Township	Potter	Unevaluated
Building		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
	Oak Hall School for Boys	Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
Building		Ulysses Township	Potter	Unevaluated
Building		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
	Gold United Methodist	Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Fowler, Robert L.	West Branch Township	Potter	Unevaluated
	West Branch Grange No. 1149	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Maine	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Conable, Winnie	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Pine Tree Hunt Club	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated

Structure		Keating Township	Mckean	Demolished or 100% Destroyed
Structure		Keating Township	Mckean	SHPO: Not Eligible
Structure	Township Road 385 Bridge	Keating Township	Mckean	SHPO: Eligible
Structure		Liberty Township	Mckean	SHPO: Not Eligible
Structure		Liberty Township	Mckean	SHPO: Not Eligible
Structure		Liberty Township	Mckean	Demolished or 100% Destroyed
Structure		Liberty Township	Mckean	SHPO: Not Eligible
Structure		Liberty Township	Mckean	SHPO: Not Eligible
Structure		Liberty Township	Mckean	Demolished or 100% Destroyed
Structure		Norwich Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	Demolished or 100% Destroyed
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Otto Township	Mckean	SHPO: Not Eligible
Structure		Port Allegany Borough	Mckean	SHPO: Not Eligible
Structure		Port Allegany Borough	Mckean	Demolished or 100% Destroyed
Structure		Abbott Township	Potter	SHPO: Not Eligible
Structure		Abbott Township	Potter	SHPO: Not Eligible
Structure		Abbott Township	Potter	SHPO: Not Eligible
Structure		Abbott Township	Potter	SHPO: Not Eligible
Structure		Allegany Township	Potter	SHPO: Not Eligible
Structure		Allegany Township	Potter	SHPO: Not Eligible
Structure		Allegany Township	Potter	SHPO: Eligible
Structure		Bingham Township	Potter	SHPO: Not Eligible
Structure		Bingham Township	Potter	SHPO: Not Eligible
Structure		Clara Township	Potter	SHPO: Not Eligible
Structure		Clara Township	Potter	SHPO: Not Eligible
Structure		Clara Township	Potter	SHPO: Not Eligible
Structure		Coudersport Borough	Potter	SHPO: Not Eligible
Structure		Coudersport Borough	Potter	Demolished or 100% Destroyed
Structure		Coudersport Borough	Potter	SHPO: Not Eligible
Structure		Coudersport Borough	Potter	SHPO: Not Eligible
Structure		Eulalia Township	Potter	SHPO: Not Eligible
Structure		Eulalia Township	Potter	SHPO: Not Eligible
Structure		Eulalia Township	Potter	SHPO: Not Eligible
Structure		Galeton Borough	Potter	SHPO: Not Eligible
Structure		Genesee Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Harrison Township	Potter	SHPO: Not Eligible
Structure		Hebron Township	Potter	SHPO: Not Eligible
Structure		Hebron Township	Potter	SHPO: Not Eligible
Structure		Hebron Township	Potter	SHPO: Not Eligible
Structure		Hebron Township	Potter	Demolished or 100% Destroyed
Structure		Hebron Township	Potter	SHPO: Not Eligible
Structure		Hector Township	Potter	SHPO: Not Eligible
Structure		Hector Township	Potter	SHPO: Not Eligible
Structure		Oswayo Borough	Potter	SHPO: Not Eligible
Structure		Oswayo Borough	Potter	Demolished or 100% Destroyed
Structure		Oswayo Borough	Potter	SHPO: Not Eligible

Building	DGS 01963-006: Latrine	Ulysses Township	Potter	
Building	DGS 01963-006: Latrine	West Branch Township	Potter	
Building	Lyman Run State Park: IAC Camp, Building 15-CA-22		Potter	
Building	Lyman Run State Park: IAC Camp, Building 15-CA-22	Ulysses Township	Potter	
Building	Lyman Run State Park: IAC Camp, Building 15-CA-22	West Branch Township	Potter	
District	Cherry Springs State Park	West Branch Township	Potter	Unevaluated
Building	DGS 01939-007: Latrine	West Branch Township	Potter	
Structure	Western New York & Pennsylvania Railway: Bridge, No. 30	Eldred Borough	Mckean	Unevaluated
Building		Eldred Township	Mckean	Unevaluated
Building		Eldred Township	Mckean	Unevaluated
Building		Ceres Township	Mckean	Unevaluated
Building	W.S. Morris Place	Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building	Brookland General Store	Ulysses Township	Potter	SHPO: Eligible
Site		Leidy Township	Clinton	Unevaluated
Site		Leidy Township	Clinton	Unevaluated
Building	Sunset Memorial Community Church	Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Site	Red Hill Cemetery	Leidy Township	Clinton	Unevaluated
District	Westfield Commercial District	Westfield Borough	Tioga	SHPO: Not Eligible
Building		Sullivan Township	Tioga	Unevaluated

HISTORIC SITES (Linear)

<u>Resource Category</u>	<u>Historic Name</u>	<u>Municipality</u>	<u>County</u>	<u>National Register Status</u>
District	Western New York and Pennsylvania Railway (Eldred Twp.	Eldred Township	Mckean	SHPO: Not Eligible
District	Coudersport & Port Allegany Railroad (aggregate file)			Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Allegany Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Coudersport Borough	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Eulalia Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Hebron Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Liberty Township	Mckean	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Port Allegany Borough	Mckean	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Roulette Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Ulysses Borough	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Ulysses Township	Potter	Aggregate File (see comments)
Site	Forbidden Path		Bradford	Unevaluated
Site	Forbidden Path		Mckean	Unevaluated
Site	Forbidden Path		Potter	Unevaluated
Site	Forbidden Path			Unevaluated
Site	Oswayo Path		Mckean	Unevaluated
Site	Oswayo Path		Potter	Unevaluated
Site	Oswayo Path			Unevaluated
Site	Pine Creek Path		Clinton	Unevaluated
Site	Pine Creek Path		Lycoming	Unevaluated

		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
		Abbott Township	Potter	Unevaluated
Building	Dale Erway property	Allegany Township	Potter	Unevaluated
Building		Allegany Township	Potter	Unevaluated
Building	Henry Wood property	Allegany Township	Potter	Unevaluated
		Allegany Township	Potter	Unevaluated
	School	Allegany Township	Potter	Unevaluated
		Allegany Township	Potter	Unevaluated
		Allegany Township	Potter	Unevaluated
		Allegany Township	Potter	Unevaluated
	Ford Hill Cemetery	Allegany Township	Potter	Unevaluated
Building	Buck Eye Red Lion Lodge	Bingham Township	Potter	Unevaluated
Building	DeWane property	Bingham Township	Potter	Unevaluated
Building		Bingham Township	Potter	Unevaluated
Building	Bruce Hassis property	Bingham Township	Potter	Unevaluated
Building	Dave Price property	Bingham Township	Potter	Unevaluated
Building		Bingham Township	Potter	Unevaluated
Building	Truax property	Bingham Township	Potter	Unevaluated
Building		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
	West Bingham Church	Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
	N Bingham Church	Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
Building	Thompson Road Farm	Bingham Township	Potter	SHPO: Not Eligible
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
		Bingham Township	Potter	Unevaluated
	Fishing Creek Church & Cemetery	Clara Township	Potter	Unevaluated
		Clara Township	Potter	Unevaluated
Building	Benson, I.	Eulalia Township	Potter	Unevaluated
Building	Lehman, P.	Eulalia Township	Potter	Unevaluated
Building	Peck, F.L. (1893)	Eulalia Township	Potter	Unevaluated
Building		Eulalia Township	Potter	Unevaluated
Building		Eulalia Township	Potter	Unevaluated
Building	Clark, Nelson	Eulalia Township	Potter	Unevaluated
Building	Jones property	Eulalia Township	Potter	Unevaluated
		Eulalia Township	Potter	Unevaluated
		Eulalia Township	Potter	Unevaluated
Building	Coudersport & Port Allegany Railroad: Station	Eulalia Township	Potter	Unevaluated
		Eulalia Township	Potter	Unevaluated
	Saint Eulalia's Roman Catholic Church	Eulalia Township	Potter	Unevaluated
	N Eulalia Baptist Church	Eulalia Township	Potter	Unevaluated
Building	D.F. Baker property	Genesee Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
Building	Palmatier's Garage property	Genesee Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
Building	Genesee Hotel	Genesee Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
Building		Genesee Township	Potter	Unevaluated
Building	United Methodist Church	Genesee Township	Potter	Unevaluated

		Hector Township	Potter	Unevaluated
Building	Skymead Farm	Hector Township	Potter	Unevaluated
Building		Homer Township	Potter	Unevaluated
Building	Meplehurst Farm property	Homer Township	Potter	Unevaluated
Building		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
		Homer Township	Potter	Unevaluated
Building	Odin Grange	Keating Township	Potter	Unevaluated
Building	Loretto Lodge property	Keating Township	Potter	Unevaluated
Building		Keating Township	Potter	Unevaluated
Building	Barkshanty Farm	Keating Township	Potter	Unevaluated
Building		Keating Township	Potter	Unevaluated
Building		Keating Township	Potter	Unevaluated
Building		Keating Township	Potter	Unevaluated
Building	Vern Mantz property	Keating Township	Potter	Unevaluated
		Keating Township	Potter	Unevaluated
		Keating Township	Potter	Unevaluated
	Keating Summit United Methodist	Keating Township	Potter	Unevaluated
		Keating Township	Potter	Unevaluated
		Keating Township	Potter	Unevaluated
Building	Walker's Wild Acres property	Oswayo Township	Potter	Unevaluated
Building		Oswayo Township	Potter	Unevaluated
Building		Oswayo Township	Potter	Unevaluated
Building		Oswayo Township	Potter	Unevaluated
Building		Oswayo Township	Potter	Unevaluated
Building		Oswayo Township	Potter	Unevaluated
Building		Oswayo Township	Potter	Unevaluated
		Oswayo Township	Potter	Unevaluated
		Oswayo Township	Potter	Unevaluated
	Chrystal School	Oswayo Township	Potter	Unevaluated
		Oswayo Township	Potter	Unevaluated
	Chrystal Cemetery	Oswayo Township	Potter	Unevaluated
	Chrystal Church	Oswayo Township	Potter	Unevaluated
		Oswayo Township	Potter	Unevaluated
		Oswayo Township	Potter	Unevaluated
		Oswayo Township	Potter	Unevaluated
Building		Pike Township	Potter	Unevaluated
Building		Pike Township	Potter	Unevaluated
Building	Bowen Building Supplies	Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
		Pike Township	Potter	Unevaluated
Building		Pleasant Valley Township	Potter	Unevaluated
Building		Pleasant Valley Township	Potter	Unevaluated
Building	Sartwell Creek Church	Pleasant Valley Township	Potter	Unevaluated
Building	Roy Frutiger property	Pleasant Valley Township	Potter	Unevaluated
	School	Pleasant Valley Township	Potter	Unevaluated
Building	J.G. Brownlee of Cooney property	Portage Township	Potter	Unevaluated
	Forest Hill Cemetery	Portage Township	Potter	Unevaluated
		Portage Township	Potter	Unevaluated
		Portage Township	Potter	Unevaluated

	Grange, Sharon 1247	Sharon Township	Potter	Unevaluated
	Anderson, Mrs. D.	Stewardson Township	Potter	Unevaluated
	Olson Youth Fellowship	Stewardson Township	Potter	Unevaluated
	Ole Bull Forest Foreman	Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
	Jordan, Mrs. H.	Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
	Cross Fork Inn	Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
	Knickerbocker, K.	Stewardson Township	Potter	Unevaluated
	Knickerbocker, Mrs.	Stewardson Township	Potter	Unevaluated
	McCoy, William	Stewardson Township	Potter	Unevaluated
	Pollard, Mrs.	Stewardson Township	Potter	Unevaluated
		Stewardson Township	Potter	Unevaluated
Building		Summit Township	Potter	Unevaluated
		Summit Township	Potter	Unevaluated
		Summit Township	Potter	Unevaluated
		Summit Township	Potter	Unevaluated
		Summit Township	Potter	Unevaluated
		Summit Township	Potter	Unevaluated
		Summit Township	Potter	Unevaluated
Building	Sweden Valley United Methodist Church	Sweden Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building	Faith United Methodist Church	Sweden Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building	Schoonover and Knefly Farm	Sweden Township	Potter	SHPO: Not Eligible
Building		Sweden Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building	Potato City Motor Inn	Sweden Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
	Sweden Church	Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
	Sweden Hill Cemetery	Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
		Sweden Township	Potter	Unevaluated
Building	Sam Long property	Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
	Reeseville School	Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
	Rees Cemetery	Sylvania Township	Potter	Unevaluated
		Sylvania Township	Potter	Unevaluated
	Moores Run Cemetery	Sylvania Township	Potter	Unevaluated
Building	All Saints' Episcopal Church	Ulysses Township	Potter	SHPO: Eligible
Building	Harvey, A. L. (1893)	Ulysses Township	Potter	Unevaluated
Building	Raymond House	Ulysses Township	Potter	SHPO: Not Eligible

Building	Blake property	Ulysses Township	Potter	Unevaluated
Building		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
	Oak Hall School for Boys	Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
Building		Ulysses Township	Potter	Unevaluated
Building		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
	Gold United Methodist	Ulysses Township	Potter	Unevaluated
		Ulysses Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Fowler, Robert L.	West Branch Township	Potter	Unevaluated
	West Branch Grange No. 1149	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Maine	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Conable, Winnie	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
	Pine Tree Hunt Club	West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
		West Branch Township	Potter	Unevaluated
Building	Marion Peters Property	Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
	Wharton Hotel	Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
		Wharton Township	Potter	Unevaluated
Building	Barta Wold property	Austin Borough	Potter	Unevaluated
Building	Jerry Hunsinger property	Austin Borough	Potter	Unevaluated
Building	Free Methodist Church	Austin Borough	Potter	Unevaluated
Building	Francis Sterner property	Austin Borough	Potter	Unevaluated
Building		Austin Borough	Potter	Unevaluated
Building		Austin Borough	Potter	Unevaluated
Building	Bayless Row property	Austin Borough	Potter	Unevaluated
Building		Austin Borough	Potter	Unevaluated
Site	Austin Dam (Bayless Paper Mill & Dam)	Austin Borough	Potter	Listed
Building	Benson, I., Residence	Coudersport Borough	Potter	Unevaluated
Building		Coudersport Borough	Potter	Unevaluated
Building		Coudersport Borough	Potter	Unevaluated
Building		Coudersport Borough	Potter	Unevaluated
		Coudersport Borough	Potter	Unevaluated
Building	Potter County Garage	Coudersport Borough	Potter	Unevaluated
		Coudersport Borough	Potter	Unevaluated
Building		Coudersport Borough	Potter	Unevaluated

Building		Shinglehouse Borough	Potter	Unevaluated
Building	Hewitt Manor property	Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
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Building		Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
Building		Shinglehouse Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
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Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building		Ulysses Borough	Potter	Unevaluated
Building	United Methodist Church	Smethport Borough	Mckean	SHPO: Not Eligible
Building	Crittenden Hotel	Coudersport Borough	Potter	SHPO: Not Eligible
Building	Colegrove Chapel	Norwich Township	Mckean	SHPO: Not Eligible
Building	Red House	Norwich Township	Mckean	SHPO: Not Eligible
		Coudersport Borough	Potter	
		Coudersport Borough	Potter	
District	Coudersport Historic District	Coudersport Borough	Potter	Listed
Building	Ryder, Stephen, House	Renovo Borough	Clinton	Unevaluated
Building	Stevens, Eugene K., House	Renovo Borough	Clinton	Unevaluated
Building	Saint Joseph's Catholic Church	Renovo Borough	Clinton	Unevaluated
Building	Stevenson, Margaret Campell, House	Renovo Borough	Clinton	Unevaluated
Building	Stevenson, A.N., Hardware Store	Renovo Borough	Clinton	Unevaluated
Building	Wainwright Building	Renovo Borough	Clinton	Unevaluated
Building	Wainwright Building	Renovo Borough	Clinton	Unevaluated
Building	Kane, Patrick, House	Renovo Borough	Clinton	Unevaluated
Building	Kane, Patrick, House	Renovo Borough	Clinton	Unevaluated
Building	Renovo Boro Building	Renovo Borough	Clinton	Unevaluated
Building	Leuthner & Nestlerode Property	Renovo Borough	Clinton	Unevaluated
Building	Leuthner & Nestlerode Property	Renovo Borough	Clinton	Unevaluated
Building	Trinity Episcopal Parish House	Renovo Borough	Clinton	Unevaluated
Building	First National Bank Building	Renovo Borough	Clinton	Unevaluated
Building	Perri, Salvatore, Property	Renovo Borough	Clinton	Unevaluated
Building	McDonald-Binder Hotel	Renovo Borough	Clinton	Unevaluated
Building	European Hotel	Renovo Borough	Clinton	Unevaluated
Building	Trinity Episcopal Church	Renovo Borough	Clinton	Unevaluated
Building	Trinity Episcopal Rectory	Renovo Borough	Clinton	Unevaluated
Building	Stout, James C., House	Renovo Borough	Clinton	Unevaluated
Building	Masonic Temple	Renovo Borough	Clinton	Unevaluated
Building	Murphy, James, House	Renovo Borough	Clinton	Unevaluated
Building	Conser, Frederick W., Property	Renovo Borough	Clinton	Unevaluated
Building	Meisel-Welsh Building	Renovo Borough	Clinton	Unevaluated
Building	First Presbyterian Church	Renovo Borough	Clinton	Unevaluated
Building	McCallum, Malcolm, House	Renovo Borough	Clinton	Unevaluated
Building	Nicholas, Benjamin, House	Renovo Borough	Clinton	Unevaluated
Building	O'Hagen, Peter, Building	Renovo Borough	Clinton	Unevaluated
Building	O'Hagen, Peter, Building	Renovo Borough	Clinton	Unevaluated
Building	Kunkle, Laura, Building	Renovo Borough	Clinton	Unevaluated
Building	Kunkle, Laura, Building	Renovo Borough	Clinton	Unevaluated
				Demolished or 100% Destroyed
Building	Philadelphia & Erie Railroad: Office Building & Storehouse	Renovo Borough	Clinton	
Structure	Footbridge, Renovo Shops	Renovo Borough	Clinton	Unevaluated
Building	Renovo Hotel	Renovo Borough	Clinton	Unevaluated

Building	Sylvania Club	Emporium Borough	Cameron	SHPO: Eligible
Building	Wilmot Building	Coudersport Borough	Potter	SHPO: Eligible
Building	Presbyterian Church	Coudersport Borough	Potter	Demolished or 100% Destroyed
Building	DGS 00937-010: Latrine	Stewardson Township	Potter	
Building	DGS 00937-011: Beach House	Stewardson Township	Potter	
Building	DGS 00937-015: Latrine	Stewardson Township	Potter	
Building	DGS 00937-09: Latrine	Stewardson Township	Potter	
Building	DGS 00937-021: Outhouse	Stewardson Township	Potter	
Building	DGS 00937-003: Maintenance Building 116-3	Stewardson Township	Potter	
Site	Ole Bull State Park	Stewardson Township	Potter	Unevaluated
Building	Galeton Band House	Galeton Borough	Potter	Unevaluated
Structure	Eulalia Township Road Bridge	Eulalia Township	Potter	Demolished or 100% Destroyed
Building	Forest Foreman's House, Sproul State Forest	Noyes Township	Clinton	SHPO: Not Eligible
Building	Coudersport & Port Allegany Freight Station	Coudersport Borough	Potter	SHPO: Eligible
Building	Cherry Springs Picnic Pavilion	West Branch Township	Potter	Listed
Structure	L.R. 12005 Bridge 12 20 0005 0 003441	Shippen Township	Cameron	SHPO: Not Eligible
Structure	T-155 Bridge 12 10 0100 0 015407	Shippen Township	Cameron	SHPO: Not Eligible
Structure	T-120 Bridge 12 10 0105 0 004820	Shippen Township	Cameron	SHPO: Not Eligible
Structure	Emporium Bridge 12 10 00990 053203	Shippen Township	Cameron	SHPO: Eligible
Structure	Sinnemahoning Bridge 12 200001 0 053981	Grove Township	Cameron	SHPO: Not Eligible
Structure	Pa. 144 Bridge 18 20 0004 0067832	Noyes Township	Clinton	SHPO: Not Eligible
Structure	Memorial Bridge	Renovo Borough	Clinton	SHPO: Not Eligible
Structure	Tipple & Coal Company Buildings	Liberty Township	Mckean	SHPO: Eligible
Structure	Bolivar Drive Bridge 42 200012 0 001225	Foster Township	Mckean	SHPO: Not Eligible
Structure	Pa. 44 Bridge 42 10 0236 0 021474	Ceres Township	Mckean	Demolished or 100% Destroyed
Structure	Larabee Bridge 42 10 0211 0 025028	Eldred Township	Mckean	SHPO: Not Eligible
Structure	Brooklynside Bridge	Liberty Township	Mckean	Unevaluated
Building	Hamilton Building (America's First Christmas Store)	Smethport Borough	Mckean	SHPO: Not Eligible
Structure	Pa. 44 Bridge 52 10 0266 0 113187	Abbott Township	Potter	SHPO: Not Eligible
Structure	U.S. 6 Bridge 52 10 0101 0 061188	Coudersport Borough	Potter	SHPO: Not Eligible
Structure	Burtville Truss Bridge 52 20 0012 0 000231	Roulette Township	Potter	SHPO: Not Eligible
Structure	L.R. 52008 Bridge 52 20 0008 0 028544	Sharon Township	Potter	SHPO: Not Eligible
Structure	L.R. 52002 Bridge 52 20 0002 0 011571	Sylvania Township	Potter	SHPO: Not Eligible
Structure	L.R. 52017 Bridge 52 20 0017 0 023076	West Branch Township	Potter	SHPO: Not Eligible
Building	Sylvania Plant Complex	Emporium Borough	Cameron	SHPO: Eligible
Structure	Mechanic Street Bridge	Smethport Borough	Mckean	SHPO: Eligible
Building	Gibson Round Barn	Ulysses Township	Potter	Unevaluated
Building	Walker, George, House	Emporium Borough	Cameron	SHPO: Eligible
Building	Lyman, Laroy, House	Roulette Township	Potter	Unevaluated
Building	Renovo High School	Renovo Borough	Clinton	SHPO: Not Eligible
Building	Cabin 15 Ca 104	Stewardson Township	Potter	SHPO: Eligible
Building	Wrights, Jerry, Property	Coudersport Borough	Potter	SHPO: Not Eligible
Building	Buchanan Property	Coudersport Borough	Potter	SHPO: Not Eligible
Building	Phillips, Jimmy, Property	Coudersport Borough	Potter	SHPO: Not Eligible
District	5th St. Historic District	Emporium Borough	Cameron	SHPO: Not Eligible
Building	Independent Order of Odd Fellows Lodge	Gaines Township	Tioga	Unevaluated
Structure	Castle Garden Bridge	Driftwood Borough	Cameron	Demolished or 100% Destroyed
Structure	Castle Garden Bridge	Gibson Township	Cameron	Demolished or 100% Destroyed
Building	Seacord, G.S., House	Westfield Borough	Tioga	SHPO: Eligible
District	Renovo Historic District	Renovo Borough	Clinton	SHPO: Not Eligible
Site	Hyner Cemetery	Chapman Township	Clinton	Unevaluated
Building	McCloskey, James A., Farmhouse	Chapman Township	Clinton	Unevaluated
Building	Grugan, Coleman, House	Chapman Township	Clinton	Unevaluated
Building	Farwell, Lemuel/Nathan, Farmhouse	Chapman Township	Clinton	Unevaluated
Building	Grugan, William A., House	Chapman Township	Clinton	Unevaluated
Building	Welsh, John Q., House	Chapman Township	Clinton	Unevaluated
Site	North Bend Presbyterian	Chapman Township	Clinton	Unevaluated
Building	Quigley, A.J., House	Chapman Township	Clinton	Unevaluated
Building	Cleveland, Charles A., House	Chapman Township	Clinton	Unevaluated
Building	Smith, Dennis, House	Chapman Township	Clinton	Unevaluated
Building	Quigley, Michael	Chapman Township	Clinton	Unevaluated
Building	Pfluggelder, Catherine, House	Chapman Township	Clinton	Unevaluated
Building	North Bend School	Chapman Township	Clinton	Unevaluated
Building	Gleason & Irwin Tannery Worker Houses	Chapman Township	Clinton	Unevaluated
Building	Gleason, L.R. & Sons House	Chapman Township	Clinton	Unevaluated

Building	Welsh, C.C., House	Chapman Township	Clinton	Unevaluated
Building	Webster's Church	Chapman Township	Clinton	Unevaluated
Building	Bailey-Webster House	Chapman Township	Clinton	Unevaluated
Building	Webster/C.H. Klinefelter-Dance Hall/Store	Chapman Township	Clinton	Unevaluated
Building	Chapman Township School/Webster, H.M.	Chapman Township	Clinton	Unevaluated
Building	Hansen, Christ, House	Chapman Township	Clinton	Unevaluated
Building	Nuss, Bernard R. (Ben), House	Chapman Township	Clinton	Unevaluated
Building	Steuart, James F., Farmhouse	Noyes Township	Clinton	Unevaluated
Building	Immaculate Conception Roman Catholic Church	Noyes Township	Clinton	Unevaluated
Building	Bitumen Worker House	Noyes Township	Clinton	Unevaluated
Building	Hoyer/Clendenen House	Noyes Township	Clinton	Unevaluated
Building	Caldwell, Andrew O., Farmhouse	Noyes Township	Clinton	Unevaluated
Building	Drake, James M., House	Noyes Township	Clinton	Unevaluated
Building	Werts, Zachery & John, House	Noyes Township	Clinton	Unevaluated
Building	Olson, Charles M., House	Noyes Township	Clinton	Unevaluated
Building	Graw, Edward, House	Noyes Township	Clinton	Unevaluated
Building	Roberts/Proctor Farm	Leidy Township	Clinton	Unevaluated
Building	Stout, Gerald M. Cabins	Leidy Township	Clinton	Unevaluated
Site	Tamarack Swamp	Leidy Township	Clinton	Unevaluated
Site	Cross Log Camps	Leidy Township	Clinton	Unevaluated
Site	Boon Road	Leidy Township	Clinton	Unevaluated
Building	Gakle, Wallace, House	East Keating Township	Clinton	Unevaluated
Building	Burge-Cannon Tavern & Inn	East Keating Township	Clinton	Unevaluated
Building	Floyd, William Jr., House	East Keating Township	Clinton	Unevaluated
Structure	Bridge over Cowanesque River	Deerfield Township	Tioga	Unevaluated
Structure	Bridge over Pine Creek	Gaines Township	Tioga	Unevaluated
Structure	Bridge over Cowanesque River	Westfield Township	Tioga	Unevaluated
Structure	Bridge over Cowanesque River	Deerfield Township	Tioga	Unevaluated
Structure	Bridge over Cowanesque River	Westfield Borough	Tioga	Unevaluated
Structure	Bridge over Crooked Creek	Chatham Township	Tioga	Unevaluated
Structure	Bridge over Jenison Creek	Westfield Township	Tioga	Unevaluated
Structure	Bridge over Cedar Run	Elk Township	Tioga	Unevaluated
Structure	Bridge over Troup's Creek	Brookfield Township	Tioga	Unevaluated
Building	Duke Center Elementary School	Otto Township	Mckean	SHPO: Eligible
Building	Methodist Episcopal Church	Roulette Township	Potter	SHPO: Not Eligible
Building	Vanzile, Barbara A., House	Roulette Township	Potter	SHPO: Not Eligible
Building	Reeds Racket Store, Reoulette Recorder Building	Roulette Township	Potter	SHPO: Not Eligible
Building	Brian, Wade E., House	Roulette Township	Potter	SHPO: Not Eligible
Building	Roulette Water Company Building	Roulette Township	Potter	SHPO: Not Eligible
Building	Jestes, J. Boyd, House	Roulette Township	Potter	SHPO: Not Eligible
Structure	River Street Bridge	Roulette Township	Potter	Demolished or 100% Destroyed
Building	Sallade, James, House	Roulette Township	Potter	SHPO: Not Eligible
Building	Nenno, William C., House	Roulette Township	Potter	SHPO: Not Eligible
Structure	Dents Run Bridge	Benezette Township	Elk	SHPO: Not Eligible
Building	Sherman, G.W., Property	Sharon Township	Potter	SHPO: Not Eligible
Structure	Tuna Cross Rd. Bridge	Foster Township	Mckean	SHPO: Not Eligible
Building	Cameron County Courthouse	Emporium Borough	Cameron	SHPO: Eligible
Structure	Lafferty Hollow Bridge	Foster Township	Mckean	SHPO: Not Eligible
Structure	Station Rd. Bridge	Benezette Township	Elk	Demolished or 100% Destroyed
Object	Bucktail Monument	Driftwood Borough	Cameron	SHPO: Eligible
Building	Galeton Production Plant	Galeton Borough	Potter	SHPO: Eligible
Building	Galeton Production Plant	Galeton Borough	Potter	SHPO: Eligible
Building	True Value	Galeton Borough	Potter	SHPO: Not Eligible
Building	House	Driftwood Borough	Cameron	SHPO: Eligible
Building	General Store/Masonic Lodge	Driftwood Borough	Cameron	SHPO: Not Eligible
Building	Prudence Grange	Allegany Township	Potter	SHPO: Eligible
Building	Emporium Theater	Emporium Borough	Cameron	Unevaluated
Structure	S.R. 249 Bridge	Westfield Township	Tioga	SHPO: Not Eligible
Building	McKean County Courthouse and Jail	Smethport Borough	Mckean	SHPO: Eligible
Building	McKean County Old Jail	Smethport Borough	Mckean	
Building	House on Ludington Run	Ulysses Township	Potter	SHPO: Not Eligible
Building	Gilbert, Kenneth E. & Betty L., Farm	Benezette Township	Elk	SHPO: Not Eligible
Structure	Bridge over Cowanesque River	Harrison Township	Potter	Demolished or 100% Destroyed
District	Hoffman Carbon Corp.	Foster Township	Mckean	SHPO: Not Eligible
Building	Causer Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Causer Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Olson Property	Liberty Township	Mckean	SHPO: Not Eligible

Building	Galeton Area School	Galeton Borough	Potter	Unevaluated
Building	Olson Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Alonzo Abbey Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Alonzo Abbey Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	White Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Almony Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Hink Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Alonzo Abbey Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Almony Property	Liberty Township	Mckean	SHPO: Not Eligible
Building	Alonzo Abbey Property	Liberty Township	Mckean	SHPO: Not Eligible
Structure	Township Rte. 414 at Allegheny River	Liberty Township	Mckean	Demolished or 100% Destroyed
Building	Duffy Property	Liberty Township	Mckean	SHPO: Not Eligible
Building		Roulette Township	Potter	SHPO: Not Eligible
Building		Roulette Township	Potter	SHPO: Not Eligible
Building		Roulette Township	Potter	SHPO: Not Eligible
Building	Swetland, C.A., Homestead	Harrison Township	Potter	SHPO: Eligible
District	Galeton Historic District	Galeton Borough	Potter	SHPO: Not Eligible
Structure		Driftwood Borough	Cameron	SHPO: Not Eligible
Structure		Gibson Township	Cameron	SHPO: Not Eligible
Structure		Gibson Township	Cameron	SHPO: Not Eligible
Structure		Gibson Township	Cameron	SHPO: Not Eligible
Structure		Gibson Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Grove Township	Cameron	SHPO: Not Eligible
Structure		Lumber Township	Cameron	Demolished or 100% Destroyed
Structure		Lumber Township	Cameron	SHPO: Not Eligible
Structure		Lumber Township	Cameron	SHPO: Not Eligible
Structure		Lumber Township	Cameron	SHPO: Not Eligible
Structure		Lumber Township	Cameron	SHPO: Not Eligible
Structure		Lumber Township	Cameron	Demolished or 100% Destroyed
Structure		Lumber Township	Cameron	Demolished or 100% Destroyed
Structure		Portage Township	Cameron	SHPO: Not Eligible
Structure		Portage Township	Cameron	SHPO: Not Eligible
Structure		Portage Township	Cameron	Demolished or 100% Destroyed
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Shippen Township	Cameron	Demolished or 100% Destroyed
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Shippen Township	Cameron	SHPO: Not Eligible
Structure		Chapman Township	Clinton	Demolished or 100% Destroyed
Structure		Chapman Township	Clinton	SHPO: Not Eligible
Structure		Chapman Township	Clinton	SHPO: Not Eligible
Structure		Chapman Township	Clinton	SHPO: Not Eligible
Structure		Chapman Township	Clinton	SHPO: Not Eligible
Structure		Chapman Township	Clinton	Demolished or 100% Destroyed
Structure		Chapman Township	Clinton	SHPO: Not Eligible
Structure		Chapman Township	Clinton	SHPO: Not Eligible
Structure		Chapman Township	Clinton	SHPO: Not Eligible

Structure		Elk Township	Tioga	SHPO: Not Eligible
Structure		Gaines Township	Tioga	SHPO: Not Eligible
Structure		Gaines Township	Tioga	SHPO: Not Eligible
Structure		Gaines Township	Tioga	SHPO: Not Eligible
Structure		Gaines Township	Tioga	SHPO: Not Eligible
Structure		Gaines Township	Tioga	SHPO: Not Eligible
Structure		Westfield Borough	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	Demolished or 100% Destroyed
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	Demolished or 100% Destroyed
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
Structure		Westfield Township	Tioga	SHPO: Not Eligible
District	New York & Pennsylvania Railroad (Shinglehouse)	Shinglehouse Borough	Potter	SHPO: Not Eligible
Building	Lynn Hall	Liberty Township	Mckean	Listed
District	Western New York & Pennsylvania Traction Company: Shinglehouse to State Line Spur (Shinglehouse)	Shinglehouse Borough	Potter	SHPO: Not Eligible
District	Western New York and Pennsylvania Railway (Eldred Twp.	Eldred Township	Mckean	SHPO: Not Eligible
Structure	Philadelphia & Erie Railroad: Yard (Renovo)	Renovo Borough	Clinton	SHPO: Not Eligible
Structure	Philadelphia & Erie Railroad: Yard: Smoke Stack	Renovo Borough	Clinton	
Structure	Philadelphia & Erie Railroad: Yard: Coal Tower	Renovo Borough	Clinton	
District	Philadelphia & Erie Railroad (Westport)	Noyes Township	Clinton	SHPO: Eligible
Structure		Chatham Township	Tioga	SHPO: Not Eligible
District	Erie Railroad: Bradford Branch (aggregate file)	Foster Township	Mckean	Aggregate File (see comments)
District	Erie Railroad: Bradford Branch (aggregate file)	Keating Township	Mckean	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Chapman Township	Clinton	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Driftwood Borough	Cameron	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	East Keating Township	Clinton	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Emporium Borough	Cameron	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Gibson Township	Cameron	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Grove Township	Cameron	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Lumber Township	Cameron	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Noyes Township	Clinton	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Portage Township	Cameron	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Renovo Borough	Clinton	Aggregate File (see comments)
District	Philadelphia & Erie Railroad (aggregate file)	Shippen Township	Cameron	Aggregate File (see comments)
District	Allegheny Valley Railway (aggregate file)	Benezette Township	Elk	Aggregate File (see comments)
District	Allegheny Valley Railway (aggregate file)	Driftwood Borough	Cameron	Aggregate File (see comments)
District	Allegheny Valley Railway (aggregate file)	Gibson Township	Cameron	Aggregate File (see comments)
Site	Fox Hill Cemetery	Ulysses Township	Potter	SHPO: Not Eligible
Site	Fox Hill Cemetery	Ulysses Township	Potter	SHPO: Not Eligible
Building	Lampman Farm	Ulysses Borough	Potter	SHPO: Not Eligible
Building	Flint House	Ulysses Township	Potter	SHPO: Not Eligible
	Wells House	Hector Township	Potter	SHPO: Not Eligible
Building	Hoopes House	Ulysses Township	Potter	SHPO: Not Eligible
Building	Freeman House	Ulysses Township	Potter	SHPO: Not Eligible

Building	Wilson House	Ulysses Township	Potter	SHPO: Not Eligible
Building	Burriss House	Ulysses Township	Potter	SHPO: Not Eligible
Building	Erway Farm	Ulysses Township	Potter	SHPO: Not Eligible
Building	Kelr House	Ulysses Township	Potter	SHPO: Not Eligible
Building	Hoopes, James House (a)	Ulysses Township	Potter	SHPO: Not Eligible
Building	Hoopes, James House (b)	Ulysses Township	Potter	SHPO: Not Eligible
Building	Klesa Farm	Ulysses Township	Potter	SHPO: Not Eligible
Building	Carl Erway Farm	Ulysses Township	Potter	SHPO: Not Eligible
Building	Angood Farm	Ulysses Township	Potter	SHPO: Not Eligible
Building	Sterner House	Hector Township	Potter	SHPO: Not Eligible
Site	Ulysses Airfield	Hector Township	Potter	SHPO: Not Eligible
District	Pittsburg, Shawmut & Northern Railroad (aggregate file)	Ceres Township	Mckean	Aggregate File (see comments)
District	Pittsburg, Shawmut & Northern Railroad (aggregate file)	Eldred Township	Mckean	Aggregate File (see comments)
District	Pittsburg, Shawmut & Northern Railroad (aggregate file)	Keating Township	Mckean	Aggregate File (see comments)
District	Pittsburg, Shawmut & Northern Railroad (aggregate file)	Smethport Borough	Mckean	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Allegany Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Coudersport Borough	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Eulalia Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Hebron Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Liberty Township	Mckean	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Port Allegany Borough	Mckean	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Roulette Township	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Ulysses Borough	Potter	Aggregate File (see comments)
District	Coudersport & Port Allegany Railroad (aggregate file)	Ulysses Township	Potter	Aggregate File (see comments)
District	Buffalo, Rochester & Pittsburgh Railway (aggregate file)	Foster Township	Mckean	Aggregate File (see comments)
District	Buffalo, Rochester & Pittsburgh Railway (aggregate file)	Keating Township	Mckean	Aggregate File (see comments)
Building	Watrous CCC Camp S-91	Elk Township	Tioga	SHPO: Not Eligible
District	Western New York & Pennsylvania Railway (aggregate file)	Annin Township	Mckean	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Eldred Borough	Mckean	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Eldred Township	Mckean	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Emporium Borough	Cameron	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Keating Township	Mckean	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Keating Township	Potter	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Liberty Township	Mckean	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Norwich Township	Mckean	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Port Allegany Borough	Mckean	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Portage Township	Cameron	Aggregate File (see comments)
District	Western New York & Pennsylvania Railway (aggregate file)	Shippen Township	Cameron	Aggregate File (see comments)
Building		Westfield Township	Tioga	Unevaluated
Site	Potter Farm / Highlands Farm	Sweden Township	Potter	Unevaluated
Site		Brookfield Township	Tioga	Unevaluated
Site		Deerfield Township	Tioga	Unevaluated
Site		Sweden Township	Potter	Unevaluated
Site	Barnett Farm	Allegany Township	Potter	Unevaluated

Building		Westfield Township	Tioga	Unevaluated
Building		Westfield Township	Tioga	Unevaluated
Building		Clymer Township	Tioga	Unevaluated
Building		Clymer Township	Tioga	Unevaluated
District	Prouty Place State Park	Summit Township	Potter	Unevaluated
Building	DGS 01992-001: Latrine 25-4-1	Summit Township	Potter	
Building	DGS 01992-002: Latrine 25-4-1	Summit Township	Potter	
District	Hyner Run State Park	Chapman Township	Clinton	Unevaluated
Building	DGS 00912-008: Camping Area Latrine Building 110-08	Chapman Township	Clinton	
Building	DGS 00912-003: Shed 110-03	Chapman Township	Clinton	
Building	DGS 00912-010: Maintenance Building 110-10	Chapman Township	Clinton	
Structure	Picnic Area Latrine	Chapman Township	Clinton	
District	Lyman Run State Park	Ulysses Township	Potter	Unevaluated
District	Lyman Run State Park	West Branch Township	Potter	Unevaluated
Building	DGS 01939-009: Latrine 143-9	Ulysses Township	Potter	
Building	DGS 01939-009: Latrine 143-9	West Branch Township	Potter	
Building	DGS 01963-011: Comfort Station	Ulysses Township	Potter	
Building	DGS 01963-011: Comfort Station	West Branch Township	Potter	
Building	DGS 01963-006: Latrine	Ulysses Township	Potter	
Building	DGS 01963-006: Latrine	West Branch Township	Potter	
Building	Lyman Run State Park: IAC Camp, Building 15-CA-22	Ulysses Township	Potter	
Building	Lyman Run State Park: IAC Camp, Building 15-CA-22	West Branch Township	Potter	
District	Cherry Springs State Park	West Branch Township	Potter	Unevaluated
Building	DGS 01939-007: Latrine	West Branch Township	Potter	
Building	Trail Side Latrine - Building 124-10	Portage Township	Cameron	Demolished or 100% Destroyed
District	Sinnemahoning State Park	Grove Township	Cameron	Unevaluated
District	Sinnemahoning State Park	Wharton Township	Potter	Unevaluated
Building	Park Office	Grove Township	Cameron	
Building	Park Office	Wharton Township	Potter	
District	Sizerville State Park	Portage Township	Cameron	Unevaluated
District	Sizerville State Park	Portage Township	Potter	Unevaluated
Structure	Pit Latrine #6	Portage Township	Cameron	
Structure	Pit Latrine #6	Portage Township	Potter	
Structure	Playground Pit Latrine	Portage Township	Cameron	
Structure	Playground Pit Latrine	Portage Township	Potter	
Structure	Pit Latrine, Day Use Area	Portage Township	Cameron	
Structure	Pit Latrine, Day Use Area	Portage Township	Potter	
Structure	Western New York & Pennsylvania Railway: Bridge, No. 30	Eldred Borough	Mckean	Unevaluated
District	Denton Hill State Park	Ulysses Township	Potter	Unevaluated
Structure	DGS 00936-004 Day Use Pit Latrine	Ulysses Township	Potter	
Building		Renovo Borough	Clinton	Unevaluated
Building		Eldred Township	Mckean	Unevaluated
Building		Eldred Township	Mckean	Unevaluated
Building		Ceres Township	Mckean	Unevaluated
Building	W.S. Morris Place	Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building		Keating Township	Mckean	Unevaluated
Building	Sons of Dunn Farm	Homer Township	Potter	Unevaluated
Building		Harrison Township	Potter	Unevaluated
Building		Sweden Township	Potter	Unevaluated
Building	Hamlin Bank	Smethport Borough	Mckean	Unevaluated
Building	Brookland General Store	Ulysses Township	Potter	SHPO: Eligible
Site		Leidy Township	Clinton	Unevaluated
Site		Leidy Township	Clinton	Unevaluated
Building	Sunset Memorial Community Church	Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Building		Leidy Township	Clinton	Unevaluated
Site	Red Hill Cemetery	Leidy Township	Clinton	Unevaluated

36CM0023	Open Habitation, Pre-Contact	Sterling Run 6	Unknown	Unevaluated
36CM0024	Open Habitation, Pre-Contact	Square Timber Stillhouse	Unknown	Unevaluated
36CM0025	Open Habitation, Pre-Contact	Emporium Country Club	Unknown	Unevaluated
36CM0026	Open Habitation, Pre-Contact	Cameron 1	Unknown	Unevaluated
36CM0027	Open Habitation, Pre-Contact	Cameron 2	Unknown	Unevaluated
36CM0028	Open Habitation, Pre-Contact	Canoe Run	Unknown	Unevaluated
36CM0029	Open Habitation, Pre-Contact	May Hollow Springhead	Unknown	Unevaluated
36CM0030	Open Habitation, Pre-Contact	Memorial Springs	Unknown	Unevaluated
36CM0031	Open Habitation, Pre-Contact	Big Run	Unknown	Unevaluated
36CM0032	Open Habitation, Pre-Contact	Tanglefoot Run	Unknown	Unevaluated
36CM0037	Open Habitation, Pre-Contact	Hicks Run	Unknown	Unevaluated
36CM0038	Open Habitation, Pre-Contact	Gardeau	Unknown	Unevaluated
36CM0039	Open Habitation, Pre-Contact	Britton Run	Unknown	Unevaluated
36CM0040	Open Habitation, Pre-Contact	Fairgrounds	Unknown	Unevaluated
36CM0044	Rock Shelter/Cave	Montour Rockshelter 1	Yes, Top Stratum Visible From Surface	Unevaluated
36CM0053	Open Habitation, Pre-Contact	Topolski Site	Unknown	Unevaluated
36CM0054	Lithic Reduction	Narby Site	Unknown	Unevaluated
36CM0057	Open Habitation, Pre-Contact	North Creek Site #1	Unknown	Unevaluated
36CM0058	Open Habitation, Pre-Contact	North Creek Site #2	Yes, Top Stratum Buried Under Sterile Deposits	Unevaluated
36CM0059	Open Habitation, Pre-Contact	North Creek Site #3	No	Unevaluated
36CM0060	Open Habitation, Pre-Contact	North Creek Site #4	No	Unevaluated
36CM0061	Open Habitation, Pre-Contact	North Creek Site #5	No	Unevaluated
36CM0062	Unknown Function Surface Scatter Less than 20M Radius	North Creek Site #6	No	Unevaluated
36CM0063	Open Habitation, Pre-Contact	Portage Creek Site #1	Unknown	Unevaluated
36CM0064	Unknown Function Surface Scatter Less than 20M Radius	Sinnemahoning Portage Creek Site #2	Unknown	Unevaluated
36CM0066	Unknown Function Surface Scatter Less than 20M Radius	Emporium Pipeyard Site 1	No	Unevaluated
36CM0067	Unknown Function Surface Scatter Less than 20M Radius	Prehistoric Concentration A8	No	SHPO: Not Eligible
36CM0068	Unknown Function Surface Scatter Less than 20M Radius	Prehistoric Concentration B4	No	SHPO: Not Eligible
36CM0069	Historic Domestic Site	Caldwell Homestead	No	SHPO: Not Eligible
36CM0070	Historic Domestic Site	William F. Logue Homestead	No	SHPO: Not Eligible
36CN0088	Open Habitation, Pre-Contact		No	Unevaluated
36CN0089	Open Habitation, Pre-Contact		No	Unevaluated
36CN0090	Open Habitation, Pre-Contact		No	Unevaluated
36CN0091	Open Habitation, Pre-Contact		No	Unevaluated
36CN0092	Open Habitation, Pre-Contact		No	Unevaluated
36CN0093	Open Habitation, Pre-Contact		No	Unevaluated
36CN0094	Open Habitation, Pre-Contact		No	Unevaluated
36CN0095	Open Habitation, Pre-Contact		No	Unevaluated
36CN0165	Open Habitation, Pre-Contact	Kettle Creek	No	SHPO: Eligible
36CN0198	Historic - Unknown/Other/Multiple Types	Site 3	No	SHPO: Not Eligible
36CN0199	Open Pre-Contact Site, Unknown Function	Kettle Creek Fast (K-1)	Yes	SHPO: Eligible
36CN0209	Open Habitation, Pre-Contact	Kettle Creek Loci 1-2	Unknown	Unevaluated
36CN0221	Historic and Pre-Contact	Porter Branch	No	Unevaluated
36EL0050	Cemetery	Hicks-Dents Burial Guound	Unknown	Unevaluated
36MC/018	Isolated Find		No	Unevaluated
36MC/022	Isolated Find			Unevaluated
36MC/024	Isolated Find		No	Unevaluated
36MC0033	Lithic Reduction	Eldred Levee I	No	Unevaluated
36MC0057	Lithic Reduction	East Water Street Site	Yes, Top Stratum Buried Under Sterile Deposits	SHPO: Not Eligible
36MC0058	Open Pre-Contact Site, Unknown Function	April Fools	No	SHPO: Eligible
36MC0059	Rock Shelter/Cave	McNaulty Rocks	Unknown	Unevaluated
36MC0060	Open Habitation, Pre-Contact	Dougherty	Yes, Top Stratum Visible From Surface	SHPO: Eligible
36MC0062	Open Pre-Contact Site, Unknown Function	Indian Echo	Yes, Top Stratum Buried Under Sterile Deposits	SHPO: Eligible
36MC0069	Historic Industrial Site	Power Station Site	No	SHPO: Not Eligible
36MC0070	Historic - Unknown/Other/Multiple Types	Roulo Horse Farm Site	No	SHPO: Eligible
36MC0070	Open Pre-Contact Site, Unknown Function	Roulo Horse Farm Site	No	SHPO: Eligible
36MC0092	Historic and Pre-Contact	Ayers 1	No	Unevaluated
36MC0093	Open Habitation, Pre-Contact	Ayers 2	Unknown	Unevaluated
36MC0126	Unknown Function Surface Scatter Less than 20M Radius	Park Site	No	SHPO: Not Eligible
36MC0127	Historic Domestic Site	Keating	No	SHPO: Eligible
36MC0127	Historic and Pre-Contact	Keating	No	SHPO: Eligible

36MC0127	Open Habitation, Pre-Contact	Keating	No	SHPO: Eligible
36MC0130	Historic and Pre-Contact	Liberty Site	No	Unevaluated
36MC0130	Open Habitation, Pre-Contact	Liberty Site	No	Unevaluated
36MC0232	Open Habitation, Pre-Contact	Leet Prehistoric	Yes, Top Stratum Buried Under Historical Deposits	SHPO: Not Eligible
36MC0233	Historic Industrial Site	Kushequa Railroad	No	Unevaluated
36MC0235	Open Habitation, Pre-Contact		No	Unevaluated
36MC0236	Open Habitation, Pre-Contact		No	SHPO: Not Eligible
36MC0255	Unknown Function Surface Scatter Less than 20M Radius	Area 14-1	Unknown	SHPO: Not Eligible
36MC0256	Unknown Function Surface Scatter Less than 20M Radius	Area 14-2	Unknown	SHPO: Not Eligible
36MC0257	Unknown Function Surface Scatter Less than 20M Radius	Area 17	Unknown	Unevaluated
36MC0314	Open Habitation, Pre-Contact	PS-2	Unknown	SHPO: Not Eligible
36MC0315	Open Habitation, Pre-Contact	PS-3	Unknown	Unevaluated
36MC0316	Lithic Reduction	PS-4	Unknown	Unevaluated
36MC0317	Open Habitation, Pre-Contact	PS-5	Unknown	SHPO: Not Eligible
36PO/044	Isolated Find		Unknown	Unevaluated
36PO0001	Open Habitation, Pre-Contact		No	Unevaluated
36PO0002	Open Habitation, Pre-Contact		No	Unevaluated
36PO0003	Open Pre-Contact Site, Unknown Function	Greenlike Site	No	Unevaluated
36PO0004	Open Habitation, Pre-Contact	Wharton Site #3	Yes, Top Stratum Buried Under Sterile Deposits	Unevaluated
36PO0007	Open Habitation, Pre-Contact	Boorum-Voorhees	Unknown	Unevaluated
36PO0007	Open Habitation, Pre-Contact	Boorum-Voorhees	Unknown	Unevaluated
36PO0008	Open Pre-Contact Site, Unknown Function	Darrin	Unknown	Unevaluated
36PO0009	Open Pre-Contact Site, Unknown Function	Corn Pit Site	Unknown	Unevaluated
36PO0010	Open Habitation, Pre-Contact	Gibson	Unknown	Unevaluated
36PO0011	Open Habitation, Pre-Contact	Lewis I	Unknown	Unevaluated
36PO0012	Open Habitation, Pre-Contact	Lewis II	Unknown	Unevaluated
36PO0013	Open Habitation, Pre-Contact	Lewis III	Unknown	Unevaluated
36PO0014	Open Pre-Contact Site, Unknown Function	Lewis IV	Unknown	Unevaluated
36PO0015	Open Habitation, Pre-Contact	Rose Lake	Unknown	Unevaluated
36PO0016	Open Habitation, Pre-Contact	Shinglehouse	Unknown	Unevaluated
36PO0017	Historic Industrial Site	Town Of Hammersley Fork	Unknown	Unevaluated
36PO0018	Historic Industrial Site	Pennsylvania Lumber Museum	Unknown	Unevaluated
36PO0019	Lithic Reduction	Coleman Site	Unknown	Unevaluated
36PO0020	Lithic Reduction	Wharton Site #1	No	Unevaluated
36PO0021	Open Pre-Contact Site, Unknown Function	Wharton Site #2	No	Unevaluated
36PO0022	Open Habitation, Pre-Contact	Wharton Site #5	No	Unevaluated
36PO0024	Historic - Unknown/Other/Multiple Types	Ole Bull	No	Unevaluated
36PO0025	Open Pre-Contact Site, Unknown Function	CWP Site	No	Unevaluated
36PO0026	Open Habitation, Pre-Contact	Locus 75-1	Yes	Unevaluated
36PO0027	Historic and Pre-Contact	R75 Locus 2	Yes	Unevaluated
36PO0028	Historic and Pre-Contact	RRR75 Locus 1	Yes	Unevaluated
36PO0029	Open Pre-Contact Site, Unknown Function	Harrison Valley Site	No	Unevaluated
36PO0030	Lithic Reduction	Pure Carbon Site	No	Unevaluated
36PO0030	Open Pre-Contact Site, Unknown Function	Pure Carbon Site	No	Unevaluated
36PO0031	Open Pre-Contact Site, Unknown Function	Wastewater Treatment Plant Site	No	Unevaluated
36PO0032	Historic and Pre-Contact	Kettle Creek	Yes	Unevaluated
36PO0033	Historic - Unknown/Other/Multiple Types	Stone Ruins Site	Unknown	SHPO: Not Eligible
36PO0034	Historic - Unknown/Other/Multiple Types	Taylor-Pinney Site	No	SHPO: Not Eligible
36PO0034	Open Pre-Contact Site, Unknown Function	Taylor-Pinney Site	No	SHPO: Not Eligible
36PO0035	Historic Domestic Site	S.G. Rouse Site	Unknown	SHPO: Not Eligible
36PO0036	Historic and Pre-Contact	Fox Hill TRC-1	No	SHPO: Not Eligible
36PO0037	Unknown Function Surface Scatter Less than 20M Radius	Fox Hill TRC-2	No	SHPO: Not Eligible
36PO0038	Historic and Pre-Contact	Fox Hill TRC-3	No	SHPO: Not Eligible
36PO0039	Unknown Function Surface Scatter Less than 20M Radius	Fox Hill TRC-4	No	SHPO: Not Eligible
36PO0040	Historic and Pre-Contact	Fox Hill TRC-5	No	SHPO: Not Eligible
36PO0041	Historic Industrial Site	POT-01	No	SHPO: Not Eligible
36PO0042	Historic Domestic Site	POT-02	No	SHPO: Not Eligible
36PO0042	Historic Farmstead	POT-02	No	SHPO: Not Eligible
36PO0042	Historic and Pre-Contact	POT-02	No	SHPO: Not Eligible
36PO0043	Lithic Reduction	Osborne Branch	No	Unevaluated
36PO0044	Historic - Unknown/Other/Multiple Types	002-2	No	SHPO: Not Eligible
36PO0045	Historic - Unknown/Other/Multiple Types	004-1	Unknown	SHPO: Not Eligible
36PO0046	Historic Domestic Site	Paddilla House	Yes	SHPO: Not Eligible
36PO0047	Historic Domestic Site	Ten-1	No	Unevaluated
36PO0048	Open Habitation, Pre-Contact	Mosch Site	Unknown	SHPO: Not Eligible
36PO0049	Historic and Pre-Contact	Comstock 1	No	Unevaluated

36PO0049	Unknown Function Surface Scatter Less than 20M Radius	Comstock 1	No	Unevaluated
36PO0050	Lithic Reduction	Sweden Valley Extension	No	Unevaluated
36PO0050	Open Habitation, Pre-Contact	Sweden Valley Extension	No	Unevaluated
36PO0051	Open Habitation, Pre-Contact	PS-6	Unknown	SHPO: Not Eligible
36PO0052	Historic Commercial Site	Wingo 1	No	SHPO: Not Eligible
36PO0052	Lithic Reduction	Wingo 1	No	SHPO: Not Eligible
36PO0053	Historic Farmstead	WyKoff 1	Yes	SHPO: Not Eligible
36TI0059	Open Habitation, Pre-Contact	Meade	Unknown	Unevaluated
36TI0078	Open Habitation, Pre-Contact	Spencer	No	Unevaluated
36TI0140	Historic Industrial Site	TIO-02	No	SHPO: Not Eligible
36TI0172	Historic Domestic Site	NW4-4 (SUBI-2994)	No	Unevaluated

**PREVIOUSLY RECORDED CULTURAL RESOURCES UNDERLYING THE
NEW YORK PORTION OF THE EXISTING AND PROPOSED DUKE MOAs**

Previously Identified Archaeological Resources

Site Number	Site Name	Town/County	Time Period/ Site Type	NRHP Determination
OFFICE OF PARKS RECREATION, AND HISTORIC PRESERVATION SITES				
USN 00924.000065	West Oil Production Site	Olean/Cattaraugus	Historic oil production	Not Eligible
USN 00924.000064	East Oil Production Site	Olean/Cattaraugus	Historic oil production	Not Eligible
USN 00924.000067	Derrick Ruin Oil Production Site	Olean/Cattaraugus	Historic oil production	Not Eligible
USN 00924.000068	Wooden Auger Oil Production Site	Olean/Cattaraugus	Historic oil production	Not Eligible
NEW YORK STATE MUSEM ARCHAEOLOGICAL SITES AND AREAS				
NYSM 7539	No info	Portville/Cattaraugus	No info	Not available
NYSM 7912	No info	Genesee/Allegany	No info	Not available
NYSM 7539	No info	Portville/Cattaraugus	No info	Not available
NYSM 7925	No info	Genesee/Allegany	No info	Not available
NYSM 7017	No info	Genesee/Allegany	No info	Not available

Previously Identified Historic Resources

Site Number	Address	Town/County	NRHP Determination
USN 00901.000067	501 Boucher Hollow Road	Allegany/Cattaraugus	Eligible
USN 00901.000077	1375 NY Route 16	Olean/Cattaraugus	Not Eligible
USN 00928.000041	405 West Carroll Road	Portville/Cattaraugus	Not Eligible
USN 00928.000016	Bridge 11 East Carroll Road	Portville/Cattaraugus	Not Eligible
USN 00317.000013	200 School Street	Genesee/Allegany	Not Eligible
USN 00317.000014	55 High Street	Genesee/Allegany	Not Eligible
USN 00317.000008	99 High Street	Genesee/Allegany	Not Eligible
USN 00317.000003	The Coliseum / NY Route 417	Genesee/Allegany	Undetermined
USN 00317.000004	Western NY & PA Traction Co. Powerhouse	Genesee/Allegany	Eligible
USN 00310.000089	32 Horse Run Road	Genesee/Allegany	Not Eligible
USN 00928.000017	527 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000018	523 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000019	513 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000020	505 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000021	504 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000022	501 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000023	489 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000024	481 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000025	472 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000026	465 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000027	462 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible

Site Number	Address	Town/County	NRHP Determination
USN 00928.000028	455 Portville-Ceres Road	Portville/Cattaraugus	Not Eligible
USN 00928.000043	426 Portville-Eldred Road	Portville/Cattaraugus	Not Eligible
USN 00928.000043	735 Portville-Eldred Road	Portville/Cattaraugus	Not Eligible
USN 00940.000340	1002 NY Route 16	Olean/Cattaraugus	Not Eligible
USN 00924.000005	Swartz Road	Olean/Cattaraugus	Not Eligible
USN 00924.000004	NY Route 16	Olean/Cattaraugus	Not Eligible
USN 00901.000023	Sanitarium Apartments NY Route 16	Allegany/Cattaraugus	Not Eligible
USN 00924.000002	NY Route 16	Allegany/Cattaraugus	Not Eligible
USN 00924.000003	NYS Route 16	Allegany/Cattaraugus	Not Eligible
USN 00924.000077	624 NY Route 16 South	Olean/Cattaraugus	Not Eligible