



Final

Environmental Impact Statement

GUAM AND CNMI MILITARY RELOCATION

Relocating Marines from Okinawa,
Visiting Aircraft Carrier Berthing, and
Army Air and Missile Defense Task Force

Reader's Guide

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Guam and CNMI Military Relocation EIS

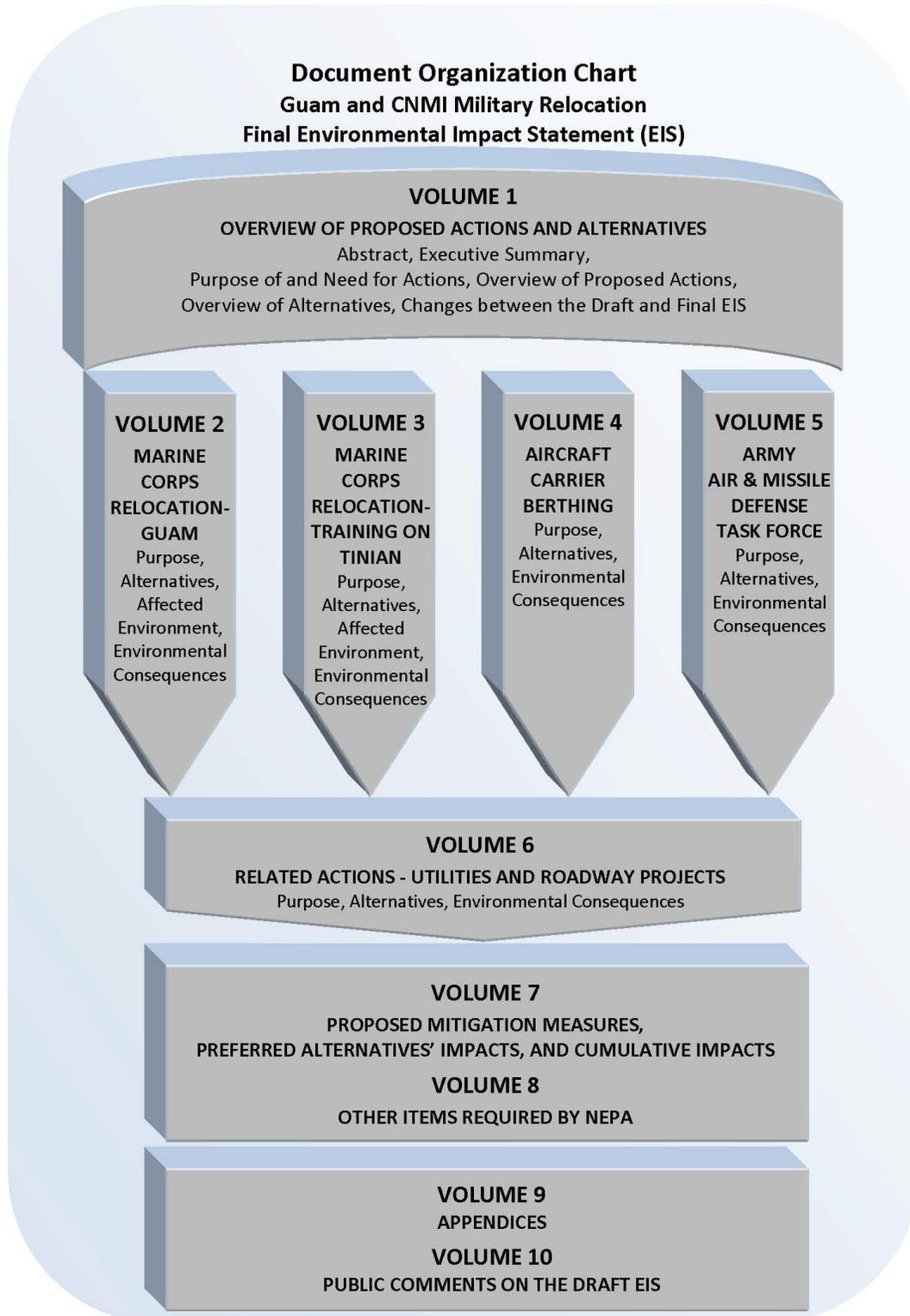
Reader's Guide

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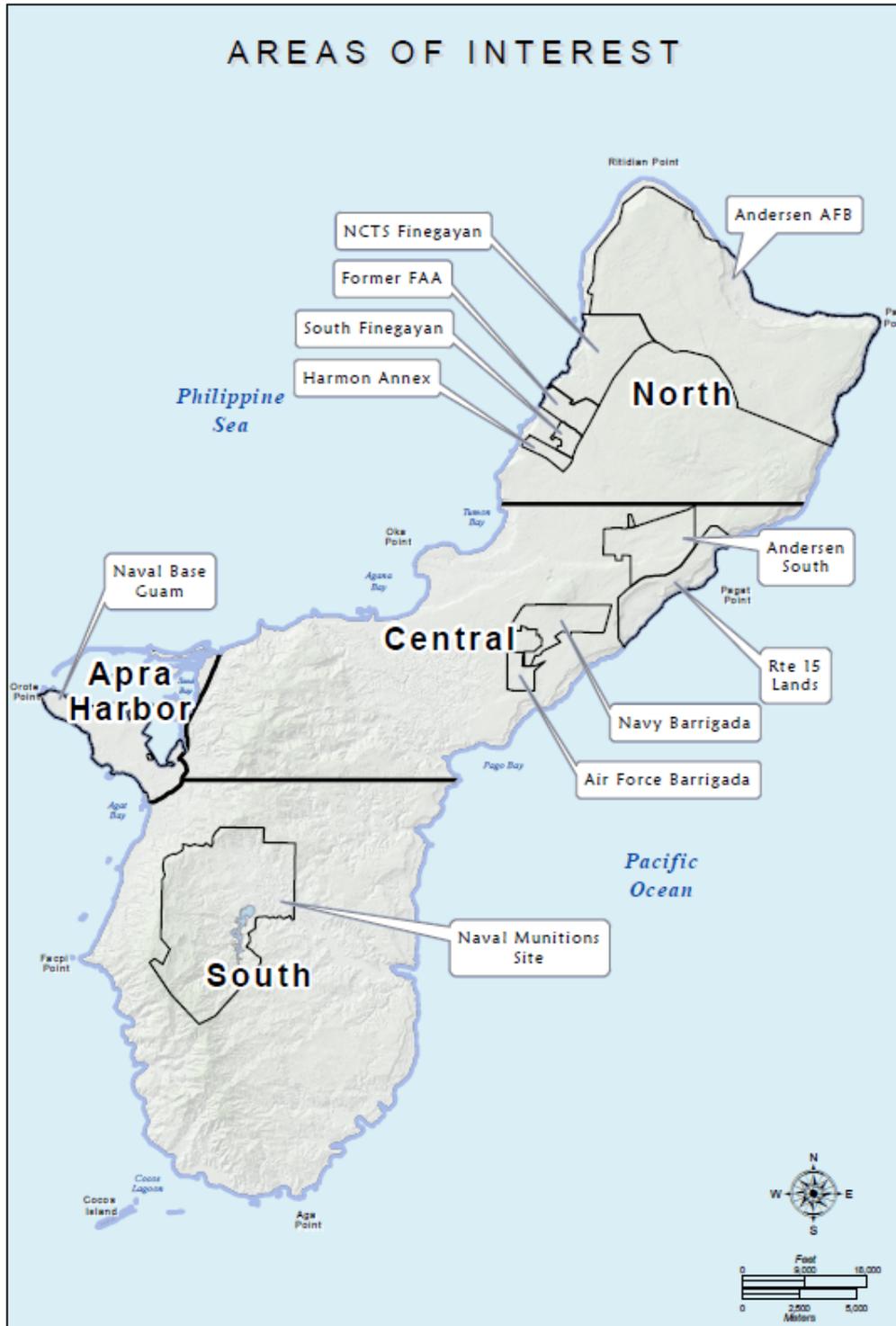
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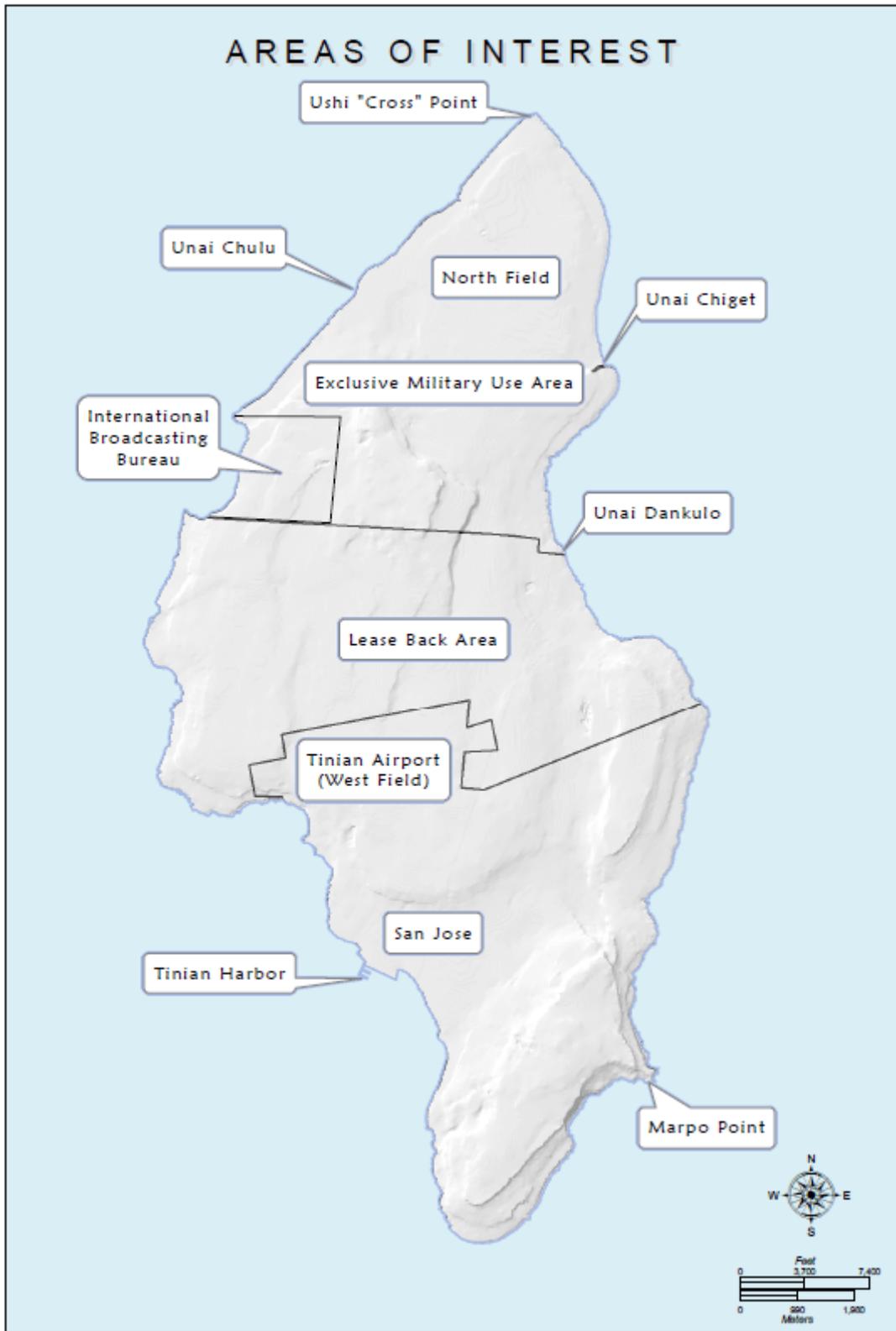
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CHAPTER 3. AREAS OF INTEREST

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CHAPTER 4.

GLOSSARY

Access—the right to transit to and from and to make use of an area.

Activity—an individual scheduled training function or action such as missile launching, bombardment, vehicle driving, or Field Carrier Landing Practice.

Air Traffic Control Assigned Airspace (ATCAA)—Federal Aviation Administration-defined airspace not over an Operating Area (OPAREA) within which specified activities, such as military flight training, are segregated from other Instrument Flight Rules air traffic.

Airfield—usually an active and/or inactive airfield, or infrequently used landing strip, with or without a hard surface, without Federal Aviation Administration-approved instrument approach procedures. An airfield has no control tower and is usually private.

Airport—usually an active airport with hard-surface runways of 3,000 feet or more, with Federal Aviation Administration-approved instrument approach procedures regardless of runway length or composition. An airport may or may not have a control tower. Airports may be public or private.

Airspace, Controlled—airspace of defined dimensions within which air traffic control service is provided to Instrument Flight Rules flights and to Visual Flight Rules flights in accordance with the airspace classification. Controlled airspace is divided into five classes, dependent upon location, use, and degree of control: Class A, B, C, D, and E.

Airspace, Special Use—airspace of defined dimensions identified as the space or portion thereof over an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon non-participating aircraft.

Airspace, Uncontrolled—airspace, or Class G airspace, refers to airspace not otherwise designated and operations below 1,200 feet above ground level. No air traffic control service to either Instrument Flight Rules or Visual Flight Rules aircraft is provided other than possible traffic advisories when the air traffic control workload permits and radio communications can be established.

Airspace—the space lying above the earth or above a certain land or water area (such as the Pacific Ocean); more specifically, the space lying above a nation and coming under its jurisdiction.

Amphibious Craft Laydown—location for storing, maintaining and deploying amphibious vehicles.

Army Air and Missile Defense Task Force (AMDTF)—a ground force that includes command and control, missile field teams, maintenance, and logistics/supplies support. They also include Weapons Emplacement Sites that would accommodate Terminal High-Altitude Area Defense (THAAD) and Patriot Missile operations.

Base load power—the minimum load over a given time period. The generation capacity needed to meet the continuous (24/7) demand for the system.

Battalion—in general, a battalion is a group of 5 companies, approximately 960 individuals.

Biosecurity Risk Assessment—a risk assessment to evaluate the proposed actions described in this EIS to determine the potential for invasive species to cause harm to ecological or economic systems on Guam or at locations where they may be inadvertently exported.

Biosecurity Plan—a plan that includes an invasive species risk assessment (biosecurity risk assessment) and management of risks and damage from invasive plant and animal species.

Biosecurity—a multi-level, multi-disciplinary, collaborative program to prevent the introduction and establishment of new invasive species.

Booster—an auxiliary or initial propulsion system that travels with a missile or aircraft and that may not separate from the parent craft when its impulse has been delivered; may consist of one or more units. Boosters contain high explosives sensitive enough to be detonated by a small initiator and powerful enough to set off a less sensitive main explosive charge.

Carrier Vessel Nuclear (CVN)—a nuclear powered aircraft carrier.

Coastal Zone—a region occupying the area near the coastline in depths of water less than 538.2 ft (164.0 m). The coastal zone typically extends from the high tide mark on the land to the gently sloping, relatively shallow edge of the continental shelf. The sharp increase in water depth at the edge of the continental shelf separates the coastal zone from the offshore zone. Although comprising less than 10% of the ocean's area, this zone contains 90% of all marine species and is the site of most large commercial marine fisheries. This differs from the way the term "coastal zone" is defined in the Federal Coastal Zone Management Act where "coastal zone" typically extends from the low tide mark to several hundred feet upland.

Continental United States (CONUS)—the United States and its territorial waters between Mexico and Canada, but excluding Alaska, Hawaii, U.S. territories, and possessions.

Company—in general, a company is a group of 4 platoons, approximately 192 individuals.

Controlled Access—area where public access is prohibited or limited due to periodic training operations or sensitive natural or cultural resources.

Controlled Airspace—airspace of defined dimensions within which air traffic control service is provided to Instrument Flight Rules flights and to Visual Flight Rules flights in accordance with the airspace classification. Controlled airspace is divided into five classes, dependent upon location, use, and degree of control: Class A, B, C, D, and E.

Controlled Firing Area—area where ordnance firing is conducted under controlled conditions so as to eliminate hazard to aircraft in flight.

Council on Environmental Quality (CEQ)—established by the National Environmental Policy Act, the CEQ consists of three members appointed by the President. A CEQ regulation (Title 40 Code of Federal Regulations 1500-1508, as of July 1, 1986) describes the process for implementing the National Environmental Policy Act, including preparation of environmental assessments and environmental impact statements, and the timing and extent of public participation.

Cumulative Impact—the impact on the environment which results from the incremental impact of the action when added to the other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Discarded Military Munitions—military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations.

Distance X—the maximum distance a projectile (including guided missiles and rockets) will travel when fired or launched at a given quadrant elevation with a given charge or propulsion system.

Economic Adjustment Committee (EAC)—established by Executive Order 12788 (as amended), the EAC coordinates Federal interagency and intergovernmental assistance to support the Defense Economic Adjustment Program and help communities respond to economic impacts caused by significant Defense program changes. The EAC is chaired by the Secretary of Defense. The Secretaries of Labor and Commerce serve as the Vice Chair men and there are a total of twenty-two federal agencies and departments represented on the EAC.

Encroachment (per Navy instruction)—any non-Navy action planned or executed that inhibits, curtails, or possesses the potential to impede the performance of Navy activities. Additionally, the lack of action by the Navy to work proactively with local communities, to monitor development plans, or to adequately manage its facilities and real property could also impact the Navy mission and thereby result in encroachment.” Therefore, encroachment may stem from both internal (Navy) and external (civilian) sources.

Explosive Ordnance Disposal (EOD)—the detection, identification, field evaluation, rendering-safe recovery, and final disposal of conventional, nuclear, and chemical/biological ordnance. EOD activities are performed by specially trained active duty military personnel.

Explosive Safety Quantity-Distance (ESQD)—for a given quantity of explosive material, the distance separation relationships providing defined types of protection based on levels of risk considered acceptable. The size of the ESQD arc is proportional to the net explosive weight present.

Facilities—physical elements that can include roads, buildings, structures, and utilities. These elements are generally permanent or, if temporary, have been placed in one location for an extended period of time.

Fleet Area Control and Surveillance Facility (FACSFAC)—Navy facility that provides air traffic control services and controls and manages Navy-controlled off-shore operating areas and instrumented ranges.

Hardfill—a disposal facility for demolition debris (e.g. reinforced and non-reinforced concrete, asphalt, brick, block, tile, stone, roofing material, drywall, wood, and metal) that is not contaminated with solid waste, infectious waste, or hazardous waste.

High Explosive (HE)—an explosive substance designed to function by detonation (e.g., main charge, booster, or primary explosive). High Explosives when initiated change from basic form at a velocity greater than that of sound throughout the material exploding. The reaction, which generates a large volume of gas at high temperature and results in intense shattering effect, is usually referred to as a detonation. Examples: RDX, TNT, dynamite, and HBX.

Impact Area—the identified area within a range intended to capture or contain ammunition, munitions, or explosives and resulting debris, fragments, and components from various weapons systems (e.g., the ground and associated airspace within the training complex) A weapon system impact area is the area within the surface danger zone used to contain fired, or launched ammunition and explosives, and the resulting fragments, debris, and components. Indirect fire weapon system impact areas include probable error for range and deflection. Direct fire weapon system impact areas encompass the total surface danger zone from the firing point or position downrange to distance X.

Instrument Flight Rules (IFR)—regulations and procedures for flying aircraft by referring only to the aircraft instrument panel for navigation.

Major Exercise—a significant operational employment of live, virtual, and/or constructive forces during which live training is accomplished. A Major Exercise includes multiple training objectives, usually occurring over an extended period of days or weeks. An exercise can have multiple training operations (sub-events each with its own mission, objective and time period. Examples include C2X, JTFEX, SACEX, and CAX. Events [JTFEX] are composed of specific operations [e.g., Air-to-Air Missile], which consist of individual activities [e.g., missile launch]).

Maneuver Element—basic element of a larger force independently capable of maneuver. Normally, a Marine Division recognizes its infantry battalions, tank battalion, and light armored reconnaissance (LAR) battalion as maneuver elements. A rifle (or tank/LAR) battalion would recognize its companies as maneuver elements. A rifle (or tank/LAR) company would recognize its platoons as maneuver elements. Maneuver below the platoon level is not normally possible since fire and movement can be combined only at the platoon level or higher. The Army and National Guard recognize a squad and platoon as maneuver elements.

Maneuver—employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage with respect to the enemy in order to accomplish the mission.

Marine Air-Ground Task Force (MAGTF)— This is how the Marine Corps is set up to perform all types of their military actions. It insures that ground forces and air forces are working together under single leadership and a clear goal.

Marine Expeditionary Force (MEF)—A MEF is the largest MAGTF group, and is comprised of a MEF Headquarters Group, Marine Division, Marine Air Wing and Marine Logistics Group.

Marine Expeditionary Brigade (MEB)—A MEB is larger than a Marine Expeditionary Unit (MEU) but smaller than a Marine Expeditionary Force (MEF). It is comprised of a reinforced infantry regiment, a composite Marine aircraft group, and a brigade service support group. It can function as part of a joint task force, as the lead echelon of the MEF, or alone.

Marine Expeditionary Unit (MEU)—A MEU is the smallest MAGTF group, and is comprised of an air and ground combat team, and combat service support. The specific makeup of the MEU can be customized with additional artillery, armor, or air units.

Marine Corps Ground Unit—Marine Expeditionary Unit Ground Combat Element, or Battalion Landing Team, composed of an infantry battalion of about 1,200 personnel reinforced with artillery, amphibious assault vehicles, light armored reconnaissance assets and other units as the mission and circumstances require.

Material Potentially Presenting an Explosive Hazard (MPPEH)— material owned or controlled by the Department of Defense that, prior to determination of its explosives safety status, potentially contains explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris) or potentially contains a high enough concentration of explosives that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization, or disposal operations). Excluded from MPPEH are munitions within the DoD-established munitions management system and other items that may present explosion hazards (e.g., gasoline cans and compressed gas cylinders) that are not munitions and are not intended for use as munitions.

Munitions and Explosives of Concern (MEC)—this term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means: (A) Unexploded Ordnance (UXO), as defined in 10 U.S.C. 101(e)(5)(A) through (C); (B) Discarded military munitions (DMM), as defined in 10 U.S.C. 2710(e)(2); or (C) munitions constituents (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.

National Environmental Policy Act (NEPA)—42 U.S.C. 4321, et seq passed by Congress in 1969. The Act established a national policy designed to encourage consideration of the influences of human activities, such as population growth, high-density urbanization, or industrial development, on the natural environment. The NEPA procedures require that environmental information be made available to the public and the decision-makers before decisions are made. Information contained in the NEPA documents must focus on the relevant issues in order to facilitate the decision-making process.

Outside the Continental United States (OCONUS)—the areas of Alaska, Hawaii, U.S. territories, and possessions and their territorial waters excluding the U.S. and its territorial waters between Mexico and Canada.

Operation—A combination of activities accomplished together for a scheduled period of time for an intended military mission or task. An operation can range in size from a single unit exercise to a Joint or Combined event with many participants (e.g., aircraft, ships, submarines, troops).

Operational Range—a range that is under the jurisdiction, custody, or control of the Secretary of Defense and is used for range activities; or although not currently being used for range activities, that is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities per 10 U.S.C. 101(e)(3).

Ordnance—broadly encompasses all weapons, ammunition, missiles, shells, and expendables (e.g., chaff and flares).

Peak load—the maximum load consumed or produced by a unit or group of units in a stated time period. It may be the maximum instantaneous load or the maximum average load over a designated period of time. The peak system demand during a period of time (peak demand for a day, hour, month).

Platoon—in general, a platoon is a group of 42 individuals.

Range—a land or sea area designated and equipped for firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, exclusionary areas. Also includes airspace areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the Federal Aviation Administration [10 U.S.C. 101 (e)(3)].

Range Activity—an individual training or test function performed on a range or in an Operating Area. Examples include missile launching, bombardment, and vehicle driving. Individual RDT&E functions are also included in this category.

Range Complex—a geographically integrated set of ranges, operational areas, and associated special use airspace, designated and equipped with a command and control system and supporting infrastructure for freedom of maneuver and practice in munitions firing and live ordnance use against scored and/or tactical targets and/or Electronic Warfare tactical combat training environment.

Range Operation—a live training exercise, a research, development test and evaluation (RDT&E) test, or a field maneuver conducted for a specific strategic, operational or tactical military mission, or task. A military action. Operations may occur independently, or multiple operations may be accomplished as part of a larger event. One operation consists of a combination of activities accomplished together. The type of operation can include air, land, sea, and undersea warfare training or testing. Participants can include a specific number and type of aircraft, ships, submarines, amphibious or other vehicles and personnel.

Range Safety Zone—area around air-to-ground ranges designed to provide safety of flight and personnel safety relative to dropped ordnance and crash sites. Land use restrictions can vary depending on the degree of safety hazard, usually decreasing in magnitude from the weapons impact area (including potential ricochet) to the area of armed overflight and aircraft maneuvering.

Readiness—the ability of forces, units, weapon systems, or equipment to deliver the outputs for which they were designed (includes the ability to deploy and employ without unacceptable delays).

Regiment—a Regiment is a unit of three Battalions, approximately 2,880 individuals.

Restricted Area—a designated airspace in which flights are prohibited during published periods of use unless permission is obtained from the controlling authority.

Safety Zone—administratively designated/implicit areas designated to limit hazards to personnel and the public, and resolve conflicts between operations. Can include range safety zones, ESQDS, surface danger zones, special use airspace, hazards of electromagnetic radiation to ordnance/hazards of electromagnetic radiation to personnel areas, etc.

Scoping—a process initiated early during preparation of an Environmental Impact Statement to identify the scope of issues to be addressed, including the significant issues related to the Proposed Action. During scoping, input is solicited from affected agencies as well as the interested public.

Sortie—a single operational training or RDT&E event conducted by one aircraft in a range or operating area. A single aircraft sortie is one complete flight (i.e., one take-off and one final landing).

Special Use Airspace—consists of several types of airspace used by the military to meet its particular needs. Special use airspace consists of that airspace wherein activities must be confined because of their nature, or wherein limitations are imposed upon aircraft operations that are not a part of these activities, or both. Special use airspace, except for Control Firing Areas, are charted on instrument flight rules or visual flight rules charts and include hours of operation, altitudes, and the controlling agency.

Stakeholder—those people or organizations that are affected by or have the ability to influence the outcome of an issue. In general, this includes regulators, the regulated entity, and the public. It also includes those individuals who meet the above criteria and do not have a formal or statutorily defined decision-making role.

Submerged Lands—the areas in coastal waters extending from the Guam coastline into the ocean 3 nautical miles (nm) (5.6 kilometers [km]).

Surface Danger Zone (SDZ)—the area surrounding a range that allows for the probability of a munition not landing within the designated target or impact area within which access is controlled for safety during firing.

Sustainable Range Management—management of an operational range in a manner that supports national security objectives, maintains the operational readiness of the Armed Forces, and ensures the long-term viability of operational ranges while protecting human health and the environment.

Targets—earthwork, materials, actual or simulated weapons platforms (tanks, aircraft, EW systems, vehicles, ships, etc.) comprising tactical target scenarios within the range/range complex impact areas.

Uncontrolled Airspace—airspace of defined dimensions in which no air traffic control services to either instrument flight rules or visual flight rules aircraft will be provided, other than possible traffic advisories when the air traffic control workload permits and radio communications can be established.

Unexploded Ordnance (UXO)—military munitions that (A) have been primed, fused, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, property, installations, personnel or material; and (C) remained unexploded either by malfunction, design or any other cause [10 U.S.C. 101 (e)(5)(A) through (C)].

Ungulate—any animal having hoofs such as deer, pigs, cattle, etc.

Upland—an area of land of higher elevation.

U.S. Territorial Waters—sea areas within 12 nm of the U.S. coastline, normally measured from the low water mark on the shoreline.

Visual Flight Rules (VFR)—regulations which allow a pilot to operate an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going.

Wholly Inert—ordnance with no explosive, propellant, or pyrotechnic component (non-reactive); example: BDU-50, BDU-56 (both are non-reactive heavy-weights with no explosive charges).

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CHAPTER 5.

ACRONYM AND ABBREVIATION LIST

°F	degrees Fahrenheit	ATARA	Alliance Transformation and
36 WG	36 th Wing		Realignment Agreement
III MEF	Third Marine Expeditionary Force	ATC	Air Traffic Control
AAV	Amphibious Assault Vehicle	ATCAA	Air Traffic Control Assigned Airspace
AADT	Average Annual Daily Traffic	AT/FP	Antiterrorism/Force Protection
AASHTO	American Association of State Highway and Transportation Officials	AUPM	Above and Underground Storage Tank and Pesticide Management
ac	acre(s)	B	billion
ACE	Air Combat Element	BA	Biological Assessment
ACHP	Advisory Council for Historic Preservation	BACT	Best Available Control Technology
ACM	asbestos-containing material	BASH	Bird Airstrike Hazard Plan
A.D.	Anno Domini	B.C.	Before Christ
AD/ADFM	Active Duty/Active Duty Family Members	BCD	Base Command Officer
ADA	Americans with Disabilities Act	BCDC	Bureau of Communicable Disease Control
ADAAG	Americans with Disabilities Act Accessibility Guidelines	BDDT	BASH Detection and Dispersal Team
ADNL	A-weighted Day Night Average Level	BEQ	Bachelor Enlisted Quarters
ADT	Average Daily Traffic	BFHNS	Bureau of Family Health and Nursing Services
AFB	Air Force Base	BFR	Basic Facility Requirements
AFI	Air Force Instruction	BHC	Bird Hazard Condition
A-G	air-to-ground	BI	Beneficial Impact
AGL	above ground level	BMD	Ballistic Missile Defense
AICUZ	Air Installation Compatible Use Zone	BMDTF	Ballistic Missile Defense Task Force
AIDS	Acquired Immune Deficiency Syndrome	BMP	Best Management Practice
AIP	Agreed Implementation Plan	BMUS	Bottomfish Management Unit Species
ALPCD	Alien Labor Processing and Certification Division	BO	Biological Opinion
AMC	Air Mobility Command	BOD	biological oxygen demand
AMDTF	Air and Missile Defense Task Force	BOMBEX	Bombing Exercise
AMVOC	Advanced Motor Vehicle Operators Course	BOQ	Bachelor Officer Quarters
AOC	Area of Concern	BOW	Bilge Oily Waste
AOR	Area of Responsibility	BOWTS	Bilge Oily Waste Treatment System
APC	Areas of Particular Concern	B.P.	Before Present
APCSR	Air Pollution Control Standards and Regulations	BPC	Bureau of Primary Care
APE	Area of Potential Effect	BFR	Basic Facility Requirements
APZ	Accident Potential Zone	BQ	Bachelors Quarters
ARG	Amphibious Readiness Group	BRAC	Base Realignment and Closure
APHIS	Agricultural Animal Plant and Health Inspection Service	BRD	Biological Resources Discipline
ARPA	Archaeological Resource Protection Act	BRS	Biennial Reporting System
A-S	air-to-surface	BRSA	Biological Resource Study Area
ASHRAE	American Society of Heating Refrigeration and Air Conditioning Engineers	BS 0	Battle Site Zero
ASN	Assistant Secretary of the Navy	BSP	Bureau of Statistics and Plans
AST	Aboveground Storage Tank	BSTF	Battle Staff Training Facility
ASTM	American Standards Society for Testing and Measurements	BSTS	Battle Staff Training and Simulation
		BTS	brown tree snake
		Btu	British Thermal Units
		BUMED	Bureau of Medicine and Surgery
		C&D	Construction and Demolition
		CAA	Clean Air Act
		CAAA	Clean Air Act Amendments
		CAL	Confined Area Landings
		CAST	Combined Arms Staff Trainer

CATEX	Categorical Exclusion	CRMP	Coastal Resources Management Program
CBOD ₅	Chemical Biological Oxygen Demand – Five Day	CRRC	Combat Rubber Raiding Craft
CCU	Consolidated Commission on Utilities	CSA	Customer Service Agreement
CDC	Center for Disease Control	CSAR	Combat Search and Rescue
CDF	Confined Disposal Facility	CSG	Carrier Strike Group
CDL	Clandestine Drug Labs	CSS	Commander Submarine Squadron
CDNL	C-weighted DNL	CT	Combustion Turbine
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	CUC	Commonwealth Utilities Corporation
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Act Information Systems	CVN	Carrier Vessel Nuclear
CESQG	Conditionally Exempts Small Quantity Generators	CVW	Carrier Air Wing
CEQ	Council on Environmental Quality	CWA	Clean Water Act
CFA	Controlled Firing Area	CWCS	Comprehensive Wildlife Conservation Strategy
CFR	Code of Federal Regulations	CY	cubic yard(s)
cfs	cubic feet per second	CZ	Clear Zone
CG	Guided Missile Cruiser	CZMA	Coastal Zone Management Act
CGC	Coast Guard Cutter	DAMOS	Disposal Area Monitoring System
CGP	Construction General Permit	DAR	Defense Access Road
CH ₄	methane	dB	decibel(s)
CHC	Community Health Clinic	dba	A-weighted decibel(s)
CHCRT	Currently Harvested Coral Reef Taxa	dbc	C-weighted decibel(s)
CIP	Capital Improvements Program	DD	Destroyer
CLOMR	Conditional Letter of Map Revision	DDESB	Department of Defense Explosive Safety Board
CLTC	Chamorro Land Trust Commission	DDESS	Dependent Elementary and Secondary Schools
cm	centimeter(s)	DDG	Guided Missile Destroyer
cm/s	centimeters per second	DEH	Division of Environmental Health
CMCC	Civil-Military Coordination Council	DELISTED NPL	National Priority List Deletions
CMP	Coastal Management Program	DEQ	Division of Environmental Quality
CMUS	Crustacean Management Unit Species	DERP	Defense Environmental Restoration Program
CNM	Commander Navy Region Marianas	DISID	Department of Integrated Services for Individuals with Disabilities
CNMI	Commonwealth of the Northern Mariana Islands	DLM	Department of Land Management
CNO	Chief of Naval Operations	DLNR	Department of Lands and Natural Resources
CO	carbon monoxide	DM	Defensive Maneuvers
CO ₂	carbon dioxide	DMHSA	Department of Mental Health and Substance Abuse
COFA	Compact of Free Association	DMM	Discarded Military Munitions
COMNAV	Commander Navy Region	DMR	Discharge Monitoring Report
COMPACFLT	Commander, U.S. Pacific Fleet	DNL	Day-Night Sound Level
COMSCINST	Commander, Military Sealift Command Instruction	DO	dissolved oxygen
CONOPS	Concept of Operations	DoC	Department of Corrections
CONSENT	Superfund Consent Decrees	DoD	Department of Defense
CONUS	Continental United States	DoDEA	Department of Defense Education Activity
CORRACTS	Corrective Action Sites	DOE	Department of Energy
CPA	Commonwealth Ports Authority	DOI	Department of the Interior
CPF	Commander U.S. Pacific Fleet	DOJ	Department of Justice
CPI	Consumer Price Index	DoN	Department of the Navy
CQC	Close Quarters Combat	DOPAA	Description of Proposed Action and Alternatives
CREMUS	Coral Reef Ecosystem Management Unit Species	DOT	Department of Transportation
CRM	Coastal Resources Management		
CRMO	Coastal Resources Management Office		

DOT OPS	Department of Transportation Office of Pipeline Safety Incident and Accident Data	FAM	Familiarization and Instrument Flight
		FARP	Forward Arming and Refueling Point
		FAS	Freely Associated States of Micronesia
DPHSS	Department of Public Health and Social Services	FCLP	Field Carrier Landing Practice
		FDC	Fire Direction Center
DPL	Department of Public Lands	FDM	Farallon de Medinilla
DPRI	Defense Policy Review Initiative	FEMA	Federal Emergency Management Agency
DPS	Department of Public Safety	FEP	Fishery Ecosystem Plan
DPW	Department of Public Works	FEPCA	Federal Pesticide Control Act
DRMO	Defense Reutilization and Marketing Office	FFCA	Federal Facilities Compliance Act
		FHWA	Federal Highway Administration
DRS	Demand Response Service	FINDS	Facility Index System
DSAY	Discount Service Acre Year	FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
DSMOA	DoD & State/Territorial Memorandum of Agreement	FIP	Flight Information Public
		FIREX	Firing Exercise
DU	dwelling unit	FIRM	Flood Insurance Rate Map
DU/ac	dwelling units per acre	FIMP	Fishery Management Plan
DYA	Department of Youth Affairs	FONSI	Finding of No Significant Impact
E&ECR	Erosion and Sediment Control Regulation	FOC	Full Operational Capability
EA	Environmental Assessment	FPPA	Farmland Protection Policy Act
EAC	Economic Adjustment Committee	FR	Federal Register
EC	Electronic Combat	FSM	Federated States of Micronesia
ECM	earth-covered magazine	ft	foot/feet
ECO	Environmental Compliance Officer	ft ²	square foot/feet
EC-OPS	Electronic Combat Operations	FTA	Federal Transit Administration
ECHO	Enforcement and Compliance History Online	FTE	full time equivalent
		FTTS	FIFRA/TSCA Tracking System
ECP	entry control point	FTX	Field Training Exercise
EDR	Environmental Data Resources	FUDS	Formerly Used Defense Sites
EET	Energy Efficient Transport	FWCA	Fish and Wildlife Coordination Act
EEZ	Exclusive Economic Zone	FY	Fiscal Year
EFH	Essential Fish Habitat	GAIN	Guam Animals in Need
EIS	Environmental Impact Statement	GALC	Guam Ancestral Lands Commission
EJ	Environmental Justice	GAR	Guam Administrative Regulations
EMI	Electromagnetic Interference	GBB	Gershman, Brickner, & Bratton, Inc.
EMR	Electromagnetic Radiation	GBSP	Guam Bureau of Statistics and Plans
EMUA	Exclusive Military Use Area	GCA	Guam Code Annotated
ENSO	El Niño Southern Oscillation	GCC	Guam Community College
EO	Executive Order	GCE	Ground Combat Element
EOD	Explosive Ordnance Disposal	GCMP	Guam Coastal Management Plan
EPACT	Energy Policy Act of 2005	GCR	General Conformity Rule
EPCRA	Emergency Planning & Community Right-To-Know Act	GCWCS	Guam Comprehensive Wildlife Conservation Strategy
EPP	Environmental Protection Plan	GDAWR	Guam Division of Aquatic and Wildlife Resources
ERA	Ecological Reserve Area		
ERNS	Emergency Response Notification System	GDISID	Guam Department of Integrated Services for Individuals with Disabilities
ER-L	Effects Range-Low		
ER-M	Effects Range-Median	GDLM	Guam Department of Land Management
ESA	Endangered Species Act	GDMHSA	Guam Department of Mental Health and Substance Abuse
ESAL	Equivalent Single Axle Loading		
ESG	Expeditionary Strike Group	GDoC	Guam Department of Corrections
ESQD	Explosive Safety Quantity Distance	GDoL	Guam Department of Labor
ESS	Explosive Safety Submission	GDP	Guam Police Department
FAA	Federal Aviation Administration	GDPHSS	Guam Department of Public Health and Social Services
FACSFAC	Fleet Area Control and Surveillance Facility		

GDPR	Guam Department of Parks and Recreation	HCM	Highway Capacity Manual
GDPW	Guam Department of Public Works	HDPE	high-density polyethylene
GDYA	Guam Department of Youth Affairs	HDD	Horizontal Directional Drilling
GEDA	Guam Economic Development Authority	HE	high explosive
GEPA	Guam Environmental Protection Agency	HEA	Habitat Equivalency Analysis
GFD	Guam Fire Department	HERO	Hazards of Electromagnetic Radiation to Ordnance
GHG	greenhouse gas	HERP	Hazards of Electromagnetic Radiation to Personnel
GHMP	Guam Hazard Mitigation Plan	HFC	hydrofluorocarbons
GHPO	Guam Historic Preservation Office	HIE	Helicopter Insertion/Extraction
GHRA	Guam Hotel and Restaurant Association	HIV	Human Immunodeficiency Virus
GIAA	Guam International Airport Authority	HMIRS	Hazardous Materials Information Reporting System
GIMDP	Guam Integrated Military Development Plan	HMMP	Hazardous Materials Management Plan
GIP	Gross Island Product	HMMWV	High Mobility Multi-Purpose Wheeled Vehicle
GIS	Geographic Information System	HMU	Habitat Management Unit
GJMMP	Guam Joint Military Master Plan	HPO	Historic Preservation Office(r)
GLUC	Guam Land Use Commission	HPV	high-priority violation
GLUP	Guam Land Use Plan	HQ	Headquarters
GMH	Guam Memorial Hospital	hr	hour(s)
GMHA	Guam Memorial Hospital Authority	HSC	Helicopter Sea Combat Squadron
GNWR	Guam National Wildlife Refuge	HSIP	Highway Safety Improvement Program
GoJ	Government of Japan	HSV	High Speed Vessel
GovGuam	Government of Guam	HSWA	Hazardous and Solid Waste Amendments
GPA	Guam Power Authority	HUBZone	Historically Underutilized Business Zone
gpcd	gallons per capita per day	HVAC	heating, ventilation, and air conditioning
gpd	gallons per day	HWMP	Hazardous Waste Management Program
GPD	Guam Police Department	Hz	hertz
GPLS	Guam Public Library System	IAP	International Airport
gpm	gallons per minute	IAS	invasive alien species
GPSS	Guam Public School System	IBB	International Broadcasting Bureau
GRHP	Guam Register of Historic Places	ICC	information coordination central
GRN	Guam Road Network	ICIS	Integrated Compliance Information System
GRT	Gross Receipts Tax	ICRMP	Integrated Cultural Resources Management Plan
GSCSCR	Government of Guam Soil Erosion And Sediment Control Regulations	IGPBS	Integrated Global Presence and Basing Strategy
GSF	gross square feet	IFR	Instrument Flight Rules
GSM	gross square meters	IMP	Integrated Management Practice
GTP	2030 Guam Transportation Plan	IMS	invasive marine species
GTR	Ground Threat Reaction	in	inch(es)
GUNEX	Gunnery Exercise	INRMP	Integrated Natural Resources Management Plan
GVB	Guam Visitors Bureau	INST CONTROLS	Sites with Institutional Controls
GW	groundwater	IOC	Initial Operational Capability
GWA	Guam Waterworks Authority	IPCC	Intergovernmental Panel on Climate Change
GWMPZ	ground water management protection zone	IPMP	Integrated Pest Management Plan
GWP	global warming potential	IPP	Independent Power Producers
GWQS	Guam Water Quality Standards	IRIS	Integrated Risk Information System
GWUDI	groundwater under the direct influence of surface water	IRP	Installation Restoration Program
ha	hectare(s)	ISA	Inter-Service Agreement
HACCP	Hazard Analysis and Critical Control Points	ISO	International Organization for Standardization
HAP	Hazardous Air Pollutant(s)	ISR	Intelligence, Surveillance, and Reconnaissance
HAPC	Habitat Area of Particular Concern	ISWMP	Integrated Solid Waste Management Plan
HC	hydrocarbon		
HCF	hydrofluorocarbon		

ITC	International Trade Center	Marine Corps	United States Marine Corps
IWPS	Island-Wide Power System	MARFORPAC	Marine Forces Pacific
JBIC	Joint Bank of International Cooperation	MAW	Marine Aircraft Wing
JGPO	Joint Guam Program Office	MBP	Micronesia Biosecurity Plan
JSDF	Japanese Self-Defense Force	MBTA	Migratory Bird Treaty Act
JRC	Joint Region Commander	MCB	Marine Corps Base
JRM	Joint Region Marianas	MCMEX	Mine Counter Measures Exercise
KD	known distance	MC	Munitions Constituents
kg	kilogram	MCCS	Marine Corps Community Service
kg/day	kilograms per day	MCL	Maximum Concentration Level
km	kilometer(s)	MCMEX	Mine Counter Measures Exercise
km ²	square kilometer(s)	MCO	Marine Corps Order
knots	nautical miles per hour	MCP	Mariana Islands Concept Plan
kph	kilometers per hour	MCTL	Marine Corps Task List
kV	kilovolts	MDA	Missile Defense Agency
kW	kilowatt(s)	MEB	Marine Expeditionary Brigade
kW/hr	kilowatts per hour	MEC	Munitions and Explosives of Concern
L	liter(s)	MEF	Marine Expeditionary Force
LAER	Lowest Achievable Emission Rate	MEU	Marine Expeditionary Unit
LandGEM	Landfill Gas Emissions Model	MFP/CPF	Marine Forces Pacific/Commander Pacific Fleet
LAV	Light Armored Vehicle	MFR	multi-family residential
lb	pound(s)	MG	million gallons
LBA	Leaseback Area	mg/cm ²	milligrams per square centimeter
LBP	lead-based paint	MGd	million gallons per day
LCAC	Landing Craft Air Cushion	mg/L	milligrams per liter
LCE	Logistic Combat Element	mi	mile(s)
LCU	Landing Craft Utility	mi ²	square miles
LEDPA	Least Environmentally Damaging Practicable Alternative	MILCON	Military Construction
LEED	Leadership in Energy and Environmental Design	MIP	Medically Indigent Program
L _{eq}	equivalent sound level	MIRC	Mariana Islands Range Complex
LF	linear feet	MISSILEX	Missile Exercise
LFG	Landfill Gas	ML	million liters
LHA/LHD	Amphibious Assault Ship	MLA	Military Lease Area
LID	Low Impact Development	MLd	million liters per day
LIDAR	Light Detection and Ranging	MLG	Marine Logistic Group
LLDP	linear low-density polyethylene	MLLW	mean lower low water
L _{max}	Maximum Sound Level	MLTS	Material Licensing Tracking System
LNG	Liquefied Natural Gas	mm	millimeter(s)
LOS	Level of Service	MMPA	Marine Mammal Protection Act
LPD	Amphibious Transport Dock	MMR	Military Munitions Rule
lpm	liters per minute	MMPR	Military Munitions Response Program
LQG	large quantity generator	MMT	Marine Monitoring Team
LSD	Dock Landing Ship	MOA	Memorandum of Agreement
LSI	Less than significant impact	MOS	Military Occupational Specialty
LUCIS	Land Use Control Information Systems	MOU	Memorandum of Understanding
LZ	Landing Zone	MOUT	Military Operations in Urban Terrain
m	meter(s)	MP	Military Police
m ²	square meter(s)	MPA	microscopic particulate analyses
m ³	cubic meters(s)	MPA	Marine Protected Area
M	million	mph	miles per hour
MAGC	Marine Air Control Group	MPLA	Marianas Public Land Authority
MAGTF	Marine Air Ground Task Force	MPPEH	material potentially presenting an explosive hazard
MALS	Marine Aviation Logistics Squadron	MPRSA	Marine Protection, Research, and Sanctuaries Act
MAP	Military Access Point		

MRA	Munitions Response Area	NIOSH	National Institute for Occupational Safety and Health
MRC	Marine Research Consultants	NISC	National Invasive Species Council
MRP	Marine Resource Preserve	NITTS	Noise Induced Temporary Threshold Shift
MRS	Munitions Response Sites	NLNA	northern land navigation area
MSA	Munitions Storage Area	nm	nautical mile(s)
M-SA	Magnuson-Stevens Fishery Conservation and Management Act	nm ²	square nautical mile(s)
MSAT	Mobile Source Air Toxics	NMC-DET	Navy Munitions Command Detachment
MSC	Military Sealift Command	NMFS	National Marine Fisheries Service
msl	mean sea level	NMS	Naval Munitions Site
MSM	modular storage magazine	NNPP	Naval Nuclear Propulsion Program
MSWLF	Municipal Solid Waste Landfill Facility	NO ₂	nitrogen dioxides
MTVR	Medium Tactical Vehicle Replacement	NO _x	nitrogen oxides
MUS	Management Unit Species	NOA	notice of availability
MUSE	Mobile Utilities Support Equipment	NOAA	National Oceanic and Atmospheric Administration
MUTCD	Manual on Uniform Traffic Control Devices	NOI	Notice of Intent
MVA	mega volt ampere	NOPH	notice of public hearing
MW	megawatts	NOSSA	Naval Ordnance Safety and Security Activity
MWDK	Military Working Dog Kennel	NOTAM	Notice to Airmen
MWR	Morale, Welfare, and Recreation	NOTMAR	Notice to Mariners
N ₂ O	nitrous oxide	NPDES	National Pollutant Discharge Elimination System
NA	not applicable	NPL	National Priorities List
NAA	Non-Attainment Area	NPS	National Park Service
NAAQS	National Ambient Air Quality Standards	NRC	Nuclear Regulatory Commission
NAC	Noise Abatement Criteria	NRCHC	Northern Region Community Health Center
NATA	National Air Toxics Assessment	NRCS	Natural Resources Conservation District
NAV	Navy Ashore Vision	NRHP	National Register of Historic Places
NAVCAMS	Naval Communication Area Master Station	NRMC	Navy Regional Medical Center
NAVFAC	Naval Facilities Engineering Command	NSR	New Source Review
NC	New Construction	NSV	North San Vitoris
NCP	National Contingency Plan	NTU	nephelometric turbidity unit
NCTMS	Naval Computer and Telecommunications Main Station	NW	nearshore waters
NCTS	Naval Computer and Telecommunications Station	NWF	Northwest Field
ND	Neighborhood Development	NWI	National Wetland Inventory
NDAA	National Defense Authorization Act	NWR	National Wildlife Refuge
NDWWTP	Northern District Wastewater Treatment Plant	O ₃	ozone
NELHA	National Energy Laboratory of Hawaii Authority	O&M	Operations and Maintenance
NEO	Noncombatant Evacuation Operations	ODMDS	Ocean Dredged Material Disposal Site
NEPA	National Environmental Policy Act	OEA	Overseas Environmental Assessment
NEW	net explosive weight	OEIS	Overseas Environmental Impact Statement
NEXRAD	Next Generation Weather Radar	OHA	Overseas Housing Allowance
NFIP	National Flood Insurance Program	OIA	Office of Insular Affairs
NFRAP	No Further Remedial Action Planned List	OPA	Oil Pollution Act
NGL	Northern Guam Lens	OPNAVINST	Office of the Chief of Naval Operations Instruction
NGLA	Northern Guam Lens Aquifer	OSD	Office of the Secretary of Defense
NGO	Non-Governmental Organization	OSHA	Occupational Safety and Health Administration
NHL	National Historic Landmark	OTEC	Ocean Thermal Energy Conversion
NHPA	National Historic Preservation Act	P2	Pollution Prevention
NHP	National Historic Park	PA	Programmatic Agreement
NI	No impact	PAC-3	Patriot Advanced Capability-3

PACAF	Pacific Air Forces	RORO	roll-on roll-off
PACOM	U.S. Pacific Command	ROW	right-of-way
PAG	Port Authority of Guam	RPM	revolutions per minute
PAH	polynuclear aromatic hydrocarbon	RSE	Repair Squadron Engineer
Pb	lead	RTA	Range Training Area
PCB	polychlorinated biphenyl	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
PCE	perchloroethylene	SAIA	Sikes Act Improvement Act
PE	private entity	SARA	Superfund Amendments and Reauthorization Act
PFC	perfluorocarbon	SAR	Second Assessment Report
PHCRT	potentially harvested coral reef taxa	SARNAM	Small Arms Range Noise Assessment Model
PHL	Potential Hearing Loss	SAS	Special Aquatic Sites
PI	potential impact	SAT	Stationary Armor Target
PK-15	Unweighted Peak, 15% Metric	SBHSR	Ship-Borne Hazardous Substance Regulations
PL	Public Law	SCC	Security Consultative Committee
PLS	Public Library System	SCH	school
PM	particulate matter	SCR	Selective Catalytic Reduction
PM _{2.5}	particulate matter less than 2.5 microns in diameter	SCS	Soil Conservation Service
PM ₁₀	particulate matter less than 10 microns in diameter	SCUBA	self-contained underwater breathing apparatus
PMO	Personnel Management Office	SDWA	Safe Drinking Water Act
PMUS	Pelagic Management Unit Species	SDZ	Surface Danger Zone
POL	petroleum, oil, and lubricants	SEABEE	Construction Battalion
POV	privately-owned vehicle	SECNAV	Secretary of the Navy
PPA	Pollution Prevention Act	SEI	Sea Engineering Inc.
PPE	personal protective equipment	SEL	Sound Exposure Level
ppm	parts per million	SF ₆	sulfur hexafluoride
ppt	parts per thousand	SFR	single-family residential
PSD	Prevention of Significant Deterioration	SHSP	Strategic Highway Safety Plan
psi	pounds per square inch	SHPO	State Historic Preservation Office
PUC	Public Utilities Commission	SI	Significant impact
pv	photovoltaic	SIAS	Socioeconomic Impact Assessment Study
PVC	polyvinyl chloride	SI-M	Significant impact mitigable to less than significant
PYE	person years of employment	SINEX	Sink Exercise
PWC	Public Works Center	SIP	State Implementation Plan
QDR	Quadrennial Defense Review	SIT	Stationary Infantry Target
QOL	Quality of Life	SLAMRAAM	Surface-Launched Advanced Medium-Range Air-to-Air Missile
RA	Restricted Area	SLC	Submarine Learning Center
RAATS	RCRA Administrative Action Tracking System	SMMP	Site Management and Monitoring Plan
RAB	Restoration Advisory Board	SNC	Significant Non-Compliance
RADINFO	Radiation Information Database	SNU	Skilled Nursing Unit
RCRA	Resource Conservation and Recovery Act	SO	stipulated order
RCRIS	Resource Conservation and Recovery Act Information System	SO ₂	sulfur dioxide
REA	Rapid Ecological Assessment	SOC	species of concern
REC	Regional Environmental Coordinator	SOFA	Status of Forces Agreement
REDHORSE	Rapid Engineer Deployable Heavy Operations	SOGCN	Species of Greatest Conservation Need
Req'd	required	SOP	Standard Operating Procedure
RHA	Rivers and Harbors Act	SPAWAR	Space and Naval Warfare Systems Command
RHIB	Rigid Hull Inflatable Boat	SPCC	Spill Prevention, Control and Countermeasure
RIA	Regulatory Impact Analysis		
RO	reverse osmosis		
ROD	Record of Decision		
ROI	region of influence		

SPE	Special Purpose Entity	UNFCC	United Nations Framework Convention on Climate Change
SPS	Sewage Pump Station	U.S.	United States
SQG	small quantity generator	USACE	U.S. Army Corps of Engineers
SRBM	Short-range Ballistic Missile	USC	U.S. Code
SRCHC	Southern Region Community Health Center	USCG	U.S. Coast Guard
SRF	Ship Repair Facility	USCRTF	U.S. Coral Reef Task Force
S-S	surface-to-surface	USDA	U.S. Department of Agriculture
SSTS	Section Seven Tracking System	USDA-APHIS	U.S. Department of Agriculture Animal and Plant Health Inspection Service
STD	sexually transmitted disease	USDA-WS	U.S. Department of Agriculture- Wildlife Services
STOM	Ship-to-Objective Maneuver	US ENG CONTROLS	Engineering Controls Site List
STP	sewage treatment plant	USEPA	U.S. Environmental Protection Agency
SUA	Special Use Airspace	USFS	U.S. Forest Service
SW	surface water/stormwater	USFWS	U.S. Fish and Wildlife Service
SWMD	Solid Waste Management Division	USGBC	U.S. Green Building Council
SWMP	Stormwater Management Plan	USGS	U.S. Geological Service
SWMU	solid waste management unit	USLE	Universal Soil Loss Equation
SWPPP	Stormwater Pollution Prevention Plan	UST	underground storage tank
T&D	Transmission and Distribution	UXO	unexploded ordnance
T-AKE	Auxiliary Dry Cargo/Ammunition Ship	v	volt(s)
T-AKR	Sealift Ship	VA	Veterans Affairs
TAOC	Tactical Air Operations Center	v/c	volume to capacity
TB	tuberculosis	VCO	Volunteer Conservation Officer
TBD	To Be Determined	VCP	vitrified clay pipe
TBP	To Be Provided	VFR	Visual Flight Rules
TBT	tributyl tin	VHF	very high frequency
TCE	trichloroethylene	VHT	vehicle hours traveled
TCP	Training Concept Plan	VIF	Vehicle Inspection Facility
TDS	total dissolved solids	VMT	vehicle miles traveled
TEC JV	TEC Inc. Joint Venture	VOC	volatile organic compound
TERF	Terrain Flights	vpd	vehicles per day
THAAD	Terminal High-Altitude Area Defense	VQCF	Vehicle Queuing Control Facility
TJS	Tactical Jamming System	VWP	Visa Waiver Program
TMDL	Total Maximum Daily Load	WA	Warning Area
TMP	Traffic Management Plan	WPC	Watershed Planning Committee
TNAP	Traffic Noise Abatement Policy	WPCP	Water Pollution Control Program
TNM	Traffic Noise Model	WPRFMC	Western Pacific Regional Fisheries Management Council
TOC	total organic carbon	WQC	Water Quality Certification
TORPEX	Torpedo Exercise	WQMP	Water Quality Monitoring Plan
TPFD	Time-Phased Force Deployment	WRDA	Water Resource Development Acts
TPY	tons per year	WRMP	Water Resources Master Plan
TRIS	Toxic Release Inventory System List	WTE	Waste-to-Energy
TSCA	Toxic Substance Control Act	WTP	Water Treatment Plant
TSS	total suspended solids	WWII	World War II
TTIP	Territorial Transportation Improvement Plan	WL	wetlands
TTLC	total threshold limit concentration	WWTP	Wastewater Treatment Plant
UAV	Unmanned Aerial Vehicle	yd	yard
UD	unknown distance	ZID	zone of initial dilution
UF	usage factor		
UFC	Unified Facilities Criteria		
UFW	Unaccounted for Water		
µg/L	micrograms per liter		
UoG	University of Guam		