

Joint Base Elmendorf-Richardson

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Community Environmental Board & Nike Site Summit Public Meeting

October 19, 2016

**Colonel Scott Matthews,
Installation Co-Chair**

**Mr. Art Isham,
Community Co-Chair**



Agenda



- **Welcome and introductions**
- **Old business**
 - Field trip and CEB member recruitment
- **New business**
 - Nike Site Summit revised proposed plan
 - Military munitions response program (MMRP) comprehensive site evaluation phase II
 - Restoration program update
- **Administrative issues**
 - Approve April meeting minutes
 - Next CEB meeting date and agenda items

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Nike Site Summit Revised Proposed Plan Public Meeting

Ms. Donna Baumler
JBER Restoration Project Manager



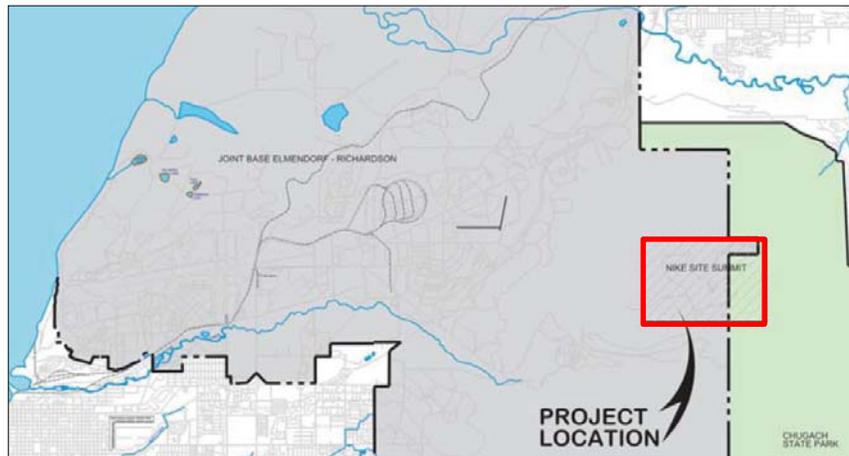
Nike Site Summit Revised Proposed Plan



- **Public meeting/comment period purpose**
 - Present the revised proposed plan for remedial action
 - Work collectively with stakeholders
 - JBER team
 - State & federal regulators
 - Community Environmental Board
 - Friends of Nike Site Summit
 - General public
 - Obtain stakeholder input on the preferred alternatives to address contamination



Nike Site Summit Revised Proposed Plan



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Nike Site Summit Revised Proposed Plan



- **Site history**
 - Formerly a manned “Nike Hercules” missile launch facility
 - About 180 acres
 - Built during Cold War to defend:
 - Fort Richardson
 - Elmendorf Air Force Base
 - Anchorage

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Nike Site Summit Revised Proposed Plan



■ Site History (cont)

- 1959-1979 - active site
- 1961-1964 - missiles launched annually
- 1995 - National Register of Historic Places (NRHP) listing
- 2007 - environmental assessment to select best management of historical facilities



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Nike Site Summit Revised Proposed Plan



■ Historic use

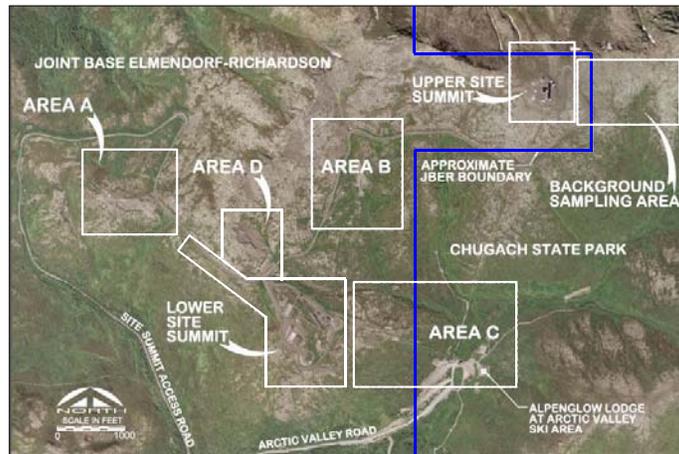
- Upper Site Summit - former battery control
- Lower Site Summit - former missile launch
- Area A - former radio relay station, former borrow area, and suspected disposal area
- Area B - former high explosive and guided missile magazines
- Area C - former pump house
- Area D - former borrow area

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Nike Site Summit Revised Proposed Plan



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Nike Site Summit Revised Proposed Plan



- **Current use**
 - No manned operations
 - Military training
 - Modern commercial communication structures at Upper Site Summit
 - Site preservation agreement (2009); guided tours (Friends of Nike Site Summit)
 - Access is controlled
 - Recreational use nearby

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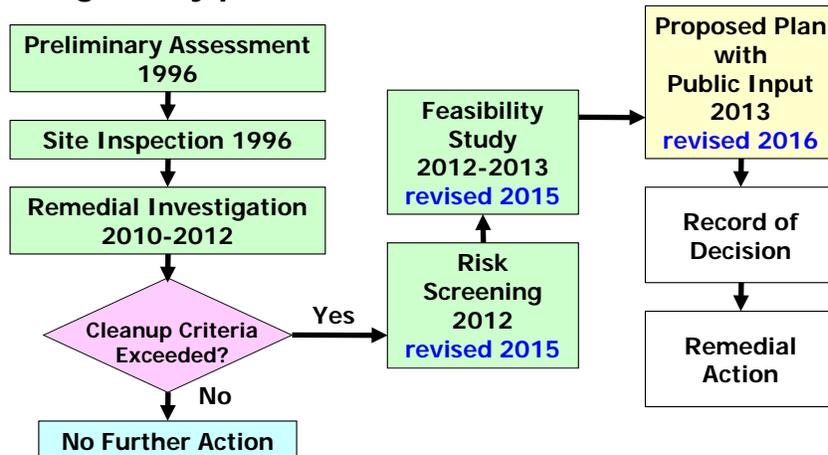
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Nike Site Summit Revised Proposed Plan



■ Regulatory process under CERCLA



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Nike Site Summit Revised Proposed Plan



■ Informal dispute resolutions

■ Upper Site Summit

- Groundwater does not exist
- Soil cleanup levels will be for direct contact or ingestion

■ Lower Site Summit

- Groundwater will be classified as IIIA (insufficient yield) pending Agency approval of a supplemental feasibility study with a technical description of groundwater volume and any impacts to the watershed from contamination

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Nike Site Summit Revised Proposed Plan



- **Informal dispute resolutions (cont)**
 - **Land Use Control (LUC) Language**
 - Agencies agree to use EPA's LUC language
 - **Petroleum Only Areas**
 - Air Force agrees to remove petroleum only areas from the Nike Site Summit Record of Decision



Nike Site Summit Revised Proposed Plan



- **In 2015, a Supplemental Feasibility Study summarized revised cleanup alternatives based on agreements to the informal dispute**
 - Confirmed lack of groundwater (insufficient yield)
 - Verified water from Lower Site Summit has no impact to watershed
 - Refined list of chemicals of concern (CoCs)
 - Changed cleanup levels for surface soils and subsurface soils
 - Modified remedial action objectives
 - Evaluated revised cleanup alternatives



Nike Site Summit Revised Proposed Plan



- In 2016, a Revised Proposed Plan was released based on new information provided in supplemental feasibility study
 - Presents refined list of COCs for each area
 - Presents human health & ecological risk
 - Proposes changed cleanup levels & modifies remedial action objectives
 - Summarizes results of evaluation of revised cleanup alternatives
 - Presents preferred alternative for each area

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Nike Site Summit Revised Proposed Plan



TENTATIVE MILESTONES

Sep 2014

May 2015

Supplemental
Feasibility Study

Opportunity for CEB and public
to provide comments on
proposed cleanup alternatives

Jun 2015

Nov 2016

Revised Proposed Plan and
Public Comment Period

We will provide
updates to the
CEB throughout
this process

Jun 2017

Record of Decision

Jun 2018

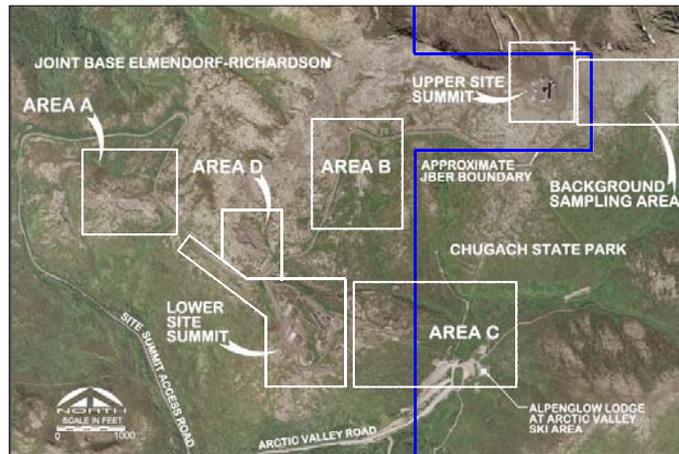
Site Clean-up

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Nike Site Summit Revised Proposed Plan



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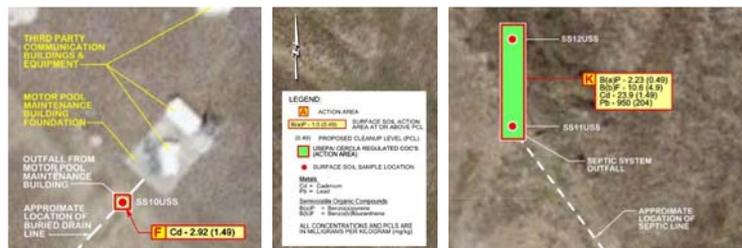
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Nike Site Summit Revised Proposed Plan



- Upper Site Summit (USS) - 2 source areas
 - Former motor pool maintenance building and foundation (action area USS-F)
 - Septic system & outfall (action area USS-K)



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Nike Site Summit Revised Proposed Plan



- Upper Site Summit chemicals of concern
 - Surface soil
 - Metals
 - Semi-volatile organic compounds



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Nike Site Summit Revised Proposed Plan



- Upper Site Summit remedial alternatives
 - Evaluated 2 remedial alternatives
 - No action
 - Excavation & off-site disposal of surface soil



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Nike Site Summit Revised Proposed Plan



- Upper Site Summit preferred alternative
 - Excavation with off-site disposal of surface soil
 - Excavate about 44 cubic yards of soil
 - Replace excavated material with clean fill
 - Cost - \$147,000
 - Reach cleanup goal in 1 year

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Nike Site Summit Revised Proposed Plan



- Lower Site Summit



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Nike Site Summit Revised Proposed Plan



Lower Site Summit action area U



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Nike Site Summit Revised Proposed Plan



Lower Site Summit action areas B H & Q



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Nike Site Summit Revised Proposed Plan



- Lower Site Summit (LSS) – 4 source areas
 - Missile launch pad & control buildings 1 & 2 (action area LSS-B)
 - Vehicle maintenance shop (action area LSS-H)
 - Launch control building (action area LSS-O)
 - Septic tank and septic system outfall (action area LSS-U)



Nike Site Summit Revised Proposed Plan



- Lower Site Summit chemicals of concern
 - Surface soil
 - Metals and semi-volatile organic compounds
 - Subsurface soil
 - Volatile and semi-volatile organic compounds





Nike Site Summit Revised Proposed Plan



- Lower Site Summit remedial alternatives
 - Evaluated 3 remedial alternatives
 - No action
 - Excavation with off-site disposal of surface and subsurface soils
 - Excavation with off-site disposal of surface soil and land use controls

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Nike Site Summit Revised Proposed Plan



- Lower Site Summit preferred alternative
 - Excavation with off-site disposal of surface and subsurface soil
 - Excavate about 230 cubic yards of soil
 - Replace excavated material with clean fill
 - Cost - \$371,000
 - Reach cleanup goal in 1 year

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- Area A and Area C
 - Recommended for no further action based on CERCLA petroleum-exclusion rule
 - Preparing decision document for clean up of petroleum-contaminated soil under State regulations



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- Area B and Area D – no action





Nike Site Summit Revised Proposed Plan



- Questions?

- How to participate

- Submit comments by Nov 3, 2016 to
673d Air Base Wing Public Affairs:

673 ABW/PA
10480 Sijan Avenue, Ste 123
JBER, AK 99506

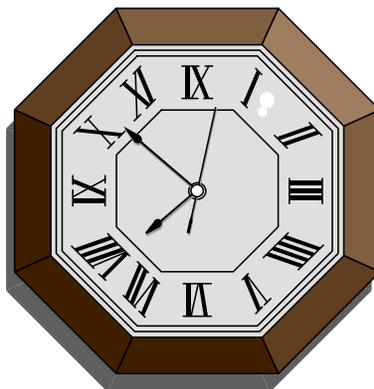
jber.pa.3@us.af.mil

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Break



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Military Munitions Response Program (MMRP)

Supplemental Comprehensive Site Evaluation (CSE) Phase II

Mr. Donald Aide
JBER Restoration Project Manager

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MMRP Comprehensive Site Evaluation



- **Objective**
 - The primary objective of the Supplemental Comprehensive Site Evaluation (CSE) Phase II field investigation is to confirm the absence or presence of:
 - munitions and explosives of concern (MEC)
 - munitions constituents (MC)

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MMRP Comprehensive Site Evaluation



■ Approach

- Identify areas of interest for field investigation by conducting a wide area assessment using:
 - Aerial Light Detection and Ranging (LiDAR), a surveying method that measures the distance to a target by illuminating the target with a laser
 - Digital orthophotography
 - Existing datasets (e.g. historic aerial photos)
 - Range configuration analysis



MMRP Comprehensive Site Evaluation



■ Approach (cont)

- Conduct instrument-assisted visual surveys of areas of interest
- Collect environmental samples if the visual survey indicates the presence of munitions
- Document all CSE Phase II activities in a report

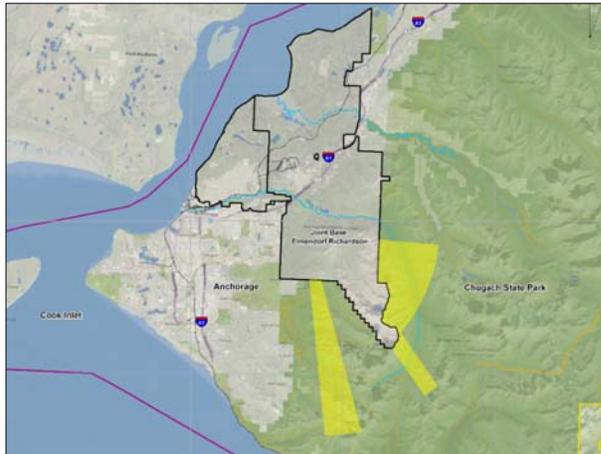




MMRP Comprehensive Site Evaluation



■ Project site map



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MMRP Comprehensive Site Evaluation



- **Davis Range A (site ID FR006)**
 - 9,197 acres extends E from the SE border of JBER into the Chugach Mountains and Ship Creek watershed
 - Davis Range A replaced the McLaughlin Range which lacked sufficient length for effective tank training
 - Davis Range A expansion beyond installation boundary allowed for impact & ricochet areas
 - The property was used under a Special Land Use Permit from Bureau of Land Management

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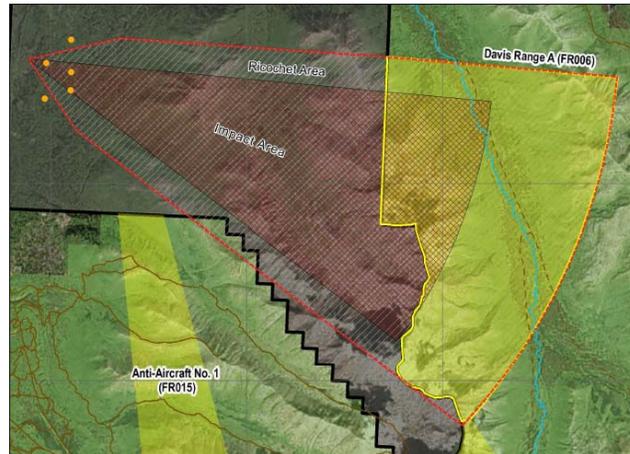
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MMRP Comprehensive Site Evaluation



■ Davis Range A



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MMRP Comprehensive Site Evaluation



- **Anti-Aircraft Range TD (site ID FR014)**
 - In 1950s “Requests for Range Use” the 68th Anti-Aircraft Artillery (AAA) Group announced heavy anti-aircraft firing
 - The danger area was described as a one mile corridor south, extending SE 15 miles, with an altitude of surface to 40,000 ft
 - The range fan extends from the center of JBER to the SE, over the operational range area and outside the JBER boundary

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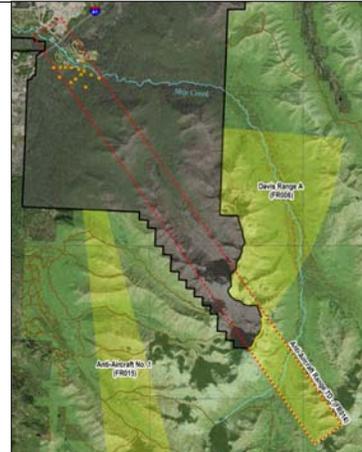
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■ Anti-Aircraft Range TD



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- **Anti-Aircraft Range No. 1 (site ID FR015)**
 - In 1950s "Requests for Range Use" the 10th Air Division noted this range was one of six controlled anti-aircraft firing areas
 - The munitions response site is located within Chugach State Park outside and adjacent to the southern boundary of JBER
 - Although the period of use for this site is unknown, it does not appear on historic maps after the 1950s

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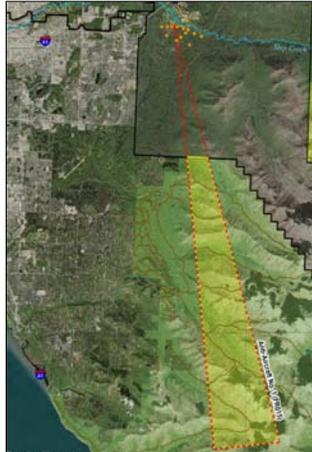
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- **Anti-Aircraft Range No. 1**



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MMRP Comprehensive Site Evaluation



- **Overview of the wide area assessment process that guides field investigation**
 - Review historical records
 - Collect LiDAR aerial data
 - Collect aerial digital orthophotography
 - Conduct line of sight analysis
 - Conduct slope aspect analysis
 - Conduct topographic slope analysis
 - Identify initial areas of interest

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MMRP Comprehensive Site Evaluation



- Historical records review helps identify:
 - Range configurations
 - Types of munitions used
 - Time frame Range used
 - Target types
 - Land use agreements



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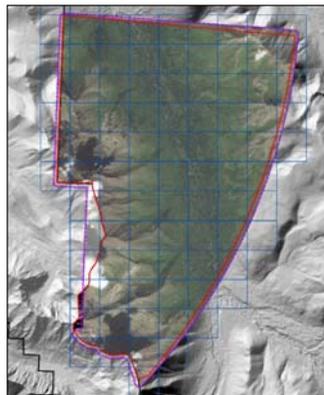
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- Digital orthophotography & LiDAR dataset
 - Data collected Sept 2015
 - LiDAR provides precise digital terrain model
 - Aerial datasets used to identify 3-dimensional features that may indicate munitions use (e.g. craters in the digital terrain model)



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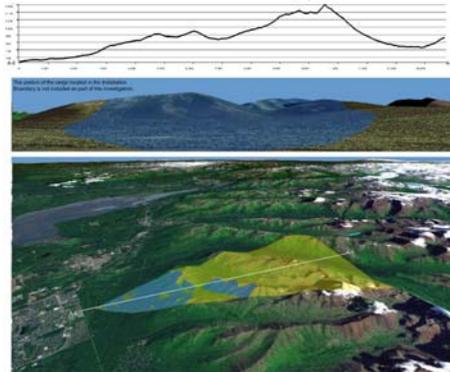


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- Line of sight analysis

- Determines what topography can be viewed from the firing point

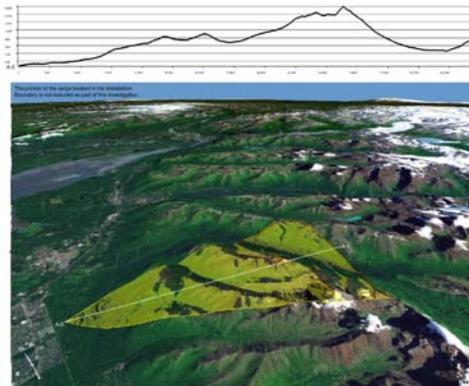


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- Slope aspect analysis

- Determines if a slope faces the firing point



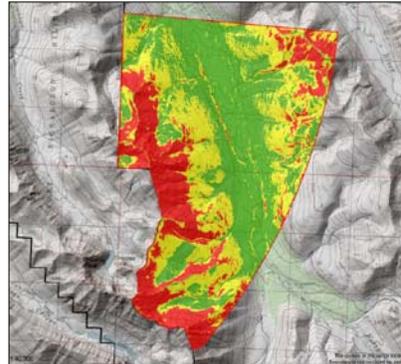


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■ Topographic slope analysis

- Determines slope steepness in order to help identify potential collection points for munitions and the likelihood for munitions to migrate down slope

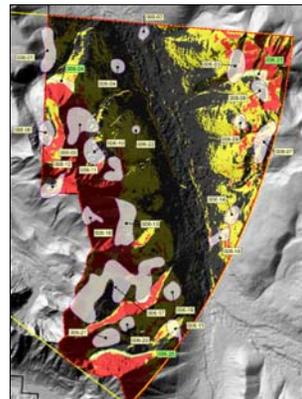


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■ Initial of areas of interest (AOIs)

- Information from all previous records and analysis are combined to identify initial AOIs
- Initial AOIs are further refined to high probability areas selected for field investigation

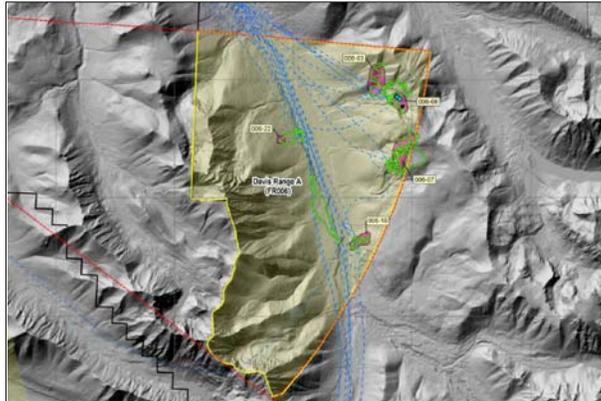




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■ Davis Range A field investigation results



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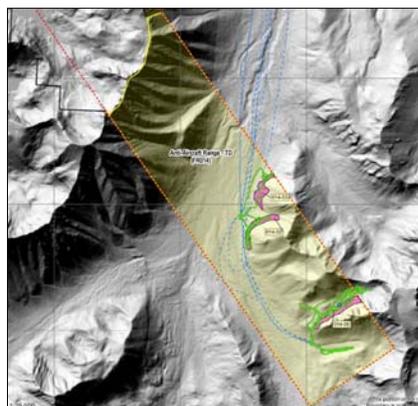
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MMRP Comprehensive Site Evaluation



■ Anti-Aircraft Range TD field investigation results



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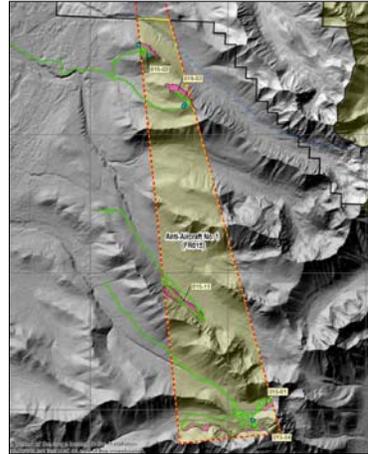
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MMRP Comprehensive Site Evaluation



- **Anti-Aircraft Range No. 1 field investigation results**



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MMRP Comprehensive Site Evaluation



- **Summary of field investigation results**
 - No evidence of military activity or munitions was observed within the ranges
 - The only man-made items observed were:
 - A few civilian small arms (0.22 caliber) casings
 - An ammunition box
 - A small propane tank suggesting camping-related activities



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MMRP Comprehensive Site Evaluation



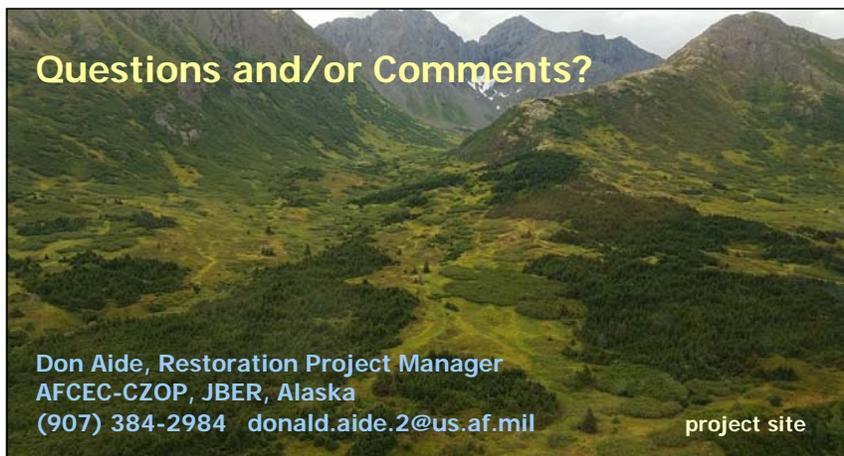
- Next steps
 - Draft report to Air Force (Feb 2017)
 - Draft report to regulators (June 2017)
 - Alaska Dept of Environmental Conservation
 - U.S. Environmental Protection Agency
 - Munitions response site prioritization protocol public comment period (Aug 2017)
 - Final report (Sept 2017)



MMRP Comprehensive Site Evaluation



Questions and/or Comments?



Don Aide, Restoration Project Manager
AFCEC-CZOP, JBER, Alaska
(907) 384-2984 donald.aide.2@us.af.mil

project site



JBER Environmental Restoration Program Update

Ms. Teresa Lee
JBER Restoration Team Lead

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Administrative Issues



-
- Approve April 2016 meeting minutes
 - Next CEB meeting
 - Wed April 19,2017 or
 - Wed April 26, 2017?
 - Future agenda items
 - Perfluorinated compound (PFC) study
 - Vapor intrusion study
 - Environmental sustainability at JBER
 -

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