

**CONSTRUCTION AND OPERATION OF A BATTLE AREA
COMPLEX AND A COMBINED ARMS COLLECTIVE
TRAINING FACILITY WITHIN U.S. ARMY TRAINING
LANDS IN ALASKA**

**FINAL
ENVIRONMENTAL IMPACT STATEMENT**

Volume 1

**Prepared For:
UNITED STATES ARMY ALASKA
DEPARTMENT OF THE ARMY**

**Prepared By:
UNITED STATES ARMY GARRISON ALASKA**

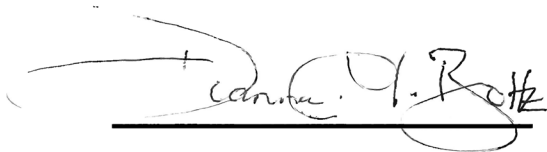
DEPARTMENT OF THE ARMY
UNITED STATES ARMY GARRISON ALASKA

FINAL
ENVIRONMENTAL IMPACT STATEMENT

CONSTRUCTION AND OPERATION OF A BATTLE AREA COMPLEX
AND COMBINED ARMS COLLECTIVE TRAINING FACILITY WITHIN
U.S. ARMY TRAINING LANDS IN ALASKA

JUNE 2006

Reviewed by:



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Colonel, U.S. Army
Commander, U.S. Army Garrison, Alaska



**DEPARTMENT OF THE ARMY
UNITED STATES ARMY ALASKA**

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JUNE 2006

Approved by:



**Charles H. Jacoby Jr.
Major General, U.S. Army
Commander, U.S. Army Alaska**



DEPARTMENT OF THE ARMY
UNITED STATES ARMY GARRISON ALASKA

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JUNE 2006

Approved by:



Stanley E. Sokoloski
Pacific Region Director
U.S. Army Installation Management Agency



**DEPARTMENT OF THE ARMY
UNITED STATES ARMY PACIFIC**

**FINAL
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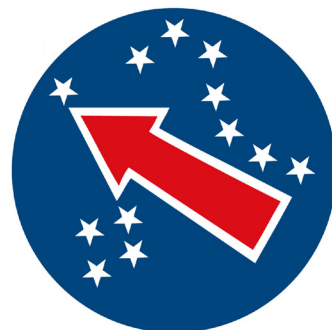
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JUNE 2006

Approved by:



**John M. Brown III
Lieutenant General, U.S. Army
Commander, U.S. Army Pacific**



HOW TO READ THIS EIS

Chapter 1 summarizes the proposed action by U.S. Army Alaska: construction and operation of a Battle Area Complex (BAX) and a Combined Arms Collective Training Facility (CACTF) within U.S. Army training lands in Alaska. This section summarizes the purpose and need for the proposed action. Issues identified during the scoping and public review process are also presented.

Chapter 2 provides a detailed description of the proposed action and a comparison of the location alternatives considered, including Eddy Drop Zone (Alternative 2), Donnelly Drop Zone (Alternative 3), North Texas Range (Alternative 4), and North Texas Range/Eddy Drop Zone Combination (Alternative 5). In addition, a description of the No Action (Alternative 1) is provided. Other alternatives that were considered and eliminated are discussed. Finally, a comparison of environmental consequences for each alternative is presented.

Important: For a summary comparison of alternatives, see Tables 2.n and 2.o. For a summary of environmental impacts for each alternative, see Tables 2.p and 2.q. These tables are located at the end of Chapter 2.

Chapter 3 describes the affected environment. This chapter summarizes the current state of knowledge of the physical, biological, and social environment at DTA East and nearby communities.

Chapter 4 compares the consequences of the five alternatives to the physical, biological, and social environments that were described in Chapter 3. Each section provides a brief description of activities that could affect the environment under each alternative, a methodology of analysis, a review of impacts common to all alternatives, and a quantitative (when applicable) and a qualitative comparison of alternatives. Existing and proposed mitigation measures are also listed.

Chapters 5-8 provide supplemental information.

Chapter 9 contains a summary of the Army's responses to comments received on the Supplemental Draft Environmental Impact Statement released in March 2006.

The *appendix* contains the maps cited in Chapters 1-4, additional information on archaeological and air resources, an analysis of existing and proposed mitigation measures, and a draft Finding of No Practicable Alternative.

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CONSTRUCTION AND OPERATION OF A BAX/CACTF WITHIN U.S. ARMY TRAINING LANDS IN ALASKA

SUMMARY OF CHANGES BETWEEN SDEIS AND FEIS

EXECUTIVE SUMMARY THROUGH CHAPTER 2

Section	Changes Made
Executive Summary	Text was modified to update terminology and to clarify descriptions.
Executive Summary Introduction	Text relevant to the SDEIS was updated for the FEIS version.
Executive Summary Introduction	The number of vehicles to be used on the range was changed from 170 to 165.
Executive Summary Purpose and Need	Text was added about the need to co-locate the two ranges.
Executive Summary Environmental Consequences	Text was added discussing potential increases in soil compaction as a result of maneuver training.
Executive Summary Environmental Consequences	Text was revised to reflect changes to impact category definitions for noise.
Executive Summary Environmental Consequences	Text was revised to include the number of cultural resources eligible for the National Register of Historic Places in the BAX/CACTF footprint.
Chapter 1	Text was modified to update terminology and to clarify descriptions.
Chapter 1 1.1 Introduction	The number of vehicles to be used on the range was changed from 170 to 165.
Chapter 1 1.3 Scope of Environmental Analysis	Text relevant to the SDEIS was moved to Section 1.7.2.6.
Chapter 1 1.3 Scope of Environmental Analysis	Text was added to clarify the division between primary and secondary resources.
Chapter 1 1.7 Scoping and Public Review Process	Text defining a schedule for the Notice of Availability of the FEIS was added.
Chapter 1 1.7.2.6 Release of SDEIS	Text was moved from Section 1.3 and added to this section.

Section	Changes Made
Chapter 1 1.7.2.7 Announcement, Availability and Public Comment on the SDEIS	A new section was created to provide a summary of the public comment period process for the SDEIS.
Chapter 1 1.8.1 Tribal Consultation	Text was revised to update and clarify the number of editions and the distribution of USARAK's <i>Quarterly Update to Alaska Native Tribes</i> newsletter.
Chapter 1 1.8.1 Tribal Consultation	The website address to view tribal comments submitted on the initial Draft EIS was added.
Chapter 1 1.8.1 Tribal Consultation	Text summarizing the tribal consultation meeting held for the SDEIS was added.
Chapter 1 1.9.2 Draft EIS Public Comment Period	The time period for the SDEIS public comment period was updated.
Chapter 1 1.9.2 Draft EIS Public Comment Period	The website address to view public comments on the initial Draft EIS was added.
Chapter 1 1.9.3 SDEIS Public Comment Period	A new section was created, and text summarizing public comments received for the SDEIS was added.
Chapter 1 1.12 Federal Permits, Licenses and Other Entitlements	This section was inserted to summarize the federal permits, licensing and other entitlements required to implement the proposed action.
Chapter 1 1.12 Federal Permits, Licenses and Other Entitlements	Table 1.b was added.
Chapter 1 1.13 Organizational Structure of this EIS	"Section 1.12" was renamed "Section 1.13."
Chapter 1 1.13 Organizational Structure of this EIS	Text for the title of Chapter 9 was revised to " <i>Summary of Comments and Responses</i> ".

Section	Changes Made
Throughout Chapter 2	“Appendix, Figure 3.k” was renamed “Appendix, Figure 3.l”.
Chapter 2 2.2 Description of the Proposed Action	The number of vehicles to be used on the range was changed from 170 to 165.
Chapter 2 2.2.1.2.5 Support Operations, Transition Routes and Deployments	Information on deployment miles was clarified.
Chapter 2 2.2.2.2.6 Support Operations, Transition Routes and Deployments	Information on deployment miles was clarified.
Chapter 2 2.3 Detailed Description of Location Alternatives	Introductory text discussing screening criteria was clarified.
Chapter 2 2.3.1 Introduction	The following text was added to the first sentence: “and cost”.
Chapter 2 2.3.3.1 Tanana Flats Training Area	“Lowlands” was deleted.
Chapter 2 2.3.3.1 Tanana Flats Training Area	The term “current” was added to emphasize that no roads exist to access the Tanana Flats Training Area.
Chapter 2 2.3.3.7 Eddy Drop Zone	Text was added to clarify that the proposed site is within the Jarvis Creek floodplain.
Chapter 2 2.3.4 Conclusion of Viability Analysis	Table 2.i was added to summarize the viability analysis of all potential sites based on screening requirements. All subsequent tables were renamed.
Chapter 2 2.6 Comparison of Alternatives and Environmental Consequences	Text under the Single Event Noise category in Table 2.p changed. For the construction footprint and maneuver area, EDZ changed from minor to moderate, DDZ changed from moderate to severe, and North Texas changed from minor to moderate.
Chapter 2 2.6 Comparison of Alternatives and Environmental Consequences	Text in Table 2.p under “socioeconomics, monetary” was changed from “beneficial” to “minor” for Alternatives 4 and 5.

CHAPTER 3

Section	Changes Made
Chapter 3	Text was modified to update terminology and to clarify descriptions.
Chapter 3 3.1.1 Organization	Text was added to clarify the division between primary and secondary resources.
Chapter 3 3.1.2.2 Climate regime for Donnelly Training Area East	Statistics on average monthly temperature, average annual wind speed, precipitation and snowfall were revised.
Chapter 3 3.2.1.1.2 Soil Characteristics by Alternative	Figure 3.b was added to the appendix. Text was added describing the figure and clarifying the locations of soil associations by alternatives. All subsequent figures were renamed.
Chapter 3 3.2.1.1.2 Soil Characteristics by Alternative	Information on drainage properties and infiltration rates was added to Eddy Drop Zone, Donnelly Drop Zone and North Texas Range alternatives.
Chapter 3 3.2.2.2.1 Floodplains by Alternative	Text was added to clarifying the Soil Conservation Service as part of the U.S. Department of Agriculture.
Chapter 3 Table 3.2.2.b	Text was modified to reflect that the BAX/CACTF would not be built within the Delta River floodplain.
Chapter 3 3.2.7.5.1 National Register of Historic Places Eligibility Evaluations by Alternative	Text was updated from 7 archeological sites at Eddy Drop Zone to 5 sites.
Chapter 3 3.2.8.1.1 Terminal and En Route Airspace by Alternative	Text was clarified to explain that the entire Eddy Drop Zone construction and maneuver areas and a vast majority of the surface danger zone falls within Class D controlled airspace.
Chapter 3 3.2.8.2.1 Special Use Airspace by Alternative	Text was clarified to indicate that only the surface danger zone at Eddy Drop Zone falls within the Buffalo MOA, and that the range facilities would be located just outside of the MOA boundary.
Chapter 3 3.3.3.3.1 Wetlands Use Management	Text has been added to expand the definition of higher function wetlands.
Chapter 3 3.3.3.2.2 Wetland Types by Alternative	Reference to Cowardin et al. 1979 was removed from Eddy Drop Zone alternative description.

CHAPTER 4

Section	Changes Made
Chapter 4	Figure 3.b was added to the appendix and all subsequent figures were renamed.
Chapter 4 4.1.1 Organization	Text was added to clarify the division between primary and secondary resources.
Chapter 4 4.2.1.1.2 Impacts Common to All Alternatives	Text was added to clarify the process and implementation of a storm water pollution prevention plan for this project.
Chapter 4 4.2.1.1.4 Impacts Attributed to Alternative 2 (Eddy Drop Zone)	Information was added on the potential for soil compaction as a result of off road vehicle maneuvers.
Table 4.2.2.a	Text was modified to reflect that the BAX/CACTF would not be built within the Delta River floodplain.
Chapter 4 4.2.2.1.4 Impacts Attributed to Alternative 2 (Eddy Drop Zone)	Clarifying text on vegetation clearing within the construction footprint and maneuver area was added.
Chapter 4 4.2.2.1.4 Impacts Attributed to Alternative 2 (Eddy Drop Zone)	Text was added to clarify that design features at Eddy Drop Zone will also be constructed to run east and west, not solely north and south.
Chapter 4 4.2.2.1.4 Impacts Attributed to Alternative 2 (Eddy Drop Zone)	Text was added explaining why limited areas of compacted soil would not adversely impact infiltration at Eddy Drop Zone.
Chapter 4 4.2.2.1.4 Impacts Attributed to Alternative 2 (Eddy Drop Zone)	Text was added to clarify why culverts would not be adversely impacted by aufeis formation at Eddy Drop Zone.
Chapter 4 4.2.2.2.2 Proposed Mitigation	An additional measure was added relating to compliance with National Pollutant Discharge Elimination System (NPDES) permitting requirements.
Chapter 4 4.2.4.1 Description of Methodology	Text describing moderate and severe noise impacts was re-defined.
Chapter 4 4.2.4.2 Comparison of Alternatives	Text under the Single Event Noise category in Table 4.2.4.e changed. For the construction footprint and maneuver area, Eddy Drop Zone changed from minor to moderate, Donnelly Drop Zone changed from moderate to severe, and North Texas changed from minor to moderate.

Section	Changes Made
Chapter 4 4.2.6.1.2 Impacts Common to All Alternatives	Text was added concerning effects of human disturbance on moose.
Chapter 4 4.2.7.1.1 Description of Methodology	Data in Table 4.2.7.a changed. For the Eddy Drop Zone BAX, the sites determined eligible for NRHP within the construction footprint changed from 0 to 1, and the maneuver area changed from 1 to 0. For the sites determined not eligible, the construction footprint changed from 0 to 2, and the maneuver area was changed from 6 to 2.
Chapter 4 4.2.8.1.4 Impacts Attributed to Alternative 2 (Eddy Drop Zone)	Text was clarified to explain that the entire Eddy Drop Zone construction and maneuver areas and a vast majority of the surface danger zone falls within Class D controlled airspace.
Chapter 4 4.2.8.1.4 Impacts Attributed to Alternative 2 (Eddy Drop Zone)	Text was clarified to indicate that only the surface danger zone at Eddy Drop Zone falls within the Buffalo MOA, and that the range facilities would be located just outside of the MOA boundary.
Chapter 4 4.2.8.2.2 Proposed Mitigation	Additional measures were proposed.
Chapter 4 4.3.1.2.2 Proposed Mitigation	Text was added to evaluate the need for air quality permits.
Chapter 4 4.3.3.1.1 Description of Methodology	Information in Table 4.3.3.b changed for Eddy Drop Zone. The total fill in wetlands changed from 24 acres to 26 acres.
Chapter 4 4.3.6.1.1 Description of Methodology	Text in Table 4.3.6.a changed. For Alternatives 4 and 5, the monetary impact was changed from beneficial to minor. Text was added on the impact of losing Cold Regions Test Center (CRTC) activities.
Chapter 4 4.3.6.1.6 Impacts Attributed to Alternative 4	Text was added on the impact of this project to CRTC and to the Delta Junction economy.
Chapter 4 4.3.6.1.7 Impacts Attributed to Alternative 5	Text was added on the impact of this project to CRTC and to the Delta Junction economy.
Chapter 4 4.3.10 Cumulative Effects Analysis	Text under the Single Event Noise category in Table 4.3.10.b changed. For the construction footprint and maneuver area, Eddy Drop Zone changed from minor to moderate, Donnelly Drop Zone changed from moderate to severe, and North Texas changed from minor to moderate.
Chapter 4 4.3.10 Cumulative Effects Analysis	The text in Table 4.3.10.b was changed under Socioeconomics. The monetary impacts for Alternatives 4 and 5 were changed from beneficial to minor.

CHAPTER 5 THROUGH APPENDIX

Section	Changes Made
Chapter 5, List of Preparers and Contributors	Text modified to reflect changes in number of years of experience and job positions.
Chapter 5, List of Preparers and Contributors	Added Calvin Bagley, Associate Director of CEMML, to the list of contributors.
Chapter 6 Bibliography	New or missing references were added to the bibliography; references were changed or deleted to reflect changes in the document.
Chapter 9 Summary of Comments and Responses	A new chapter was added to summarize review comments and Army responses.
Appendix Figures	Figure 3.b, Soils on Donnelly Training Area East, was added. All subsequent figures were renamed.
Appendix Draft Finding of No Practicable Alternative	Text referring to the SDEIS was modified to refer to the Final EIS.
Appendix Draft Finding of No Practicable Alternative	The total fill in wetlands changed from 24 acres to 26 acres.
Appendix Draft Finding of No Practicable Alternative	The following text was deleted from Footnote 1: “reviews and considers all public comments on the SDEIS and this draft finding and”.
Appendix Draft Finding of No Practicable Alternative	A footnote was added referencing Section 4.3.6, Socioeconomics.

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