

Joint Pacific Alaska Range Complex



Environmental Impact Statement for the Modernization and Enhancement of Ranges, Airspace, and Training Areas in the Joint Pacific Alaska Range Complex in Alaska

Volume I – Executive Summary, Chapters 1 through 10

Final

March 2013



How to Use This Document

Our goal is to provide a reader-friendly document. The organization of this Final Environmental Impact Statement (Final EIS) is shown below.

VOLUME I

Table of Contents, List of Figures, List of Tables, List of Acronyms, and Executive Summary

Chapter 1 Purpose and Need for Joint Pacific Alaska Range Complex (JPARC) Proposed Actions:

Explains the reasons for the proposed enhancements and modernizations and the screening criteria used to select proposals from the *JPARC Master Plan* for this EIS. Also described is the Environmental Impact Analysis Process, the consultation and public involvement processes, a table of where scoping comments are addressed, and a comparative analysis of the anticipated impacts of the proposed actions and alternatives.

Chapter 2 Description of Proposed Action and Alternatives: An overview of the JPARC EIS definitive and programmatic proposed actions and alternatives.

Chapter 3 Affected Environment and Environmental Consequences: Describes the environmental resources and areas that could potentially be affected by each proposed action, analysis methodology and potential impacts.

- Airspace Management and Use
- Noise
- Safety
- Air Quality
- Physical Resources
- Water Resources
- Hazardous Materials and Waste
- Biological Resources
- Cultural Resources
- Land Use
- Infrastructure and Transportation
- Socioeconomics
- Subsistence
- Environmental Justice

Fox 3 MOA Expansion and New Paxson MOA

Realistic Live Ordnance Delivery

Battle Area Complex (BAX) Restricted Area

Expand Restricted Area R-2205, including the Digital Multi-Purpose Training Range (DMPTR)

Night Joint Training

Unmanned Aerial Vehicle (UAV) Access

Enhanced Ground Maneuver Space

Tanana Flats Training Area (TFTA) Roadway Access

Joint Air-Ground Integration Complex (JAGIC)

Intermediate Staging Bases (ISBs)

Missile Live Fire for AIM-9 and AIM-120 in the Gulf and Alaska

Joint Precision Airdrop System (JPADS) Drop Zones

Chapter 4 Cumulative Impacts and Secondary Effects: Summarizes the aggregated effects of multiple JPARC proposed actions, as well as the cumulative effects associated with other past, present, and reasonably foreseeable military and civilian actions.

Chapter 5 Other Considerations Required by NEPA: Discussions on short-term use of man's environment in relation to long-term productivity and irreversible or irretrievable commitment of resources.

Chapter 6:
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Chapter 7:
List of Preparers

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Glossary

Chapter 10:
EIS Distribution List and Repositories

APPENDICES

VOLUME II

Appendix A Public Scoping Summary: Describes the public review process during EIS scoping.

Appendix B Resource Definitions and Regulatory Settings: Provides applicable regulations related to JPARC enhancements.

Appendix C Conflict of Interest Statements: Contains disclosure statements from consulting firms supporting this EIS, stating financial or other interests that might cause a conflict of interest.

Appendices D-J: Technical appendices that include reports and information that support the EIS analyses.

Appendix K Mitigations: A discussion of existing and proposed measures to minimize impacts.

Appendix L Copies of Agency and Government Correspondence: Copies of letters exchanged with government agencies, including consultation, coordination, and cooperating agency correspondence.

VOLUME III

Appendix M Draft EIS Review Public Process and Public Hearing Summary: Draft EIS and public hearing notification, informational, and summary materials.

Appendix N Draft EIS Comments and Responses: Copies of Draft EIS public comments and hearing transcripts, plus responses to substantive comments.

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List of Acronyms

Volume I

LIST OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS

2,4-DNT	2,4 dinitrotoulene	ANG	Air National Guard
11th AF	11th Air Force	ANILCA	Alaska National Interest Lands Conservation Act
354 FW	354th Fighter Wing	AOHA	Alaska Office of History and Archaeology
AAC	Alaska Administrative Code	APEX	Alaska Predator Ecosystem Experiment
AADT	annual average daily traffic	AR	Army Regulation
AAF	Army Airfield	ARTCC	Air Route Traffic Control Center
AAR	after-action review	ASCG Inc.	ASCG Incorporated of Alaska
AAW	Anti-Air Warfare	ATC	Air Traffic Control
ABCT	Airborne Brigade Combat Team	ATCAA	Air Traffic Control Assigned Airspace
ACMAC	Alaska Civil/Military Aviation Council	BASH	bird/wildlife-aircraft strike hazard
ACMI	air combat maneuvering instrumentation	BAX	Battle Area Complex
ACMP	Alaska Coastal Management Program	BIA	Bureau of Indian Affairs
ADEC	Alaska Department of Environmental Conservation	BLM	Bureau of Land Management
ADFG	Alaska Department of Fish and Game	BMP	best management practice
ADNR	Alaska Department of Natural Resources	BRTA	Black Rapids Training Area
ADOT&PF	Alaska Department of Transportation and Public Facilities	CAB	Combat Aviation Brigade
AFB	Air Force Base	CACTF	Combined Arms Collective Training Facility
AFI	Air Force Instruction	cal	caliber
AFOSH	Air Force Occupational and Environmental Safety, Fire Protection and Health	CALFEX	Combined Arms Live-Fire Exercises
AGL	above ground level	CAS	Close Air Support
AGM	air-to-ground missile	CDNL	C-weighted day-night average sound level
AHERA	Asbestos Hazard Emergency Response Act	CDP	census-designated place
AIRFA	American Indian Religious Freedom Act	CEQ	Council on Environmental Quality
AK	Alaska	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
ALCOM	Alaskan Command	CFA	Controlled Firing Area
AMHS	Alaska Marine Highway System	CFR	Code of Federal Regulations
ANCSA	Alaska Native Claims Settlement Act	CH ₄	Methane
		CHA	Critical Habitat Area

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CO	carbon monoxide	EA	environmental assessment
CO ₂ e	carbon dioxide equivalent	EB	Engineer Brigade
COA	Certificate of Authorization	EEZ	Exclusive Economic Zone
COMSUBPAC	Commander Submarine Force, U.S. Pacific Fleet 2	EFH	Essential Fish Habitat
CONOPS	Concept of Operations	EGMS	Enhanced Access to Ground Maneuver Space
CONUS	contiguous United States	EIAP	environmental impact analysis process
Councils	Fishery Management Councils	EIS	environmental impact statement
CRMP	Cultural Resources Management Plan	EISA	Energy Independence and Security Act
CRTC	Cold Regions Test Center	EN BDE	Engineer Brigade
CSP	Contaminated Sites Program	EO	Executive Order
CUA	Controlled Use Area	EPA	U.S. Environmental Protection Agency
CWA	Clean Water Act	EPCRA	Emergency Planning and Community Right-to-Know Act
dB	decibel		
dB PK 15(met)	single-event peak level exceeded by 15 percent of events	ERC	Eielson Range Control
DCED	Department of Commerce and Economic Development	ESA	Endangered Species Act
DERP	Defense Environmental Restoration Program	ESU	Evolutionary Significant Unit
DJMA	Delta Junction Management Area	ETAP	Eastern Tanana Area Plan
DMPTR	Digital Multi-Purpose Training Range	FAA	Federal Aviation Administration
DNL	day-night average sound level	FAR	Federal Aviation Regulation
DoD	U.S. Department of Defense	FCC	Federal Communications Commission
DODIC	U.S. Department of Defense Identification Code	FHWA	Federal Highway Administration
DOI	U.S. Department of the Interior	FIA	forest inventory and analysis
DOPAA	Description of Proposed Action and Alternatives	<i>Final Alaska MOA EIS</i>	Final Environmental Impact Statement, Alaska Military Operations Areas
DOT/AAHSTO	Department of Transportation/American Association of State Highway and Transportation Officials	FL	flight level
DPS	Distinct Population Segment	FNSB	Fairbanks North Star Borough
DTA	Donnelly Training Area	FOF	Force-on-Force
DZ	Drop Zone	FONSI	Finding of No Significant Impact
		FOT	Force-on-Target
		Fox 3/Paxon MOA	Fox 3 MOA Expansion and New Paxon MOA
		FRTR	Full Range Training Round

List of Acronyms, Abbreviations, and Symbols

FSO	Full-Spectrum Operations	IRP	Installation Restoration Program (DoD)
FSS	Flight Service Station	ISB	Intermediate Staging Base
FTX	field training exercises	ISR	Intelligence Surveillance Reconnaissance
GAP	Gulf APEX Predator-Prey Project	ITAM	Integrated Training Area Management
GBU	Guided Bomb Unit	JAGIC	Joint Air–Ground Integration Complex
GHG	greenhouse gas	JBER	Joint Base Elmendorf-Richardson; combination of Elmendorf AFB and Fort Richardson
GIS	geographic information system	JCALF	Joint Combined Arms Live Fire
GMU	Game Management Unit	JDAM	Joint Direct Attack Munition
GOA	Gulf of Alaska	JIIM	Joint Interagency, Intergovernmental, and Multinational
<i>GOA EIS/OEIS</i>	<i>The Gulf of Alaska Navy Training Activities Final Environmental Impact Statement/Overseas Environmental Impact Statement</i>	JLUS	Joint Land Use Study
GPS	global positioning system	JPADS	Joint Precision Airdrop System
Ground Maneuver	Enhanced Access to Ground Maneuver Space	JPARC	Joint Pacific Alaska Range Complex
GRTA	Gerstle River Training Area	JPARC Master \ Plan	JPARC Master Plan, August 2011
Guidance	“DoD American Indian/Alaska Native Policy: Alaska Implementation Guidance”	<i>JPARC Modernization and Enhancement EIS</i>	<i>Environmental Impact Statement for the Modernization and Enhancement of Ranges, Airspace, and Training Areas in the Joint Pacific Alaska Range Complex in Alaska</i>
GVEA	Golden Valley Electric Association	KAC	Knik Arm Crossing
HAMMR	High Angle Mountain Marksmanship Range	km	kilometer
HAP	hazardous air pollutant	km ²	square kilometers
HMX	High Melting Explosive	KTAS	knots true airspeed
HTRW	hazardous, toxic, and radioactive waste	kV	kilovolt
IBCT	infantry brigade combat team	LAS	Land Administration System
ICDS	Improved Container Delivery System	LATN	low-altitude tactical navigation
ICRMP	Integrated Cultural Resources Management Plan	lb	pound
IFR	Instrument Flight Rules	L _{dnmr}	onset rate—adjusted day-night average sound level
INRMP	Integrated Natural Resources Management Plan	LFE	large force exercise
IR	Illumination Round		
IRO	Installation Range Office		

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LGB	laser-guided bomb	NEPA	National Environmental Policy Act
L _{max}	maximum noise level	NHPA	National Historic Preservation Act
LOS	Level of Service	NJT	Night Joint Training
LRAM	Land Rehabilitation and Maintenance	NLR	noise level reduction
LUPZ	Land Use Planning Zone	NM	nautical mile
LVC	Live-virtual-constructive	NM ²	square nautical mile
M	mach	NMFS	National Marine Fisheries Service
MBTA	Migratory Bird Treaty Act	NOAA	National Oceanic and Atmospheric Administration
MDS	mission design series	NOI	Notice of Intent
MEA	Minimum Enroute Altitude	NORAD	North American Aerospace Defense Command
MFE	major flying exercise	NOTAM	Notice to Airmen
MG	machine gun	NOTMAR	Notice to Mariners
MGS	mobile gun system	NO _x	nitrogen oxides
Missile Live-Fire	Missile Live-Fire for AIM-9 and AIM-120 in the Gulf of Alaska	NPDES	National Pollutant Discharge Elimination System
MK	mark	NPFMC	North Pacific Fishery Management Council
mm	millimeter	NRCS	National Resources Conservation Service
MMPA	Marine Mammal Protection Act	OCRM	Office of Ocean and Coastal Resource Management
MOA	Military Operations Area	OEIS	Overseas Environmental Impact Statement
MOCA	Minimum Obstacle Clearance Altitude	ORRV	off-road recreational vehicle
MOO	Mineral Opening Order	ORV	off-road vehicle
MOU	Memorandum of Understanding	PA	Programmatic Agreement
MOUT	Military Operations on Urban Terrain	PACOM	U.S. Pacific Command
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act of 1976	PCB	polychlorinated biphenyl
MSL	(above) mean sea level	PLO	Public Land Order
MTR	Military Training Route	PM ₁₀	particulate matter 10 microns or less in diameter
MVA	megavolt ampere	PM _{2.5}	particulate matter 2.5 microns or less in diameter
MW	megawatts	POL	petroleum, oil, and lubricant products
MWe	megawatts electrical	ppm	parts per million
N/A	not applicable	PRMP/FEIS	Proposed Resource Management Plan/Final
NAAQS	National Ambient Air Quality Standards		
National Register	National Register of Historic Places		
NCA	Northern Control Area		

List of Acronyms, Abbreviations, and Symbols

	Environmental Impact Statement	STIP	Statewide Transportation Improvement Program
PSD	prevention of significant deterioration	SUA	Special Use Airspace
PUA	Public Use Area	SUAIS	Special Use Airspace Information Service
R-	Restricted Area; e.g., Restricted Area 2202 (R-2202)	SWPPP	Storm Water Pollution Prevention Plan
RCRA	Resource Conservation and Recovery Act	TA	Training Area
RDX	Royal Demolition Explosive	TCP	traditional cultural property
RF	radio frequency	TFTA	Tanana Flats Training Area
RLOD	Realistic Live Ordnance Delivery	TFTA Access	Tanana Flats Training Area Roadway Access
RMA	Resource Management Area	TMAA	Temporary Maritime Activities Area
RMP	Resource Management Plan	TNT	trinitrotoluene
RNAV	Area Navigation	TOW	tube-launched, optically-tracked, wire-command data link, guided missile
ROD	Record of Decision	TPT	target practice tracer
ROI	region of influence	TRACON	Terminal Radar Approach Control
RPA	remotely piloted aircraft	TRI	Toxic Release Inventory
RS	Revised Statute	TRI-DDS	Toxic Release Inventory Data Delivery System
RST	(indicates a trail number)	TSCA	Toxic Substances Control Act
RTLA	Range and Training Land Assessment	U.S.C.	United States Code
S&I	flare safe & initiation (device)	UAS	unmanned aircraft system
SBCT	Stryker Brigade Combat Team	UAV	Unmanned Aerial Vehicle
SDB	Small Diameter Bomb	UAV Access	Unmanned Aerial Vehicle Access
SDZ	surface danger zone	UNK	Unknown
SEL	sound exposure level	USACE	U.S. Army Corps of Engineers
SFR	State Forest	USAGAK	U.S. Army Garrison-Alaska (now renamed USAG-FWA)
SHPO	State Historic Preservation Officer	USAG-FWA	U.S. Army Garrison Fort Wainwright, Alaska
SI	International System of Units	USARAK	U.S. Army Alaska
SO ₂	sulfur dioxide	USARTRAK	Army Recreational Tracking System
SOP	standard operating procedure	USFS	U.S. Forest Service
SP	State Park	USFWS	U.S. Fish and Wildlife Service
SRA	State Recreation Area		
SRC	State Recreation Center		
SRR	State Recreation River		
SRS	State Recreation Site		
STC	Sound Transmission Class		

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USGS	U.S. Geological Survey
UST	underground storage tank
UXO	unexploded ordnance
VFR	Visual Flight Rules
VMT	vehicle miles of travel
VOC	volatile organic compound
VORTAC	Fairbanks navigational aid
VR-	Visual Flight Rules Route
W-	Warning Area; e.g., Warning Area 612 (W-612)
WDZ	weapon danger zone
YTA	Yukon Training Area