



# Final Environmental Impact Statement Commonwealth of the Northern Mariana Islands Joint Military Training



**June 2026**  
EISX-007-17-XMC-1747255459



This Final EIS is compliant with Section 508 of the Rehabilitation Act.

This allows assistive technology to be used to obtain the available information from the document. However, accessibility is limited to a descriptive title for some graphics, figures, tables, images, and attachments. Individuals who require assistance may submit a request through the Section 508 link on the project website at [CNMIJointMilitaryTrainingEIS.com](http://CNMIJointMilitaryTrainingEIS.com).

## TABLE OF CONTENTS

<b>FOREWORD</b> .....	<b>F-i</b>
<b>ABSTRACT</b> .....	<b>ABSTRACT-i</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>ES-1</b>
ES.1 Introduction .....	ES-1
ES.2 Purpose and Need for the Proposed Action.....	ES-1
ES.3 Proposed Action and Alternatives .....	ES-2
ES.3.1 No Action Alternative .....	ES-2
ES.3.2 Alternative 1 .....	ES-3
ES.3.3 Alternative 2 .....	ES-3
ES.4 Summary of Environmental Effects .....	ES-3
ES.5 Cumulative Impacts .....	ES-3
ES.6 Interagency Coordination.....	ES-5
ES.7 Public Involvement .....	ES-5
<b>1 PURPOSE AND NEED FOR PROPOSED ACTION</b> .....	<b>1-1</b>
1.1 Introduction .....	1-1
1.2 Purpose and Need.....	1-5
1.2.1 Purpose of the Proposed Action .....	1-5
1.2.2 Need for the Proposed Action.....	1-6
1.3 Location and Current Military Training .....	1-6
1.3.1 The CNMI .....	1-6
1.3.2 The Island of Tinian .....	1-7
1.4 NEPA Environmental Review Process and Public Involvement .....	1-8
1.4.1 2015 Draft EIS/OEIS NEPA Process .....	1-8
1.4.2 Revised Draft EIS and CNMI Coordination .....	1-9
1.4.3 Final EIS.....	1-11
1.4.4 Record of Decision.....	1-11
1.5 Interagency Coordination.....	1-11
1.5.1 Federal Cooperating Agencies.....	1-12
1.5.2 Airspace and Aviation.....	1-12
1.5.3 Cultural Resources .....	1-13
1.5.4 Biological Resources.....	1-13
<b>2 PROPOSED ACTION AND ALTERNATIVES</b> .....	<b>2-1</b>
2.1 Proposed Action .....	2-1
2.1.1 Distributed Operations Training in a Live-Virtual-Constructive Environment .....	2-3
2.1.2 Military Lease Area Training and Proposed Training Events .....	2-4
2.1.3 Ground Training.....	2-8
2.1.4 Aviation Training .....	2-9
2.1.5 Training Infrastructure .....	2-13
2.1.6 Live-Fire Range Safety Areas.....	2-21
2.1.7 Ammunition Holding Areas .....	2-23
2.1.8 Range Control: Scheduling, Environmental Management, and Public Access .....	2-26
2.1.9 Base Camp and Related Support Facilities .....	2-29
2.1.10 Biosecurity Protocols and Facilities .....	2-33
2.1.11 Emergency Services.....	2-34
2.1.12 Phased Implementation of Construction and Training .....	2-34
2.2 Alternatives Considered and Evaluated.....	2-36
2.2.1 No Action Alternative .....	2-39

2.2.2	Alternative 1 – Enhanced Training and Range Infrastructure .....	2-40
2.2.3	Alternative 2 – Training and Range Infrastructure .....	2-41
2.2.4	Preferred Alternative .....	2-41
2.3	Management Measures .....	2-41
2.4	Alternatives Considered but not Carried Forward for Analysis .....	2-42
2.4.1	Simulated Training Exclusively .....	2-43
2.4.2	Other DoD Training Locations within the CNMI.....	2-43
2.4.3	Training Locations Outside of the CNMI .....	2-43
2.4.4	2015 Draft EIS/OEIS Alternatives .....	2-45
<b>3</b>	<b>EXISTING ENVIRONMENT.....</b>	<b>3-1</b>
3.1	Public Access .....	3-1
3.2	Land Use and Recreation .....	3-1
3.2.1	Land Uses and Recreation Outside of the Military Lease Area .....	3-4
3.2.2	Land Uses and Recreation within the Military Lease Area .....	3-4
3.3	Socioeconomics.....	3-6
3.3.1	Population and Demographic Composition .....	3-7
3.3.2	Economic Activity .....	3-8
3.3.3	Public Services .....	3-13
3.4	Biological Resources.....	3-14
3.4.1	Terrestrial Vegetation .....	3-14
3.4.2	Terrestrial Wildlife.....	3-19
3.4.3	Terrestrial Special Status Species .....	3-21
3.4.4	Marine Communities .....	3-29
3.4.5	Marine Special Status Species .....	3-30
3.5	Cultural Resources .....	3-39
3.5.1	Historical Overview .....	3-43
3.5.2	Previously Recorded Resources .....	3-43
3.6	Visual Resources .....	3-46
3.7	Transportation .....	3-56
3.7.1	Ground Transportation.....	3-56
3.7.2	Water Transportation .....	3-59
3.7.3	Air Transportation.....	3-60
3.8	Noise.....	3-63
3.8.1	Francisco Manglona Borja / Tinian International Airport .....	3-67
3.8.2	Military Training in the Military Lease Area.....	3-68
3.9	Air Quality.....	3-71
3.9.1	Sources of Air Emissions.....	3-73
3.9.2	Greenhouse Gas Emissions.....	3-74
3.10	Public Health and Safety.....	3-74
3.10.1	Ground Training.....	3-75
3.10.2	Aviation Training and Civilian Aviation.....	3-76
3.10.3	Radio Frequency and Microwave Emissions .....	3-76
3.10.4	Unexploded Ordnance and Discarded Military Munitions.....	3-76
3.10.5	Hazardous Materials and Waste .....	3-77
3.10.6	Natural Hazards.....	3-78
3.10.7	Protection of Children.....	3-80
3.11	Utilities .....	3-80
3.11.1	Potable, Non-Potable, and Groundwater Water Supply .....	3-80
3.11.2	Wastewater Treatment .....	3-83

3.11.3	Solid Waste and Hazardous Waste.....	3-83
3.11.4	Green Waste.....	3-84
3.11.5	Stormwater Management.....	3-84
3.11.6	Electrical Power System.....	3-85
3.11.7	Communications.....	3-87
3.12	Topography, Geology, and Soils.....	3-87
3.12.1	Topography.....	3-87
3.12.2	Geology.....	3-89
3.12.3	Soils.....	3-89
3.13	Groundwater and Hydrology.....	3-93
3.13.1	Groundwater Availability.....	3-93
3.13.2	Groundwater Quality.....	3-95
3.14	Surface Waters and Wetlands.....	3-97
3.14.1	Surface Waters.....	3-97
3.14.2	Wetlands.....	3-97
3.14.3	Water Quality.....	3-99
<b>4</b>	<b>ENVIRONMENTAL CONSEQUENCES.....</b>	<b>4-1</b>
4.1	Public Access.....	4-1
4.1.1	Approach to Analysis.....	4-1
4.1.2	No Action Alternative.....	4-1
4.1.3	Alternative 1.....	4-2
4.1.4	Alternative 2.....	4-8
4.2	Land Use and Recreation.....	4-9
4.2.1	Approach to Analysis.....	4-9
4.2.2	No Action Alternative.....	4-9
4.2.3	Alternative 1.....	4-9
4.2.4	Alternative 2.....	4-15
4.3	Socioeconomics.....	4-16
4.3.1	Approach to Analysis.....	4-16
4.3.2	No Action Alternative.....	4-16
4.3.3	Alternative 1.....	4-18
4.3.4	Alternative 2.....	4-25
4.4	Biological Resources.....	4-26
4.4.1	Approach to Analysis.....	4-26
4.4.2	No Action Alternative.....	4-26
4.4.3	Alternative 1.....	4-26
4.4.4	Alternative 2.....	4-49
4.5	Cultural Resources.....	4-49
4.5.1	Approach to Analysis.....	4-49
4.5.2	No Action Alternative.....	4-51
4.5.3	Alternative 1.....	4-51
4.5.4	Alternative 2.....	4-58
4.6	Visual Resources.....	4-58
4.6.1	Approach to Analysis.....	4-58
4.6.2	No Action Alternative.....	4-61
4.6.3	Alternative 1 and Alternative 2.....	4-61
4.7	Transportation.....	4-68
4.7.1	Approach to Analysis.....	4-68
4.7.2	No Action Alternative.....	4-69

	4.7.3	Alternative 1 .....	4-69
	4.7.4	Alternative 2 .....	4-75
4.8	Noise .....		4-75
	4.8.1	Approach to Analysis.....	4-75
	4.8.2	No Action Alternative .....	4-79
	4.8.3	Alternative 1 .....	4-80
	4.8.4	Alternative 2 .....	4-97
4.9	Air Quality .....		4-102
	4.9.1	Approach to Analysis.....	4-102
	4.9.2	No Action Alternative .....	4-104
	4.9.3	Alternative 1 .....	4-106
	4.9.4	Alternative 2 .....	4-112
4.10	Public Health and Safety .....		4-115
	4.10.1	Approach to Analysis.....	4-115
	4.10.2	No Action Alternative .....	4-116
	4.10.3	Alternative 1 .....	4-116
	4.10.4	Alternative 2 .....	4-125
4.11	Utilities .....		4-125
	4.11.1	Approach to Analysis.....	4-125
	4.11.2	No Action Alternative .....	4-126
	4.11.3	Alternative 1 .....	4-126
	4.11.4	Alternative 2 .....	4-140
4.12	Topography, Geology, and Soils .....		4-141
	4.12.1	Approach to Analysis.....	4-141
	4.12.2	No Action Alternative .....	4-141
	4.12.3	Alternative 1 .....	4-141
	4.12.4	Alternative 2 .....	4-147
4.13	Groundwater and Hydrology .....		4-147
	4.13.1	Approach to Analysis.....	4-147
	4.13.2	No Action Alternative .....	4-147
	4.13.3	Alternative 1 .....	4-147
	4.13.4	Alternative 2 .....	4-150
4.14	Surface Waters and Wetlands .....		4-150
	4.14.1	Approach to Analysis.....	4-150
	4.14.2	No Action Alternative .....	4-151
	4.14.3	Alternative 1 .....	4-151
	4.14.4	Alternative 2 .....	4-155
4.15	Cumulative Impacts .....		4-155
	4.15.1	Public Access .....	4-158
	4.15.2	Land Use and Recreation .....	4-159
	4.15.3	Socioeconomics.....	4-159
	4.15.4	Biological Resources.....	4-160
	4.15.5	Cultural Resources .....	4-160
	4.15.6	Visual Resources .....	4-161
	4.15.7	Transportation .....	4-161
	4.15.8	Noise.....	4-162
	4.15.9	Air Quality.....	4-162
	4.15.10	Public Health and Safety.....	4-163
	4.15.11	Utilities .....	4-163

4.15.12	Topography, Geology, and Soils .....	4-164
4.15.13	Groundwater and Hydrology .....	4-164
4.15.14	Surface Waters and Wetlands .....	4-165
<b>5</b>	<b>ADDITIONAL CONSIDERATIONS .....</b>	<b>5-1</b>
5.1	Consistency with Other Laws .....	5-1
5.1.1	Coastal Zone Management Act Compliance.....	5-1
5.1.2	Commonwealth of the Northern Mariana Islands Requirements .....	5-1
5.2	Irreversible or Irretrievable Commitments of Resources.....	5-3
5.3	Relationship Between Short-Term Use of the Environment and Long-Term Productivity 5-4	
<b>6</b>	<b>REFERENCES.....</b>	<b>6-1</b>
6.1	Executive Summary .....	6-1
6.2	Chapter 1 .....	6-1
6.3	Chapter 2 .....	6-1
6.4	Chapter 3 .....	6-2
6.4.1	Public Access .....	6-2
6.4.2	Land Use and Recreation .....	6-2
6.4.3	Socioeconomics.....	6-3
6.4.4	Biological Resources.....	6-5
6.4.5	Cultural Resources .....	6-13
6.4.6	Visual Resources .....	6-13
6.4.7	Transportation .....	6-13
6.4.8	Noise.....	6-14
6.4.9	Air Quality.....	6-15
6.4.10	Public Health and Safety.....	6-15
6.4.11	Utilities .....	6-17
6.4.12	Topography, Geology, and Soils .....	6-18
6.4.13	Groundwater and Hydrology .....	6-18
6.4.14	Surface Waters and Wetlands.....	6-19
6.5	Chapter 4 .....	6-20
6.5.1	Public Access .....	6-20
6.5.2	Land Use and Recreation .....	6-20
6.5.3	Socioeconomics.....	6-20
6.5.4	Biological Resources.....	6-20
6.5.5	Cultural Resources .....	6-22
6.5.6	Visual Resources .....	6-22
6.5.7	Transportation .....	6-22
6.5.8	Noise.....	6-23
6.5.9	Air Quality.....	6-23
6.5.10	Public Health and Safety.....	6-23
6.5.11	Utilities .....	6-24
6.5.12	Topography, Geology, and Soils .....	6-24
6.5.13	Groundwater and Hydrology .....	6-25
6.5.14	Surface Waters and Wetlands.....	6-26
6.5.15	Cumulative Impacts .....	6-26
6.5.16	Chapter 5 .....	6-27
<b>7</b>	<b>LIST OF PREPARERS.....</b>	<b>7-1</b>
<b>8</b>	<b>DISTRIBUTION LIST.....</b>	<b>8-5</b>

8.1	Parties Receiving Notice of Availability of the Revised Draft and Final Environmental Impact Statement.....	8-5
8.1.1	Elected Officials – CNMI.....	8-5
8.1.2	Federal Agencies.....	8-5
8.1.3	CNMI Agencies.....	8-6
8.2	Libraries Receiving Hard Copy.....	8-6

## LIST OF FIGURES

Figure ES-1	Proposed Action Elements.....	ES-4
Figure 1.1-1	Location of the Northern Mariana Islands in the Western Pacific.....	1-2
Figure 1.1-2	Proposed Action Location.....	1-3
Figure 1.4-1	NEPA Process.....	1-9
Figure 2.1-1	Military Lease Area with Proposed Action Features.....	2-2
Figure 2.1-2	Military Lease Area Range Complex and Training Areas.....	2-5
Figure 2.1-3	Existing and Proposed No Training Areas within the Military Lease Area.....	2-6
Figure 2.1-4	AM2 Matting.....	2-10
Figure 2.1-5	Location for AM2 Matting at North Field.....	2-12
Figure 2.1-6	Multi-Purpose Maneuver Range and Explosives Training Range Locations.....	2-14
Figure 2.1-7	Surface Radar Sites.....	2-17
Figure 2.1-8	Proposed Landing Zones and Drop Zone Location.....	2-20
Figure 2.1-9	Surface Danger Zones for Multi-Purpose Maneuver Range and Explosives Training Range.....	2-22
Figure 2.1-10	Ammunition Holding Area Explosive Safety Quantity Distance Arcs.....	2-25
Figure 2.1-11	Proposed Base Camp.....	2-32
Figure 3.2-1	Existing Land Uses and Land-Based Recreation Sites on Tinian.....	3-3
Figure 3.2-2	Tinian Popular Dive Sites.....	3-5
Figure 3.4-1	Plant Communities on Tinian (North).....	3-15
Figure 3.4-2	Plant Communities on Tinian (South).....	3-16
Figure 3.4-3	Occurrences of Federally Listed and CNMI-listed Species on Tinian.....	3-24
Figure 3.5-1	Area of Potential Effect.....	3-40
Figure 3.5-2	Cultural Resources Survey Coverage on Tinian.....	3-42
Figure 3.5-3	North Field National Historic Landmark and Contributing Features.....	3-44
Figure 3.6-1	Tinian Viewpoints and View Orientation.....	3-48
Figure 3.7-1	Existing Roads in and Near the Military Lease Area on Tinian.....	3-57
Figure 3.7-2	Local Flight Routes.....	3-62
Figure 3.8-1	Sound Levels from Typical Sources.....	3-64
Figure 3.8-2	Sensitive Noise Receptors on Tinian and Saipan.....	3-66
Figure 3.8-3	Baseline/No Action Alternative Modeled Noise Contours at TNI.....	3-69
Figure 3.9-1	Prevailing Wind Patterns for Tinian, based on the Wind Rose for Saipan International Airport.....	3-72

Figure 3.10-1	Special Flood Hazard Area Subject to Coastal High Hazard Flooding .....	3-79
Figure 3.11-1	Public Water System .....	3-81
Figure 3.11-2	Tinian Power Distribution .....	3-86
Figure 3.12-1	Tinian Topographic Map .....	3-88
Figure 3.12-2	Tinian Karst Features .....	3-90
Figure 3.12-3	Tinian Soils .....	3-91
Figure 3.12-4	Tinian Prime Farmland Soils .....	3-94
Figure 3.13-1	Tinian Groundwater Wells, Elevation, and Flow Direction .....	3-96
Figure 3.14-1	Tinian Surface Water and Wetland Features, Flood Zones, and Watersheds .....	3-98
Figure 4.1-1	Surface Danger Zones .....	4-3
Figure 4.1-2	Explosive Safety Quantity-Distance Arcs .....	4-5
Figure 4.2-1	Restricted (No Training) Areas Within the Military Lease Area.....	4-11
Figure 4.2-2	Proposed Action Features Within the Natural Resources Conservation Area .....	4-13
Figure 4.2-3	Proposed Action Features Near Tinian Dive Sites .....	4-14
Figure 4.4-1	Plant Communities and Proposed Action Features (North).....	4-29
Figure 4.4-2	Plant Communities and Proposed Action Features (Central) .....	4-30
Figure 4.4-3	Plant Communities and Proposed Action Features (South).....	4-31
Figure 4.4-4	Occurrences of Federally Listed Species and Proposed Restricted Areas on Tinian .....	4-38
Figure 4.6-1	Key Observation Points Selected for Visual Simulations .....	4-60
Figure 4.7-1	Road Network in the Military Training Area .....	4-71
Figure 4.8-1	Peak Sound Levels (Unweighted Decibels) from Small Arms Firing at the Multi- Purpose Maneuver Range .....	4-83
Figure 4.8-2	Peak Sound Levels (Unweighted Decibels) from Typical Explosive Equipment Detonation at the Multi-Purpose Maneuver Range .....	4-85
Figure 4.8-3	Peak Sound Levels (Unweighted Decibels) from a 40 Pound Net Explosive Weight Detonation at the Explosives Training Range .....	4-87
Figure 4.8-4	Peak Sound Levels (Unweighted Decibels) from a 10 Pounds Net Explosive Weight Detonation at the Explosives Training Range .....	4-88
Figure 4.8-5	Peak Sound Levels (Unweighted Decibels) from a 1.25 Pounds Net Explosive Weight Detonation at the Explosives Training Range .....	4-89
Figure 4.8-6	Day-Night Average Sound Level Contours (A-weighted Decibels) at TNI under Alternative 1 .....	4-92
Figure 4.8-7	Day-Night Average Sound Level Contours (A-weighted Decibels) in Military Lease Area under Alternative 1.....	4-93
Figure 4.8-8	Day-Night Average Sound Level Contours (A-weighted Decibels) at TNI under Alternative 2 .....	4-100
Figure 4.8-9	Day-Night Average Sound Level Contours (A-weighted Decibels) in Military Lease Area under Alternative 2.....	4-101
Figure 4.10-1	Surface Danger Zones .....	4-119
Figure 4.10-2	Ammunition Holding Area Explosive Safety Quantity-Distance Arcs .....	4-120
Figure 4.11-1	Water Infrastructure Included in Proposed Action.....	4-127

Figure 4.11-2	Electrical Power Distribution for Proposed Action.....	4-139
Figure 4.12-1	Karst Features in the Vicinity of the Project Area.....	4-144
Figure 4.12-2	Highly Erodible Soils and Prime Farmland Soils in the Project Area.....	4-146
Figure 4.14-1	Tinian Surface Water and Wetland Features, Flood Zones, and Watersheds .....	4-152

## LIST OF TABLES

Table ES-1	Summary of Environmental Impacts from Training and Construction on Tinian .....	ES-7
Table 1.5-1	Interagency Coordination: Agencies and Organizations.....	1-12
Table 2.1-1	Training Event Size Categories.....	2-8
Table 2.1-2	Representative Weapons and Ammunition Proposed for Live-Fire Ranges .....	2-13
Table 2.1-3	Summary of Range Control Duties and Activities .....	2-26
Table 2.2-1	Land-Based Training Activities Currently Occurring or Proposed on Tinian .....	2-36
Table 2.3-1	Proposed Management Measures .....	2-42
Table 3.2-1	Tinian Land.....	3-2
Table 3.3-1	Population of CNMI and Tinian, 1970-2020.....	3-7
Table 3.4-1	Plant Communities on Tinian and Within the Military Lease Area .....	3-17
Table 3.4-2	Occurrence of Terrestrial Federally Listed and CNMI-listed Species on Tinian.....	3-22
Table 3.4-3	Migratory Bird Treaty Act Bird Species Documented on Tinian Potentially Affected by the Proposed Action.....	3-28
Table 3.4-4	Federally Listed and CNMI-listed Marine Species that May Occur Around Tinian .....	3-33
Table 3.4-5	Essential Fish Habitat and Habitat Areas of Particular Concern for Bottomfish and Pelagic Management Unit Systems .....	3-38
Table 3.6-1	Description of Existing Tinian Views.....	3-49
Table 3.7-1	Primary Roads on Tinian Within and Outside the Military Lease Area.....	3-58
Table 3.7-2	Existing Operations at TNI .....	3-61
Table 3.8-1	Typical Outdoor Ambient Noise Levels.....	3-64
Table 3.8-2	Baseline/No Action Alternative Flight Operations at TNI.....	3-67
Table 3.8-3	Single Event Noise Levels (Sound Exposure Level and Maximum Noise Level) at Ground Level Underneath Common Military Aircraft Operations .....	3-70
Table 3.9-1	CNMI 2023 Greenhouse Gas Emissions Inventory .....	3-74
Table 3.11-1	Commonwealth Utilities Corporation Water Production from Maui Well Number 2.....	3-80
Table 3.11-2	Commonwealth Utilities Corporation Billed Water Demand.....	3-82
Table 3.12-1	Tinian Soil Classifications and Properties .....	3-92
Table 3.14-1	Impaired Coastal Waters on Tinian .....	3-100
Table 4.4-1	Plant Community Impacts under the Proposed Action .....	4-32
Table 4.4-2	Summary of Effects Determinations for Federally Listed Species on Tinian.....	4-39
Table 4.4-3	Sound Exposure Levels at Mariana Common Moorhen Wetlands Under Alternative 1 .....	4-39

Table 4.4-4	Sound Exposure Levels at Mariana Fruit Bat Colony Location .....	4-42
Table 4.4-5	Sound Exposure Levels at Green Turtle Nesting Beaches in the Military Lease Area.....	4-43
Table 4.6-1	Degree of Visual Contrast and Corresponding Impact Defined .....	4-61
Table 4.6-2	Evaluation of Proposed Action on Tinian Based on Visual Simulations .....	4-63
Table 4.7-1	Construction Assumptions and Estimated Number of Trips.....	4-73
Table 4.8-1	Noise Modeling Software.....	4-76
Table 4.8-2	Primary Metric for Significance Analysis and Additional Effects Metrics.....	4-78
Table 4.8-3	Percentage of Population Highly Annoyed by Small Arms Noise.....	4-81
Table 4.8-4	Peak Sound Levels for Common Noise Sources.....	4-82
Table 4.8-5	Peak Noise Levels (Unweighted Decibels) at Points of Interest on Tinian and Saipan from Explosives Detonations at Proposed Live-Fire Ranges .....	4-90
Table 4.8-6	Alternative 1 Aviation Training - Modeled Day-Night Average Noise Levels at Sensitive Receptors on Tinian.....	4-94
Table 4.8-7	Single Event Noise Levels (Sound Exposure Level and Maximum Sound Level) for Common Military Aircraft Operating Conditions .....	4-95
Table 4.8-8	Alternative 1 Aviation Training Maximum Noise Levels at Sensitive Receptors on Tinian and Saipan.....	4-95
Table 4.8-9	Alternative 2 Aviation Training - Modeled Day-Night Average Noise Levels at Sensitive Receptors on Tinian.....	4-98
Table 4.9-1	No Action Alternative Criteria Pollutant and Hazardous Air Pollutant Emissions from Training Events.....	4-105
Table 4.9-2	No Action Alternative Greenhouse Gas Annual Emissions .....	4-106
Table 4.9-3	Alternative 1 Criteria Pollutant and Hazardous Air Pollutant Emissions from Training Events.....	4-107
Table 4.9-4	Alternative 1 Criteria Pollutant and Hazardous Air Pollutant Emissions from Construction.....	4-108
Table 4.9-5	Alternative 1 Criteria Pollutant and Hazardous Air Pollutant Emissions from Stationary Sources .....	4-108
Table 4.9-6	Alternative 1 Criteria Pollutant and Hazardous Air Pollutant Annual Emissions (Maximum Construction Year and Training Events Occurring Concurrently).....	4-109
Table 4.9-7	Alternative 1 Greenhouse Gas Annual Emissions (Maximum Construction Year and Training Events Occurring Concurrently) .....	4-111
Table 4.9-8	Net Increase in Greenhouse Gas Emissions from Proposed Action as Compared to CNMI and U.S. Territory Greenhouse Gas Emissions Inventories.....	4-111
Table 4.9-9	Equivalency Examples for Maximum Net Annual Increases of Greenhouse Gas Emissions from Proposed Alternatives.....	4-112
Table 4.9-10	Alternative 2 Criteria Pollutant and Hazardous Air Pollutant Emissions from Training Events.....	4-113
Table 4.9-11	Alternative 2 Criteria Pollutant and Hazardous Air Pollutant Annual Emissions (Maximum Construction Year and Training Events Occurring Concurrently).....	4-114
Table 4.9-12	Alternative 2 Greenhouse Gas Annual Emissions (Maximum Construction Year and Training Events Occurring Concurrently) .....	4-115

Table 4.11-1	Average Day Water Demand on Commonwealth Utilities Corporation Water System from Training Events Under Alternative 1 .....	4-128
Table 4.11-2	Summary of Existing and Proposed Water Demands on Commonwealth Utilities Corporation Under Alternative 1 .....	4-129
Table 4.11-3	Wastewater Demand on Proposed Wastewater Infrastructure Under Alternative 1 .....	4-130
Table 4.11-4	Solid Waste During Operations Under Alternative 1 .....	4-131
Table 4.11-5	Construction and Demolition Waste Generated During Alternative 1 .....	4-133
Table 4.11-6	Projected Green Waste Generation During Construction Under Alternative 1.....	4-135
Table 4.11-7	Annual Electrical Power System Peak Demand and Capacity Under Alternative 1 .....	4-137
Table 4.12-1	Vegetation Maintenance Under Alternative 1 .....	4-143
Table 4.12-2	Construction Disturbance Under Alternative 1 .....	4-145
Table 4.13-1	Average Annual Water Demands at the Base Camp Under Alternative 1 .....	4-148
Table 4.13-2	Summary of Average Annual Water Demands on Tinian .....	4-148
Table 4.14-1	Nearest Distances from Surface Waters and Wetlands to Proposed Infrastructure and Training Facilities .....	4-154
Table 4.15-1	Present and Reasonably Foreseeable Future Actions.....	4-157
Table 4.15-2	Potential Management Measures Related to Utilities .....	4-164

## LIST OF APPENDICES

APPENDIX A	COOPERATING AGENCY, REGULATORY AGENCY, AND ELECTED OFFICIALS CORRESPONDENCE
APPENDIX B	2015 DRAFT EIS/OEIS COMMENT SUMMARY
APPENDIX C	TRAINING AND CONSTRUCTION ASSUMPTIONS
APPENDIX D	BEST MANAGEMENT PRACTICES, STANDARD OPERATING PROCEDURES, AND MINIMIZATION MEASURES
APPENDIX E	APPLICABLE FEDERAL AND LOCAL REGULATIONS AND LAND USE AGREEMENTS
APPENDIX F	EIS PUBLIC INVOLVEMENT MATERIALS
APPENDIX G	TERRESTRIAL BIOLOGY SURVEY REPORT
APPENDIX H	CULTURAL RESOURCES SUPPORTING INFORMATION
APPENDIX I	VISUAL SIMULATIONS
APPENDIX J	NOISE STUDY
APPENDIX K	AIR QUALITY EMISSIONS CALCULATIONS
APPENDIX L	EIS PUBLIC COMMENT RESPONSES
APPENDIX M	UTILITY STUDIES
APPENDIX N	COASTAL ZONE MANAGEMENT ACT (CZMA) FEDERAL CONSISTENCY DETERMINATION

## Acronyms and Abbreviations

<i>Acronym</i>	<i>Definition</i>
C.F.R.	Code of Federal Regulations
CJMT	CNMI Joint Military Training
CNMI	Commonwealth of the Northern Mariana Islands
DoD	Department of Defense
DON	Department of Navy
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
MCO	Marine Corps Order
MITT	Mariana Islands Training and Testing
NEPA	National Environmental Policy Act
OEIS	Overseas Environmental Impact Statement
TNI	Francisco Manglona Borja / Tinian International Airport
U.S.	United States
U.S.C.	United States Code
USMC	United States Marine Corps
USAGM	United States Agency for Global Media
UXO	Unexploded Ordnance