

United States Air Force

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Malmstrom AFB Community Stakeholder ICEMAP Update



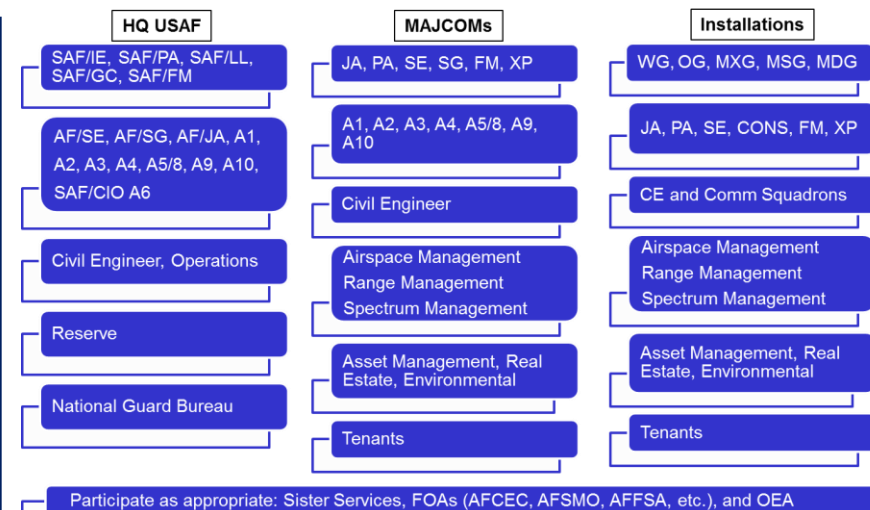
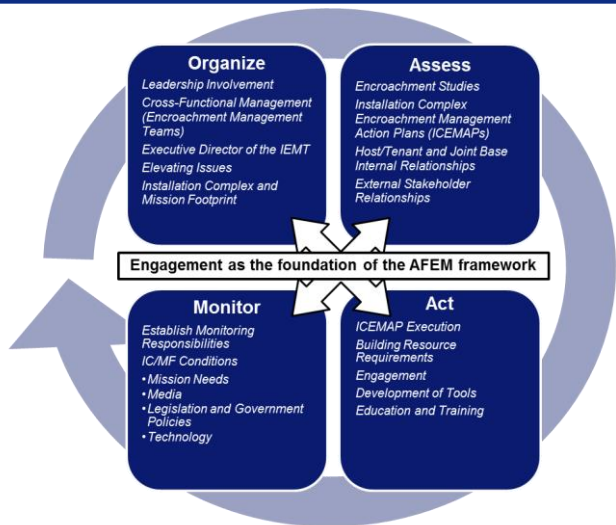
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**Randall Farren
Marstel-Day, LLC
31 July 2015**



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AFEM Concepts



Encroachment & Sustainment Challenge Areas

- Airspace and Land Restrictions
- Airborne Noise
- Urban Growth
- Spectrum Encroachment
- Endangered Species and Critical Habitat
- Air
- Water
- Cultural Resources
- Unexploded Ordnance and Munitions
- Marine Resources
- Energy Compatibility and Availability
- Security/Safety
- Natural Factors and Climate Effects





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ICEMAP Methodology

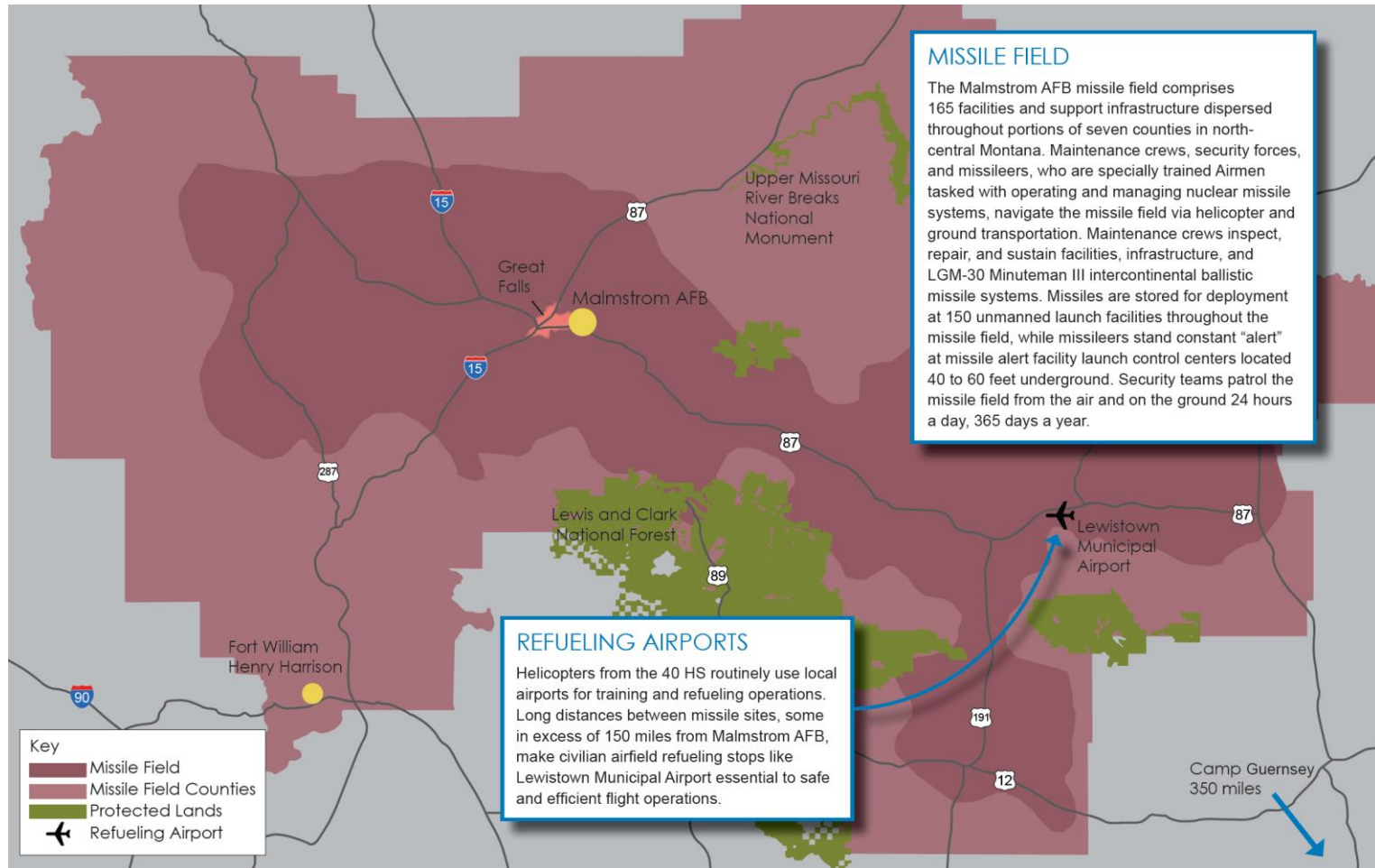


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Malmstrom AFB Mission

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Community Interviews

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- 120th Airlift Wing – Montana Air National Guard
- City of Great Falls
- Cascade County
- Montana Department of Transportation
- Montana Fish, Wildlife and Parks
- Montana Department of Environmental Quality
- Montana Land Reliance
- Bureau of Land Management
- U.S. Forest Service – Lewis and Clark National Forest
- Montana Department of Commerce – Industry Development Program
- Montana Natural Heritage Program
- Great Falls International Airport
- Cascade Conservation District
- Montana Department of Natural Resources and Conservation
- The Nature Conservancy

External interviews are used to gain community perspective on current and potential encroachment challenges.



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Malmstrom AFB Encroachment Challenges Overview

4 - Current		4 - Potential	
	Wind Turbines are Affecting Helicopter Movement through the Missile Field*		Wind Turbines May Disrupt Missile Field Radio Communications*
	Increased Traffic Adversely Affects Defense Access Roads and Missile Field Operations*		Potential Listing of Greater Sage-Grouse Under the Endangered Species Act Could Affect Missile Field Operations*
	Inadequate Restrictive Easements May lead to Incompatible Development Around LFs and MAFs		Proposed Industrial Park North of Installation Could Pose Safety and Security Risks to Base Housing
	Stormwater Discharge Through the Whitmore Ravine Has Raised Erosion and Sedimentation Concerns		Regulatory Changes Could Require Costly Alterations to Missile Alert Facility Sewage Lagoons

*** Top Challenge**



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Current Challenge: Wind Turbines are Affecting Helicopter Movement through the Missile Field

- Wind energy development is occurring throughout the missile field with expansions planned
- Unregulated wind energy development means coordination is largely ad hoc
 - Lack of formal early notification process could lead to construction of tall structures without AF input
- Improper siting could necessitate flight workarounds and may affect ingress/egress from missile field landing zones
 - Set back standards not codified
- Downrange turbulence up to 16 times rotor diameters could increase risk to missile field helicopter operations

Mission Constraints Overview:

- Creating Avoidance Areas
- Modifying Operations
- Increasing Costs or Risks

Community Constraints Overview:

- Limiting Community Development
- Affecting Economic Development



Potential Challenge: Wind Turbines may Disrupt Missile Field Radio Communications

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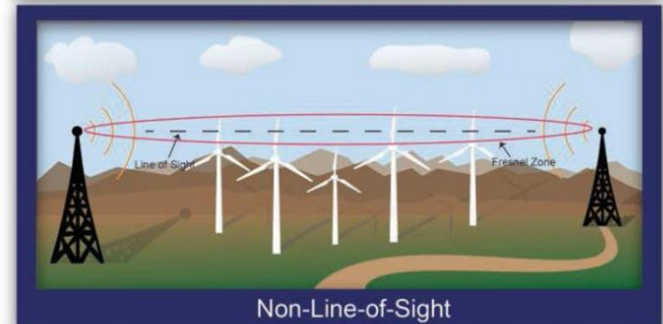
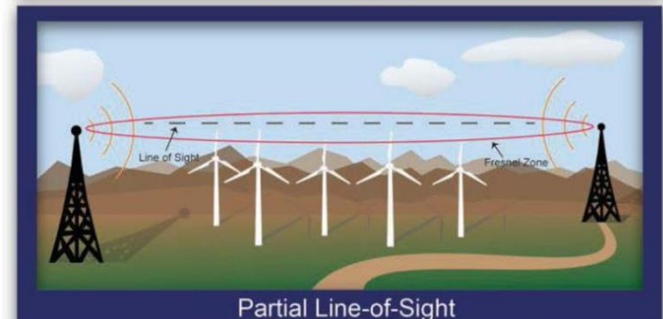
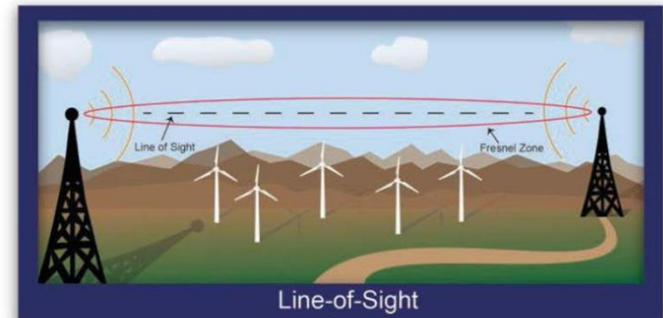
- Wind turbines built within radio frequency line-of-sight Fresnel zones can disrupt communications
- Line-of-sight corridors are built into planning documents, including the Development Coordination Map
- Improper siting has already necessitated costly retrofits and workarounds at F.E. Warren AFB

Mission Constraints Overview:

- Modifying Operations
- Increasing Costs or Risks

Community Constraints Overview:

- Limiting Community Development
- Affecting Economic Development

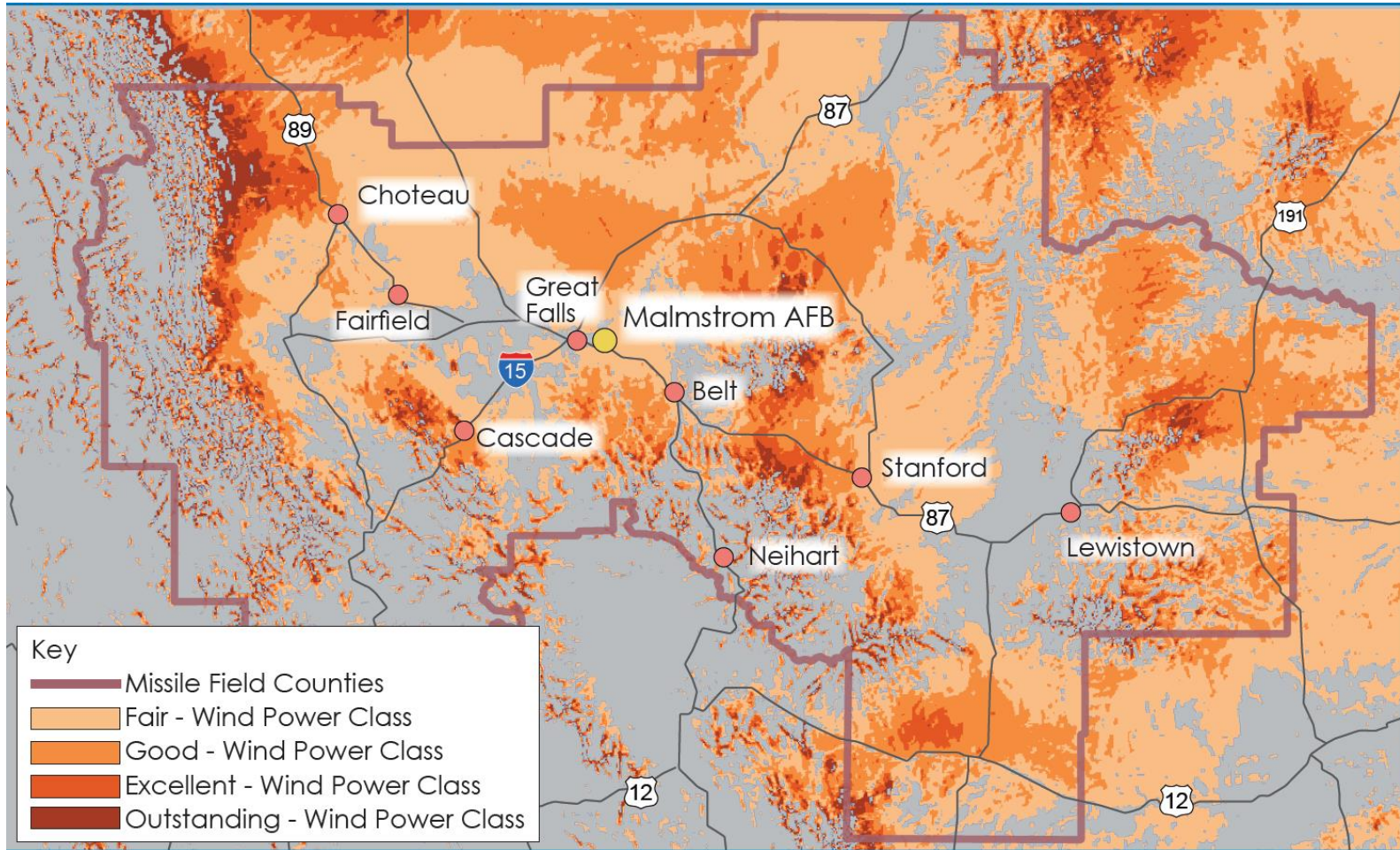




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Wind Energy Potential in the Malmstrom AFB ROI

Wind Energy Potential in the Malmstrom AFB Missile Field





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Current Challenge: Increased Traffic and Recurring Floods Adversely Affect Defense Access Roads and Missile Field Operations

- Increased traffic on defense access roads has decreased mean-time to failure of road surfaces
- Regular maintenance cycles largely unchanged despite increased use and deterioration
 - Road conditions periodically may not meet standards for transporter erectors and other large vehicles
- Seasonal flooding has exacerbated road conditions and diverted resurfacing funds
- Road conditions and traffic increase hazards to vehicles moving among missile field facilities

Mission Constraints Overview:

- Creating Avoidance Areas
- Increasing Costs or Risks

Community Constraints Overview:

- Restricting Community Access during Military Exercises
- Straining Community Assets



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Potential Challenge: Potential Listing of Greater Sage-Grouse Under the Endangered Species Act Could Affect Missile Field Operations

- Greater sage-grouse is a candidate for listing under the Endangered Species Act
- Species is sensitive to human disturbance, especially during breeding season
- Habitat overlaps with significant portions of the missile field
- Depending on final rules, many operations in certain areas could be affected if listed
 - Noise sensitivity may require alterations to vehicle and helicopter operations; construction and maintenance
 - Sensitivity to low-flying aircraft may require workarounds and flight modifications

Mission Constraints Overview:

- Prohibiting Certain Operational, Training, and Testing Events
- Modifying Operations
- Increasing Costs or Risks

Community Constraints Overview:

- None identified



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Local Area Development Considerations: Fixed Wing AICUZ Environs

- **1994 AICUZ study identified land use compatibility factors related to fixed wing flight operations at Malmstrom AFB**
- **In 1997, the runway was formally decommissioned**
- **2012 JLUS recommended protection of the AICUZ clear zones and accident potential zones (APZ) to obviate safety concerns related to any potential fixed wing operations at Malmstrom AFB**
- **There are few land uses in the vicinity of the installation that would be considered incompatible with many fixed wing flying missions**
- **New development proposals southeast of the installation have drawn concern among advocates for protecting future mission capabilities at the installation**
- **Installation personnel should continue monitoring development trends in the area to maintain operational flexibility**
 - **If the installation is considered for additional flying missions, the AF should proactively prepare an official position on these developments**



Example Management Action: Work with missile field counties to formalize use of Development Coordination Map during consultations with wind energy developers.

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Expected Outcome	Formalizes installation mission considerations among wind energy developers in the missile field.
Internal Management	
OPR	IEMT Executive Director
OCR	AFCEC/CPFR, 341 MW/CC, 341 MW/JA, 341 MW/PA, 341 CES/CC, 40 HS/CC, 341 MMXS/CC, 341 MMXS/MXMEK (Cable Affairs)
Stakeholders	
External Stakeholders	• All missile field counties
Resources	
Time	⌚
Cost	\$
Processes	Engage with participating counties to establish best practices and seek formal adoption of similar measures among all ROI Priority Area counties.
AMP	N/A

- **Three missile field counties have successfully formalized contingencies for wind energy tax incentives based on coordination with Malmstrom AFB**
- **In lieu of formal land use controls, tax mechanisms are a more practical method to identify energy developers and encourage coordination with Malmstrom AFB**

Addresses:

- Energy Compatibility and Availability: Wind Turbines are Affecting Helicopter Movement through the Missile Field
- Spectrum: Wind Turbines May Disrupt Missile Field Radio Communications



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Example Management Action: Engage with regulatory and environmental groups to develop strategies for long term preservation of quality greater sage-grouse habitat in the Malmstrom AFB missile field.

Expected Outcome	Incorporates GSG conservation considerations in foundational programs and encourages encroachment partnering with relevant stakeholders.
Internal Management	
OPR	341 CES/CEIE (Natural Resources)
OCR	AFCEC/CZP, AFCEC/CPAD, AFCEC/CPPR, REC Region VIII, 341 MW/JA, 341 MW/PA, 341 MSG/CC, 341 MXG/CC, 341 CES/CC
Stakeholders	
External Stakeholders	<ul style="list-style-type: none">• MT GSG Oversight Team• USFWS Region 6• MT Fish, Wildlife, and Parks• MT Bird Conservation Partnership
Resources	
Time	⌚ ⌚
Cost	\$\$
Processes	Engage with relevant stakeholders to incorporate GSG best management practices into foundational programs.
AMP	Natural Infrastructure

- **USFWS has indicated that successful state and regional efforts in GSG conservation are preferable to federal listing**
- **State agencies are willing to partner on GSG management**
- **Foundational programs should reflect established best practices**
- **Encroachment partnering may be feasible in eastern missile field**

Addresses:

- Endangered Species and Critical Habitat - Potential Listing of Greater Sage-Grouse Under the Endangered Species Act Could Affect Missile Field Operations



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Example Management Action: Work with the Montana Advanced Biofuels and the Great Falls Development Authority to explore buffering options between Minuteman Village and industrial developments north of the installation.

Expected Outcome	Deconflicts compatibility concerns between base housing areas and proposed industrial land uses.
Internal Management	
OPR	341 CES/CC
OCR	AFCEC/CPPR, AFCEC/CPAD, 341 MW/JA, 341 MW/PA, 341 MSG/CC, 341 SFG/CC, IEMT Executive Director
Stakeholders	
External Stakeholders	<ul style="list-style-type: none">• Montana Advanced Biofuels• Great Falls Dev. Authority• Great Falls Planning Dept.
Resources	
Time	⌚
Cost	\$\$
Processes	Weighs costs and benefits of buffering options and engages with relevant stakeholders to identify mutually acceptable solutions.
AMP	Real Property

- **Lack of available land limits on-base buffering options between base housing and industrial park**
- **Site planning and constructed buffers could limit noise, odor, and visual impacts to base housing**
- **Long-term solutions may involve staggered relocation of base housing**

Addresses:

- Urban Growth: Proposed Industrial Park North of Installation Could Pose Safety and Security Risks to Base Housing



ICEMAP Deliverables

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- **Volume I: Commander's Action Plan**
- **Volume II: Reference Book**
 - **Installation Complex / Mission Footprint (IC/MF)**
 - **Internal Context**
 - **External Context**
 - **Engagement Strategy**
- **Volume III: Community Brochure**
 - **"Partners in One Community"**

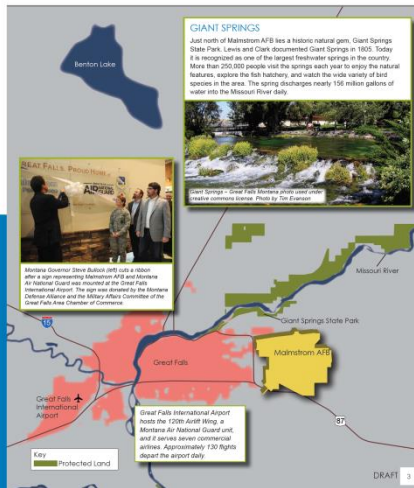
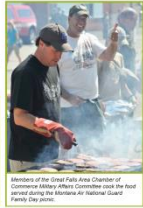


Community Brochure – Partners in One Community

MALMSTROM AFB AND THE COMMUNITY

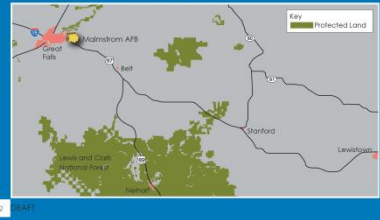
COMMUNITY COLLABORATION

The base, Cascade County, and the City of Great Falls share a strong, mutually supportive relationship. Base personnel and their families enjoy all that the area offers in business and recreational opportunities. They also volunteer with numerous community organizations. The community says "Thank you" by making Malmstrom AFB personnel feel welcome, and through groups like the Military Affairs Committee within the city's Chamber of Commerce. The Military Affairs Committee promotes support for the military throughout the year by hosting appreciation events, luncheons, golf outings, and the Co-Commander's program, among other supportive activities.



LEWIS AND CLARK NATIONAL FOREST

Stretching across 13 counties and portions of 7 mountain ranges, the Lewis and Clark National Forest plays a role in the mission of Malmstrom AFB. Some missile facilities sit at the edge of, or just inside, the forest, and search-and-rescue training is conducted in the course of forest lands. Visitors come from across the country to enjoy the forest's public recreation opportunities, which include hiking, horseback riding, camping, and skiing.



THE MALMSTROM AFB MISSION

Malmstrom AFB opened its gates in 1942 when the Army's 7th Ferrying Group began using its facilities as an air route between Great Falls and Fairbanks, Alaska, as part of the United States Land Lease Program. Through this program, the United States provided essential support to Allied nations during World War II.

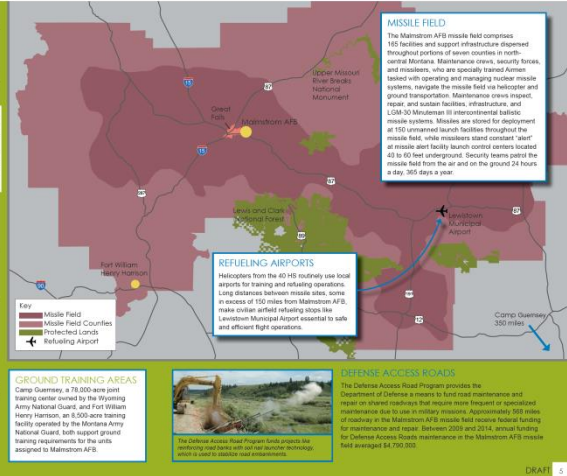
Today, the mission of the 341st Missile Wing (341 MW) is to defend America with safe, secure, effective nuclear forces and precision strike weapons. To do this, the 341 MW maintains and operates the Minuteman II intercontinental ballistic missile and is a part of the Force Global Strike Command. The nuclear capabilities secured and operated at Malmstrom AFB by the 341 MW serve as a key role in the nation's broader strategic deterrence capability.



MALMSTROM AFB MISSIONS

The 341 MW consists of five groups, each with a specialized mission. The 341st Operations Group supports the readiness of missile launch facilities and missile airt facilities dispersed throughout the Malmstrom AFB missile field. The 341st Maintenance Group maintains the missile and the communications systems required to operate from the operations group for the maintenance group could carry out three missions without the dedicated support of the administration, engineering, and other support provided by the 341st Mission Group. The largest security force group in the air force the 341st Security Forces Group, keeps a constant eye on the base and the missile complex.

The 341st Security Forces Group (341 SFG) provides security for the 341 MW with rapid response helicopter units, aerial surveillance, command support, and emergency security forces response. The squadron also supports the National Guard and Reserve plus with more than 800 "gates" to its facility. In 2015, the 341 SFG was merged under the 341st Helicopter Group at F.E. Warren AFB, in Cheyenne, Wyoming, but the unit's day-to-day operations continue from Malmstrom AFB.



Purpose

- Provides a visual depiction of installation activities and operating areas
- Identifies and acknowledges existing military-community relationships and partnerships
- Highlights opportunities for collaboration and partnering to support mutual community and mission sustainment

Contents

- Community context map
- Mission map
- Shared Interest/Shared Action
 - Energy Development in the Missile Field
 - Conservation Partnerships
- Next steps



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Way Ahead

- **Final Malmstrom AFB Wing Coordination Briefing: 31 July**
- **Malmstrom AFB Vol III Community Deliverable**
 - **To be released late September**
 - **Pending Malmstrom AFB Security and Policy Review**
 - **At the discretion of the 341 MW Commander**



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Backup Slides



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Military-Community Collaborative Efforts

- **Installation Complex Encroachment Management Action Plan (ICEMAP)**
– *Internal Air Force analysis of encroachment factors with prioritized management actions for the Installation Commander and IEMT as they work collaboratively with external stakeholders*
 - **Joint Land Use Study (JLUS)** – *Community-driven initiative to guide compatible civilian development within the Military Influence Planning District (e.g., areas around installations and ranges as defined by the JLUS study teams)*
 - **An ICEMAP does not replace a JLUS**
 - **ICEMAP management actions are for Air Force personnel and are intended to complement JLUS program goals and objectives**
 - **Air Force Community Partnership (AFCP) Program** – *Designed to leverage military and local community capabilities and resources to obtain value and benefit in support of the Air Force mission*
 - **AFCP efforts will inform the ICEMAP development process and strengthen stakeholder relationships for ongoing encroachment management efforts**
-