



Commonwealth of the Northern Mariana Islands
Field Guide for United States and Visiting Forces
Mariana Islands Range Complex



May 2021

Welcome to the United States



This field guide is intended to provide information about environmental requirements, policies, and limitations to United States (U.S.) and visiting forces conducting military training in the Commonwealth of the Northern Mariana Islands (CNMI).

As good stewards of the environment, military forces must comply with environmental regulations during training. All units must observe training constraints and protective measures for cultural and natural resources.

**Håfa Adai, Tirow, and Welcome to the CNMI,
a territory of the United States of America.**

MIRC OPS Processes and Procedures

The scheduling authority for all training in the Mariana Islands Range Complex (MIRC) is MIRC Operations (MIRC OPS). MIRC OPS coordinates the use of training areas and facilities and deconflicts exercises in the

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Deputy Director: 671-349-2510
Operations Officer: 671-349-2512
Range Sustainment: 671-349-398/5456
Schedulers: 671-349-6399

planning phase. All units training or planning to train in the MIRC will comply with the Marianas Training Manual, Commander, U.S. Naval Forces Marianas Instruction (COMNAVMARINST) 3500.4 series.

All DSN #s incoming: 315-349-6399
Director's Cell: 671-488-8104
Emergencies/Joint Region Marianas (JRM) Regional Operations Center: 671-349-4004

Hours of Operation: Monday–Friday 0800-1600
Duty cell for after hours, weekends, and holidays: 671-864-5883
Non-Secure Internet Protocol Router (UNCLASSIFIED): mirc.ops@fe.navy.mil
Secure Internet Protocol Router (CLASSIFIED): mirc.ops@fe.navy.smil.mil
Data Collection and Scheduling Tool: <https://dcast.csd.disa.mil>

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Glossary

Biosecurity: Measures that reduce the potential for transport and introduction of invasive (nonnative) species.

Chamorro: Native language of the Mariana Islands; indigenous people of the Mariana Islands.

Extirpation: When a species is completely gone from a particular region; locally extinct.

Injunctive relief: A court-ordered act or prohibition against an act or condition which has been requested, and sometimes granted, in a petition to the court for an injunction (directive or order).

Permeable: Allowing liquids or gases to pass through it.

Petroglyph: A carving or line drawing on rock, especially one made by prehistoric people.

Retrograde Waste: Classification that allows the Department of Defense (DoD) to transport hazardous waste from U.S. facilities abroad back to the United States.

Take: A regulatory term meaning to harass, disturb, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect an endangered or threatened species, or to attempt to engage in such conduct.

Unai: Sand (Chamorro).

AAFB: Andersen Air Force Base

AFPMB TG-31: Armed Forces Pest Management Board Technical Guide No. 31

AGL: above ground level

AOR: Area of Responsibility

BTS: brown treesnake

CNMI: Commonwealth of the Northern Mariana Islands

COMNAVMARINST: Commander, U.S. Naval Forces Marianas Instruction

CPA: Commonwealth Ports Authority

CRB: coconut rhinoceros beetle

CRM: Cultural Resources Manager

CRRC: Combat Rubber Raiding Craft

DoD: Department of Defense

EPA: Environmental Protection Agency

ESA: Endangered Species Act

FDM: Farallon de Medinilla

ft.: feet

JRM: Joint Region Marianas

km: kilometer

m: meter

mi: mile

MIRC: Mariana Islands Range Complex

MIRC OPS: Mariana Islands Range Complex Operations

MLA: Military Lease Area (Tinian)

MMA: Marpi Maneuver Area (Saipan)

MOUT: Military Operations on Urban Terrain

MRE: meal, ready-to-eat

NAVFACMAR: Naval Facilities Engineering Systems Command Marianas

NBG: Naval Base Guam

NRHP: National Register of Historic Places

ROWPU: reverse osmosis water purification unit

SPCC: Spill Prevention Control and Countermeasures

U.S.: United States

UXO: unexploded ordnance

Commonwealth of the Northern Mariana Islands

Background

The CNMI is a 300-mile (mi) (483 kilometer [km]) archipelago consisting of 14 islands located just north of Guam. The principal inhabited islands are Saipan, Tinian, and Rota. The largely uninhabited islands include Aguiguan, Farallon de Medinilla (FDM), Anatahan, Sarigan, Guguan, Alamagan, Pagan, Agrihan, Asuncion, Maug Islands, and Farallon de Pajaros. People born in the CNMI are U.S. citizens.

Military Training in the CNMI

Designated military training areas within the CNMI provide a unique and realistic environment capable of supporting complex expeditionary training. Training may occur on Saipan, Tinian, Rota, or FDM.

All training in the CNMI must be requested and scheduled through MIRC OPS and coordinated through the CNMI Bureau of Military Affairs via JRM.

Commonwealth of the Northern Mariana Islands

Geography

Land area: 183.5 mi² (295.31 km²)

Highest elevation: 3,166 feet (ft.) (965 m)

Highest point: Agrihan Volcano

Largest municipality: Saipan

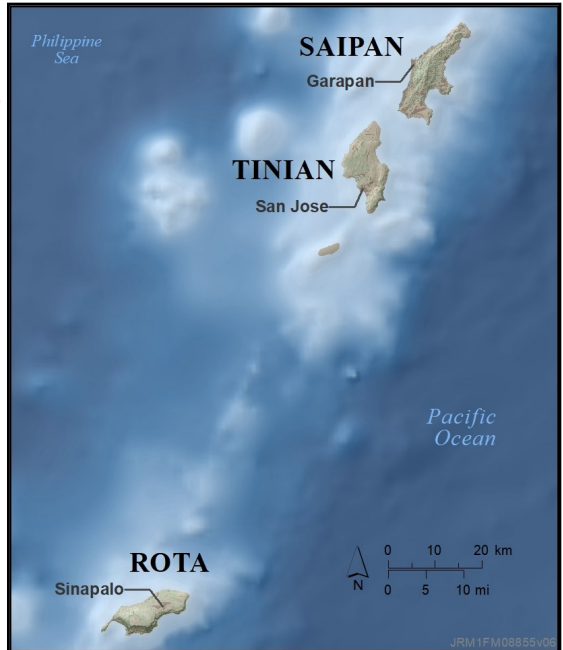
Population: 53,883 (2010 Census)

Coordinates: 15° 10'N 145° 45'E

Terrain:

Southern islands: Limestone, with fringing coral reefs.

Northern islands: Volcanic, with active volcanoes on several islands.



Commonwealth of the Northern Mariana Islands

History

As far back as 4,000 years ago: The Chamorro, the native people of the Mariana Islands, likely migrate from Southeast Asia to the Mariana Islands.

1521: Ferdinand Magellan of Spain makes first known landfall in the Pacific on the Northern Mariana Islands and Guam, marking the first contact between the Chamorro and the west.

1668: Spain formally occupies the Mariana Islands.

By 1720: Due to European-introduced diseases and conflict over land, the Chamorro population dwindles to less than 1,400 people from an estimated 40,000 people when the Spanish first arrived. The remaining Chamorro are relocated to Guam.

After the Spanish-American War of 1898: The United States acquires Guam by treaty.

1899: Spain sells the islands to Germany.



Chamorro erecting latte stones



Saipan Invasion, June 1944

1914: During World War I, Japan occupies the Northern Mariana Islands.

1919: Possession of the Northern Mariana Islands is mandated to Japan under the Treaty of Versailles.

1944: The United States takes the islands from Japan.

1945: The B-29 bombers, Enola Gay and Bockscar, fly out from North Field on Tinian carrying the atomic bombs dropped on Hiroshima and Nagasaki.

1947: Northern Mariana Islands administered as a Trust Territory of the Pacific Islands.

1975: The Covenant, a federal law, is passed, making the CNMI a U.S. commonwealth.

1977: The CNMI adopts its constitution.

1978: The first constitutional government takes office.

Natural Resources

What are Natural Resources?

Natural resources include water, air, soil, plants, or animals that occur in a natural state and have economic value. Federal laws and regulations that protect the environment include, but are not limited to:

- ◆ Clean Air Act
- ◆ Clean Water Act
 - National Pollutant Discharge Elimination System
 - Uniform National Discharge Standards
- ◆ Endangered Species Act
- ◆ Federal Insecticide, Fungicide, and Rodenticide Act
- ◆ Marine Mammal Protection Act
- ◆ Marine Protection, Research, and Sanctuaries Act
- ◆ Migratory Bird Treaty Act
- ◆ National Environmental Policy Act
- ◆ Oil Pollution Act
- ◆ Pollution Prevention Act
- ◆ Resource Conservation and Recovery Act
- ◆ Safe Drinking Water Act

Biodiversity and Environmental Protection

The Mariana Islands include a collection of biological communities representing some of the most diverse wildlife habitat in the world. The islands contain a number of protected and endangered species, including birds, bats, lizards, sea turtles, snails, and terrestrial habitats, as well as a diverse environment of coral reefs that must be protected.

What are Invasive Species?

Invasive species are plants, animals, or other organisms that are not native to the region or ecosystem. Invasive species may outcompete native species and adversely affect habitats economically, environmentally, and ecologically.

Human impacts are the primary means of invasive species introductions. Marine invasive species can be introduced to an area by ship ballast water or accidental release.

To help prevent the spread of invasive species:

- ◆ Ensure all vehicles, equipment, cargo, pallets, containers, tents, etc., are clean and devoid of all biomaterial, such as mud, soil, insects, spiders, snails, slugs, plant material, seeds, rodents, and small lizards, before and after training exercises or activities.
- ◆ Ensure personal gear, such as shoes, clothing, backpacks, tents, and tools, are free of mud, soil, plant material, seeds, insects, etc., before and after training exercises or activities.
- ◆ Prevent the accidental transport of brown treesnakes, coconut rhinoceros beetles, and other invasive species via military cargo and conveyances.

Natural Resources

Brown Treesnake

The brown treesnake (BTS) was accidentally transported to Guam from Manus Island in Papua New Guinea around 1950. It is a nocturnal, mildly venomous, rear-fanged snake; however, its bite is not lethal to adult humans. The BTS is usually tree-dwelling and typically 3 ft. (1 meter [m]) to 6 ft. (2 m) in length. Without natural predators, this snake has contributed to the extirpation and/or extinction of 10 out of 12 native forest birds on Guam, two of three bat species, and six lizard species. There are no native terrestrial snakes in the Mariana Islands.

Currently there are no known BTS in the CNMI, including Saipan, Tinian, Rota, and FDM. The DoD is required to enact measures to prevent the introduction and spread of BTS from Guam to other destinations. Accidentally transporting the BTS from Guam poses significant potential environmental impacts on the Mariana Islands.



BTS Interdiction

JRM has procedures in place to prevent the dispersal of BTS. There is a **100% inspection requirement before departing Guam and upon arrival in the CNMI for aircraft, small vessels, and cargo originating from Guam.**

To prevent the movement of BTS from Guam to off-island destinations (including vessels at sea), all cargo, equipment, containers, pallets, vehicles, aircraft, and surface vessels (≤ 100 ft. [30 m]) require 100% inspection by BTS detector canine teams on Guam and in the CNMI.

Points of contact for BTS issues can be found on pages 40 and 41.

Unit Responsibilities

- ◆ Ensure all aircraft, cargo, equipment, pallets, containers, vehicles, and vessels (≤ 100 ft. [30 m]) departing Guam with an off-island destination are inspected by BTS detector canine teams (**100% compliance is required**).
- ◆ Provide BTS detector canine teams on Guam and in the CNMI with unit points of contact to ensure inspection requirements are met.
- ◆ Ensure all items are properly cleaned before submitting to BTS detector canine teams for inspection on Guam.
- ◆ Cooperate with BTS detector canine teams to expedite the inspection process.
- ◆ Conduct self-inspection of personal gear and hand-carried equipment for BTS before departure from Guam.

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Unit Responsibilities Continued

BTS Sighting Emergency Response Procedures

- ◆ If a BTS is sighted in or near cargo staging areas on Guam or anywhere in the CNMI, every attempt should be made to **kill or immobilize** it.
- ◆ If a BTS is sighted and cannot be killed or immobilized, maintain visual contact at all times and report sighting through the exercise chain of command, BTS personnel, and the JRM environmental monitor.
- ◆ Capturing or killing a BTS should be undertaken with caution and safety in mind. Take care not to be bitten.
- ◆ BTS are mildly toxic.
- ◆ The snake can be killed or immobilized by hitting it on the head with enough force to kill it or by severing the head.

Guam Departure Inspection Requirements

- ◆ Aircraft and small vessels (≤ 100 ft. [30 m]) with off-island destinations (including vessels at sea), must be inspected by BTS detector canine teams before departure from Guam.
- ◆ Cargo, equipment, containers, pallets, and vehicles destined for off-island locations must receive inspections by BTS detector canine teams before loading onto aircraft or vessels.
- ◆ Containers and contents must be inspected by BTS detector canine teams before packing the containers.
- ◆ Airdrop pallets and bundles must be staged in one location to ensure items receive BTS detector canine inspections before uploading to aircraft.

Unit Responsibilities Continued

CNMI Arrival Inspection Requirements

- ◆ All cargo, equipment, pallets, vehicles, and small vessel originating from Guam must be inspected by BTS detector canine teams upon arrival in the CNMI.
- ◆ Aircraft originating from Guam and shutting down in the CNMI must undergo inspection by BTS detector canine teams.
- ◆ Aircraft originating from Guam and not shutting down in the CNMI must undergo BTS visual surveillance/observance by qualified BTS personnel until departure.
- ◆ Units must coordinate with the JRM BTS Program Manager to ensure availability of BTS detector canine teams and BTS visual observers on Saipan, Tinian, and Rota.

FDM Movements Inspection Requirements

- ◆ Aircraft departing Guam to Saipan and landing on FDM are required to have a canine inspection on Guam by BTS detector canine teams before departure and on Saipan upon arrival.
- ◆ Tactical flights starting on Guam and going directly to FDM require canine inspections on Guam by BTS detector canine teams and visual inspection upon arrival at FDM by flight crews and ground personnel.
- ◆ If the tactical flight returning from FDM needs to stop on Saipan for fuel, the aircraft must undergo a BTS canine inspection.

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Unit Responsibilities Continued

Additional BTS Interdiction Measures

- ◆ BTS control devices are maintained and operated at strategic port and airport locations on Guam and in the CNMI.
- ◆ If the movement of cargo and equipment originating from Guam must be off-loaded at Baker runway (Tinian North Field), Charlie Gate (Tinian West Field), and/or the Rota Airport, additional BTS control devices must be in place and operational before any cargo or equipment are off-loaded.
- ◆ Depending on the volume of cargo and equipment moving from Guam to the CNMI, additional BTS detector canine teams may need to be deployed to Rota, Tinian, or Saipan to meet inspection requirements.
- ◆ If it is deemed necessary to deploy BTS detector canine teams to the CNMI or additional BTS control device deployment in the CNMI, the exercise is required to fund the labor, travel, and supplies for the deployed BTS personnel.
- ◆ Aircraft parked and not in operation on Guam must have all doors and hatches secured to prevent BTS ingress during nighttime hours.
- ◆ Exercise participants conducting activities on Guam, Saipan, Tinian, Rota, or FDM must be briefed on BTS awareness.

Unit Responsibilities Continued

- ◆ All personnel are required to conduct self-inspections of personal gear and hand-carried equipment and supplies for BTS before departure from Guam.
- ◆ Aircraft crews and exercise personnel must be alert for potential BTS around aircraft during taxiing, loading and unloading, and parking on Guam and CNMI landing zones.



BTS trap

Natural Resources

Invasive Species Prevention

To prevent the movement of invasive species to, from, and within the JRM Area of Responsibility (AOR), all DoD entities and foreign training partners must comply with policies on preventing the introduction of invasive species and washdown standards.

Points of contact for environmental issues can be found on pages 40 and 41.



Unit Responsibilities

- ◆ All cargo, equipment, containers, pallets, and vehicles with movement to, from, or between islands within the CNMI must meet the Armed Forces Pest Management Board Technical Guide Number 31 (AFPMB TG-31) on washdown standards.
- ◆ Failure to meet AFPMB TG-31 standards will result in quarantine.
- ◆ Plan for and have adequate washdown equipment.
- ◆ Coordinate with JRM Biosecurity Program to schedule inspections before any movements.

Unit Responsibilities Continued

CNMI Washdown and Biosecurity Inspections for Arrival and Departure/Retrograde

Before Arrival to the CNMI

- ◆ Cargo, equipment, containers, pallets, vehicles, etc., originating from outside the CNMI must meet AFPMB TG-31 washdown standards and devoid of biomaterial.
- ◆ All items arriving into the CNMI must be systematically inspected by JRM biosecurity program personnel upon arrival (unless inspected on Guam just before movement to the CNMI) to ensure no dirt, soil, mud, seeds, vegetation, spider webs, invertebrates (snails, slugs, insects, spiders, etc.), and small vertebrates (rodents, shrews, skinks, geckos, etc.) are present on any items.
- ◆ Upon arrival, cargo, equipment, containers, pallets, and vehicles not meeting the standard shall be quarantined through the

duration of the training event until necessary mitigation (washing, fumigation, etc.) is arranged and conducted at the expense of the respective unit.

Before Departure/Retrograde from the CNMI

- ◆ Cargo, equipment, containers, pallets, and vehicles departing the CNMI or moving between islands are required to meet AFPMB TG-31 washdown standards.
- ◆ All items must be systematically inspected during/after washdown by JRM biosecurity program personnel before departure to ensure no dirt, mud, soil, seeds, vegetation, spider webs, invertebrates, and small vertebrates are present on items.

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Unit Responsibilities Continued

- ◆ All container interiors and exteriors (including bottoms) and field equipment (including tents) must be clean and inspected by JRM biosecurity program personnel before packing to ensure AFPMB TG-31 standards are met.
- ◆ Unit representatives must coordinate biosecurity inspections of all cargo, equipment, containers, pallets, and vehicles to be moved to and from the CNMI with the biosecurity points of contact before movement.
- ◆ Depending on staging location and duration, secondary biosecurity inspection(s) for all items may be required before departure.
- ◆ Foreign military partners departing the CNMI to return directly to their home country (therefore not transiting through Guam) will not be required to meet AFPMB TG-31 washdown standards. It is assumed that foreign military partners must meet their country of origin's customs and quarantine standards for reentry into their country.

Additional Biosecurity Measures

- ◆ Exercise participants must conduct self-inspections of personal gear and clothing to remove dirt or soil accumulation, seeds, vegetation, invertebrates, and small vertebrates before CNMI arrival, interisland movements, and departure/retrograde.
- ◆ Wood items (pallets, plywood, chocks, dunnage, etc.) must be pest-free. Wood items must be inspected for pest species upon arrival in the CNMI and before wood items depart the CNMI.
- ◆ If wood items are identified as having pest issues, the wood items must be quarantined and removed from the transportation network.

Coconut Rhinoceros Beetle

The coconut rhinoceros beetle (CRB) is a highly invasive species first discovered on Guam in 2007 and has become a serious pest causing massive coconut tree die-off on Guam. CRB are nocturnal and feed on coconut trees by boring into the crown of trees to feed on the sap.

CRB are not found in the CNMI, except for a population near the commercial port and south coastal area on Rota. CRB panel traps hung from trees are set out to serve as an interdiction tool to prevent the spread of CRB during training events. Do not tamper with the traps.



CRB trap



CRB burrowing damage

CRB Sighting Emergency Response Procedures

- ◆ If a CRB is sighted in or near cargo staging areas on Guam or anywhere in the CNMI, every attempt should be made to **kill and collect** it.
- ◆ If a CRB is sighted and/or killed and collected, notification must be made through the exercise chain of command and to JRM environmental personnel.
- ◆ The CRB can be killed by crushing it or twisting its head off.

Endangered and Threatened Species Constraints

Endangered species are plants and animals that have become so rare they are in danger of becoming extinct. Threatened species are plants and animals that are likely to become endangered within a foreseeable future.

To prevent and limit the cause of extinction of plants and animals:

- ◆ Prevent pollution.
- ◆ Use authorized pesticides in accordance with label requirements.
- ◆ Do not introduce new (invasive) species where they do not naturally occur.
- ◆ Do not “take” plants or animals from the wild. To “take” a plant or animal is to harass, disturb, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in such conduct.

It is unlawful for any person to “take” any listed endangered or threatened species. A “take” can be anything from loud noise to cutting vegetation to physically harming a species. The Endangered Species Act (ESA) enforces prohibitions on “taking” through civil and criminal penalties and injunctive relief. Any person who knowingly violates the ESA is subject to a civil penalty of up to \$25,000 for each violation and criminal penalties of a fine, imprisonment, or both.

Corals

Executive Order 13089 (Coral Reef Protection) was issued in 1998 to "preserve and protect the biodiversity, health, heritage, and social and economic value of the U.S. coral reef ecosystems and marine environment." This Executive Order requires the military to identify actions that may conserve, enhance, and prevent the degradation of such ecosystems.

Three ESA-listed corals (*Acropora globiceps*, *Acropora retusa*, and *Seriatopora aculeata*) occur on U.S. submerged lands in Tinian and FDM.

Training activities may result in damage to the coral reef ecosystem from transiting vessels (maritime and amphibious), underwater explosions, weapons firing, or expended materials. Training activities must comply with environmental laws and activities that might affect protected species must be coordinated in advance with JRM Environmental to ensure any impacts are authorized.



Historical and Cultural Resources

What are Historical and Cultural Resources?

A historical or cultural resource is a district, site, building, structure, or object of historic or cultural value. Significant laws and regulations that preserve and protect these resources are:

- ◆ Antiquities Act
- ◆ Archaeological and Historic Preservation Act
- ◆ Archaeological Resources Protection Act
- ◆ National Historic Preservation Act
- ◆ National Register of Historic Places

Guidelines for protecting historical, cultural, or archaeological resources:

- ◆ Do not attempt to dig, excavate, remove, damage, or otherwise alter or deface any historical, cultural, or archaeological resource.
- ◆ Do not attempt or offer to sell, purchase, exchange, transport, or receive any archaeological resource if it was excavated or removed from a site.
- ◆ Do not use or inhabit a historical, cultural, or archaeological resource without prior approval. Consult the chain of command for instruction.
- ◆ Coordinate any digging (trenches, drainage basins, grading, etc.) with the chain of command to ensure all clearances have been obtained.

National Historic Landmarks

A national historic landmark is a site, building, structure, or object that is officially recognized by the U.S. government for its historical significance.

The military can use or inhabit a historical resource only after approval from the National Park Services and the CNMI Historic Preservation Office. The chain of command must determine if military personnel can enter any of these sites during a training event.

During liberty, military personnel must observe basic stewardship when visiting these sites.



Atomic bomb loading pit on Tinian

Historical and Cultural Resources

Discoveries and Emergencies

The JRM Cultural Resources Manager (CRM) must be notified immediately if while training:

- ◆ Previously unknown cultural resources are discovered.
- ◆ Human burials are discovered.

Take reasonable measures to avoid or minimize impacts on cultural resources. The CRM must inspect the discovery and determine whether it is eligible for listing in the National Register of Historic Places (NRHP).

In the event that natural disasters (such as typhoons or tsunamis), fires, sudden disruptions of utility service, spill events, or other emergency events occur, units may take immediate action to preserve life and property without having to undergo required reviews, though the CRM must be notified as soon as possible.



World War II-era Imperial Japanese 16 centimeter cannon



Rota Latte Stone Quarry

Unexploded Ordnance

During World War II, the CNMI incurred heavy fighting, including air bombardments and conventional ground troop combat with the use of artillery, grenades, rocket launchers, land mines, and machine guns.

Unexploded ordnance (UXO): UXO is explosive ammunition that did not detonate during the war and still poses a risk today.

WARNING!

Former Military Use Area

Old Unexploded Bombs, Shells, and Grenades May Be Present

RECOGNIZE • RETREAT • REPORT

IF YOU SHOULD DISCOVER A SUSPICIOUS OBJECT,
NOTE THE LOCATION AND IMMEDIATELY CALL 911



認識
退避
報告

疑わしい物体を発見した場合は
決して触らないこと
場所を確認し、ただちに911
に通報してください

**RIKUKNISA
ABANDONA/SUHAYI
RIPOT**

KUMU UN SODDA` MASEHA
HĀFA NA OPHEHU NI
SUSPETCHĀO
CHA`-MU UN PARASCHA
NOTA I LUGĀT YAN HĀGAN
INSIGIDAS I 911

**TUKUYIN
LUMAYO
IULAT**

KUNG MAY MAKIKITA KANG
KAHINA-HINALANG BAGAY
HUWAG ITONG HAWAKAN
TANDAAN ANG LOKASYON AT
TUMAWAG KAAGAD SA 911

**GHULEEY MEETA
IYE U WERI
MWETESĀNGI
RIPOOT**

NGĀRE EYOOR MILLE U SCHUUNGI
NGE U KKIL BWE E NNGAW
UTU AMWÓGHUTI
ISCHITIW IYA IGHA U LO IYE ME
GHUTCHUGH LE FAINGI 911

인지
대피
신고

의심스러운 물체를 발견하는 경우
절대 건드리지 마십시오
발견 장소를 메모하고 즉시 911
번으로 전화하십시오

**РАСПОЗНАТЬ
ОТОЙТИ
СООБЩИТЬ**

ЕСЛИ ВЫ ОБНАРУЖИЛИ
ПОДОЗРИТЕЛЬНЫЙ ПРЕДМЕТ
НЕ ПРИКАСАЙТЕСЬ К НЕМУ
ОБОЗНАЧЬТЕ МЕСТОПОЛОЖЕНИЕ
ПРЕДМЕТА И НЕМЕДЛЕННО
ПОЗВОНИТЕ ПО НОМЕРУ 911

辨別
撤离
報告

如果发现可疑物体
请勿触摸
应记下发现可疑物体的位置
并立即拨打 911

識別
撤退
報告

如果您發現一個可疑的物體
請勿觸碰它
記下其位置並立即致電 911

Probability of Encountering UXO

UXO can be found lying and buried on beaches; buried in shallow soils and tree roots; hidden under heavy jungle growth; and may resemble the surrounding environment.



Unexploded Ordnance

Three Rs—Recognize, Retreat, and Report

All UXO or suspected UXO encountered on any property shall be treated as extremely dangerous. Upon any UXO encounter follow the three “Rs.”

Recognize

- ◆ Do not touch, disturb, or move UXO.
 - Munitions can become unstable over time and can detonate with movement or ground vibrations.
 - UXO comes in all shapes, sizes, and colors; however, weather exposure and time may alter or remove explosive markings.

Retreat

- ◆ Mark the location of the UXO hazard with tape, colored cloth, or ribbon.
- ◆ If available, attach the marker to a branch, structure, or other existing object so that it is about 3 ft. (1 m) off the ground and visible from all approaches.
- ◆ Place the marker not closer than the point where the munition or explosive of concern was first recognized.
- ◆ Do not drive stakes into the ground or disturb ground surface.
- ◆ Evacuate all personnel from immediate area.
- ◆ Do not transmit any radio frequencies.
- ◆ Do not talk on a cell phone near suspected munitions or explosives of concern. Signals transmitted from cell phones, short wave radios, single side-band radios or other communication and navigation devices may detonate.
- ◆ Note GPS coordinates if possible.

Report

- ◆ Once area is evacuated, immediately call 911 or **specific island** departments or agencies:
 - **Saipan** Department of Public Safety
911 or 670-664-9001/2
 - **Saipan** Fire Division, Operations Commander
670-664-9137
 - **Tinian** Department of Public Safety
670-433-9222/5
 - **Tinian** Fire Section
670-433-9030/0476
 - **Rota** Department of Public Safety
670-532-9433
 - **Rota** Fire Suppression Section
670-532-3473/3736
- ◆ Provide as much information as possible, including location; approximate size, shape, and color; and any distinguishing features such as nomenclature, writing, fins, etc.



Potable Water (Reverse Osmosis)

Reverse osmosis is a process that purifies water (typically salt water) using semi-permeable membranes. Water is generated for the cantonment area for showers, hand washing, field kitchen, etc.

Light-weight water purification has historically taken place on Tinian, primarily at the Tinian Harbor (northwest beach), or on approved beaches in the Military Lease Area (MLA). The Tinian Harbor (northwest beach) area is an unimproved road area and frequently used by the local community. Efforts should be made to minimize impacts. Roads will be affected by heavy weather and may require units to restore them to original or better conditions before the exercise. Water purification in Saipan and Rota is restricted to the ports and may require additional environmental review and consultation with local agencies.



Potable Water (Reverse Osmosis)

The waste volume from the reverse osmosis process (brine) must not be discharged in the ocean. Units must ensure potable water remains adequate for human use. Consult JRM Environmental for instructions regarding consumption or discharge.

Secondary containment is required for all generators, water desalination pumps, and stationary fuel trucks, as well as stored retrograde materials, including fuel and oil storage. Maintain dewatering logs for all operational secondary containment.

- ◆ For use of commercial ports, the CPA requires a signed acknowledgement form for the Military Ground Operations and Exercise Implementation Plan.
- ◆ Exercise planners must submit to MIRC Operations an exercise plan or scope of work no later than 75 calendar days before the start of the exercise.
- ◆ MIRC OPS must communicate with the CNMI Bureau of Military Affairs to submit plans to the CPA to request use of CPA properties.
- ◆ Generators and desalination pumps supporting Tactical Water Purification System or Reverse Osmosis Water Purification Unit (ROWPU) operations shall be situated at least 20 ft. (6 m) beyond the high tide mark to prevent spills from reaching navigable waterways.
- ◆ The placement of the seawater intake/snorkel must be approved by a JRM environmental monitor before operations of the water purification system takes place. This is to ensure no impacts on coral.
- ◆ Reject water must be pumped into areas at least 100 ft. (30 m) upland from the coastline and is thus filtered through soil before entering ground or seawater, preventing environmental impact.
- ◆ The end of the reject water outflow hose must be moved every other day to prevent the damaging/killing of vegetation.

Wastewater

Encampment areas lack any wastewater treatment infrastructure. Local services are available to contract for collection, transport, and disposal of sewage. Military units must provide a proof of disposal contract and quantities at the end of the exercise.

Wastewater will be disposed of using existing sewage systems when available. If facilities have exceeded capacity, are not functional, do not exist, or if the transport (via sewage trucks) to a suitable treatment system is not possible, human waste shall be disposed of according to field sanitation procedures.

Portable Toilets

- ◆ Wastewater is typically passed through a sanitary sewer system, but portable toilets are required in the field.
- ◆ General trash or retrograde waste must not be disposed of in portable toilets.
- ◆ Treated wastewater is pumped out and deposited at a permitted facility or permitted septic tank.
- ◆ Introducing trash or retrograde waste may harm the functionality of a septic tank and contaminate surface and/or ground water.

Equipment Washdown

- ◆ Equipment washdown locations must be approved by Navy Environmental.
- ◆ Washdown containment setups must be inspected by a Navy environmental monitor before use.
- ◆ Washdown containment setups shall be configured to contain washdown liquids and all oil and grease shall be removed and placed in a separate container for proper disposal (see Retrograde Waste section, pages 36-37).

Grey Water

- ◆ All grey water, with the exception of reject water from ROWPU activities, should be collected and disposed of at a permitted facility or permitted septic tank, and should be coordinated through Navy Environmental.
- ◆ Soaps, detergents, and cleaners shall be biodegradable and low in phosphate.
- ◆ Grey water from field mess halls must be run through a grease trap before collection and grease disposed of as retrograde waste.
- ◆ Ships must discharge grey water per service regulations and federal law.

Solid waste is any discarded material or material which is abandoned, recycled, or inherently waste-like. Solid waste can be either non-retrograde or retrograde.

Solid Waste in the CNMI

Solid waste generated during military training or activities should be returned to the ship or aircraft of the country of origin for disposal, or shipped or flown to Guam for proper disposal.

Solid Waste Disposed of on Guam

- ◆ A line of accounting must be established with Naval Facilities Engineering Systems Command Marianas (NAVFACMAR) for solid waste transportation, sterilization, and disposal.
- ◆ Waste must be collected in a tri-wall box lined with large plastic bags on the outside and inside. Once filled, use duct tape to "gooseneck" the inner bag and the outside bag.

- ◆ Date(s) of arrival of solid waste must be provided to ensure contractor is prepared to receive waste.
- ◆ Recyclable materials (aluminum cans, plastic drink bottles, glass bottles, cardboard, paper, ferrous and non-ferrous scrap metals, expended brass shell casings, expended munitions clips, etc.) must be segregated from waste and collected in separate tri-wall box(es).
- ◆ All batteries must be separated from solid waste and disposed of via retrograde waste requirements.

All meal, ready-to-eat (MRE) heaters must be fully expended before being disposed.

Retrograde Waste

Retrograde waste is any solid waste that exhibits retrograde characteristics (flammable, corrosive, toxic, or reactive). Retrograde waste is regulated by the Resource Conservation and Recovery Act for the entire “cradle-to-grave” lifecycle. This means generators of retrograde waste are responsible for managing and recording the generation, processing, packaging, storage, transportation, treatment, and disposal of their retrograde waste.

Units are responsible for funding the disposal of retrograde waste and materials accumulated during training to the appropriate collection facility.

Examples of Retrograde Waste

- ◆ Pesticides
- ◆ Spent solvents
- ◆ Fuels and lubricant oils contaminated with retrograde chemicals or metals
- ◆ Oily rags contaminated with retrograde chemical or metals
- ◆ Waste paint contaminated with retrograde chemicals or metals
- ◆ Fluorescent light bulbs containing mercury (light bulbs not containing retrograde metals are recyclable)
- ◆ Batteries containing lithium or nickel-cadmium, and damaged or leaking lead acid batteries (undamaged or non-leaking lead acid batteries may be recyclable)
- ◆ Used lubricant oil mixed with retrograde chemicals or metals (uncontaminated used oil is recyclable)

Retrograde Waste Disposal

- ◆ Retrograde waste generated during military training or activities should be returned to the ship or aircraft of the country of origin for disposal, or shipped or flown to Guam for proper disposal.
- ◆ For units requesting retrograde waste services on Guam, "Lump Sum Funding" to NAVFACMAR for the entire exercise, or at most per component, is required at a minimum of 30 days in advance for retrograde materials and retrograde waste services. A U.S. General Terms & Conditions for intragovernmental services must be in place between the lead exercise proponent or unit(s) and NAVFACMAR before funds can be transferred.

U.S. Environmental Protection Agency Requirements

- ◆ “Accumulation” is temporary storage of retrograde waste for less than 90 days in designated facilities.
- ◆ Accumulation sites must be located at or near the point of generation and must not exceed 55 gallons of retrograde waste or one quart of acute retrograde waste.
- ◆ Waste containers must be properly labeled and secured (closed) when not adding or removing waste.
- ◆ Containers must be free of rust, dents, bulges, etc.
- ◆ A retrograde waste container is considered “empty” if no more than 3% by weight of residue remains in the container.
- ◆ Waste must be properly separated/grouped according to type (e.g. flammable, corrosive, toxic, or reactive; solids or liquids; used oil).
- ◆ Retrograde waste in liquid form must be placed in appropriate containers and stored in secondary containment/berms.
- ◆ Containers holding liquid waste must have a four-inch ullage or air gap at the top of the container.
- ◆ Waste must be protected from rainwater intrusion to prevent the generation of additional liquid waste.
- ◆ Uncontaminated used oil containers must be secured, marked as “Used Oil,” protected from rain, stored on secondary containment/berms, not be overfilled, and follow Spill Prevention Control and Countermeasures (SPCC) regulations.
- ◆ A retrograde waste manifest is required for offsite transport of retrograde waste.
- ◆ Consult JRM Environmental for any concerns with disposal and management of retrograde waste.

Fuel Spills

Spill Prevention Control and Countermeasures Plan

The DoD is designated in the National Oil and Hazardous Substances Pollution Contingency Plan as on-scene commander for response to the release of hazardous substances where the release is on, or the sole source of the release is from, any facility or vessel, including vessels bareboat-chartered and operated, under the jurisdiction, custody, or control of DoD. The U.S. Environmental Protection Agency (EPA) is the lead federal response agency for oil/fuel spills in inland waters. The U.S. Coast Guard is the lead response agency for spills in coastal waters and deep-water ports.

- ◆ The exercise-specific SPCC Plan ensures spill response and secondary containment are adequate.
- ◆ The SPCC Plan must be reviewed and signed by a NAVFACMAR professional engineer. Units must be prepared to present to regulators when requested.
- ◆ Sufficient quantities of spill kits (capable of handling the largest amount of stored material) must be maintained near retrograde material storage areas.
- ◆ Secondary containment for stored retrograde materials, including fuel/oil storage, must be provided for volumes of five gallons or more.
- ◆ Secondary containment for generators, water desalination pumps, stationary fuel trucks, etc., must be maintained.
- ◆ Secondary containment for fuel bladders, fuel tanks (sixcons, etc.), and all other fuel containers must be maintained.
- ◆ Dewatering logs for operational secondary containment must be maintained.

- ◆ Personnel must know how to prevent, respond to, and make proper notifications for oil and/or chemical spills.
- ◆ Personnel must know the location of all spill kits and ensure they are accessible.
- ◆ Secondary containment/berm should be used for petroleum oil lubricant containers.
- ◆ Absorbent materials, such as sand, vermiculite, cloth rags and/or booms must be used to absorb oil spills and prevent the area of the spill from increasing.
- ◆ Absorbent materials used to contain spills must be collected and disposed of as retrograde waste.
- ◆ Spills must be prevented from entering any waterway (rivers, streams, lakes, or the ocean).

For in-water spills: Navy On-Scene Coordinator Representative 671-339-5310.

In the event a spill cannot be contained and cleaned up by the responsible party, call 911 or **specific island** departments or agencies:

- ◆ **Saipan** Department of Public Safety
911 or 670-664-9001/2
- ◆ **Saipan** Fire Division, Operations
Commander 670-664-9137
- ◆ **Tinian** Department of Public Safety
670-433-9222/5
- ◆ **Tinian** Fire Section 670-433-9030/0476
- ◆ **Rota** Department of Public Safety
670-532-9433
- ◆ **Rota** Fire Suppression Section
670-532-3736
- ◆ **Naval Base Guam (NBG)** Environmental
671-339-4100/2587
- ◆ **NBG** Command Duty Officer
671-488-7147 or 671-339-7199

Points of Contact

Emergency Contacts

For emergencies, call 911 or specific island departments or agencies:

- ◆ Saipan Department of Public Safety
911 or 670-664-9001/2
- ◆ Saipan Fire Division, Operations Commander
670-664-9137
- ◆ Tinian Department of Public Safety
670-433-9222/5
- ◆ Tinian Fire Section
670-433-9030/0476
- ◆ Rota Department of Public Safety
670-532-9433
- ◆ Rota Fire Suppression Section
670-532-3736

Military Training Coordination/Planning

- ◆ MIRC OPS General Line
671-349-6399 (DSN 315)
- ◆ MIRC OPS Duty Cell (after hours)
671-864-5883
- ◆ Regional Operations Center
671-349-4001 (DSN 315)
- ◆ JRM Regional Operations Center
671-349-4004
- ◆ BTS Program Coordinator
NAVFACMAR Environmental
671-339-2349
- ◆ JRM Environmental Monitor On Site JRM/
NAVFACMAR Environmental (J40)
671-349-1104
- ◆ Navy On-Scene Coordinator Representative
671-349-4420
- ◆ NBG Command Duty Officer
671-488-7147 or 671-339-7199

General Environmental Support

- ◆ JRM/J40
671-349-1104
- ◆ NBG Environmental
671-339-4100
671-339-2587
- ◆ Andersen Air Force Base (AAFB) 36th Civil Engineer Squadron Environmental
671-366-2556
- ◆ Environmental Business Line Coordinator/J45
671-349-4420
- ◆ MIRC OPS
671-349-6399

For environmental issues

- ◆ JRM Environmental Monitor
On Site JRM/J40/Regional Environmental Coordinator
671-349-1104
- ◆ MIRC OPS
671-349-6399
- ◆ BTS Program Coordinator
NAVFACMAR Environmental
671-339-2349
- ◆ Mariana Islands Training and Testing Biological Opinion Program Manager
671-349-2349

For cultural resources issues

- ◆ NBG CRM/Archaeologist
671-339-2093
- ◆ AAFB CRM
671-366-1019

For unmanageable fuel spills

U.S. EPA is the lead federal response agency for oil spills in inland waters.

The U.S. Coast Guard is the lead response agency for spills in coastal waters and deep-water ports.

Permits and Regulations

As representatives of the DoD, it is everyone's duty to follow applicable regulations and requirements. This involves acting as an environmental steward and taking responsibility to help protect the CNMI's natural environment and cultural resources while here; and in doing so, help ensure social harmony.

Military activity may require or involve a variety of environmental permits and regulations. Permits are typically addressed by JRM Environmental before the commencement of military activity; however, here are some general guidelines to abide by:

- ◆ No vegetation cutting or clearance allowed unless pre-approved by JRM.
- ◆ Do not disturb sea turtles, fruit bats, birds, or bird and sea turtle eggs/nests; except for BTS and CRB.
- ◆ Do not move any animals, animal parts, or their eggs, whether alive or dead.
- ◆ Adhere to all vehicle limitations in areas designated "No Cultural Resources Disturbance" and "No Wildlife Disturbance," except on established roads.
- ◆ Park on cleared shoulders not in "No Cultural Resources Disturbance" areas.
- ◆ Observe vehicle and pedestrian restrictions.
- ◆ No off-road driving.
- ◆ No fence cutting.
- ◆ Restore the site to its original condition in areas where digging is permitted. Permission to dig anywhere must be obtained from JRM CRM before exercise.

Permits and Regulations

- ◆ No painting, stenciling, marking, or placement of unit stickers, decals, or other unit identification.
- ◆ No graffiti of any kind should be placed on anything or any place.
- ◆ Do not litter or deface ancient cultural artifacts or World War II historic structures.
- ◆ No objects should be removed other than material brought in for the exercise. (i.e. no stone or pottery sherds)
- ◆ Take all material, such as solid waste, batteries, expended brass shell casings, expended munitions clips, and old communications wire, to established collection points.
- ◆ Do not dig within 3 ft. (1 m) of structures, and then only after JRM CRM has permitted it.
- ◆ Immediately report any significant damage to training areas and the extent of the damage.
- ◆ Do not walk or stand on coral reef flats or reef edges.
- ◆ Use the buddy system when conducting in-water training/exercises.
- ◆ Wear or maintain access to a personal flotation device when conducting in-water training/exercises.

Possible Consequences

The ability to conduct future exercises in the Mariana Islands depends on the success of environmental standards established and maintained during training. Training constraints and protective measures must be in effect and followed by all units operating in the MIRC.

Environmental monitors wearing safety vests must be available during the field exercises to assist with identifying exercise constraints. Environmental monitors have the authority to temporarily stop or modify any exercise activity causing an immediate threat to the environment. Compliance is a unit and individual responsibility.

Failure to comply may result in:

- ◆ Violator and their Commanding Officer being held responsible for any damages to natural, historical, or cultural resources.
- ◆ Prohibition from future training evolutions.
- ◆ Potential fines and imprisonment.
- ◆ Potential adverse effects to a natural, historical, or cultural resource.
- ◆ Criminal penalties under the Uniform Code of Military Justice.

Environmental, cultural, and heritage protection should never be forfeited. All environmental safeguards and restrictions must be complied with during all phases of training. When in doubt, consult the chain of command.



Tinian

Background

The Navy's MLA on the northern part of Tinian is centered on the unrestricted World War II-era airfield called North Field. North Field consists of four 8,000-foot parallel runways that have not been improved since the 1940s. North Field is a national historic landmark which places restrictions on its use. Consideration of this designation should be part of exercise design, development, and posture. Tinian can be used for airfield seizure, parachute insertion, embassy reinforcement, amphibious assault, amphibious raid, humanitarian assistance/disaster relief operations, noncombatant evacuation operations, intelligence, surveillance, reconnaissance, and other ground training activities.

Geography

Land area: 39 mi² (101.01 km²)

Highest elevation: 561 ft. (171 m)

Highest point: Mount Lasso

Largest city: San Jose

Population: 3,136 (2010 Census)

Coordinates: 15° 00'N 145° 38'E

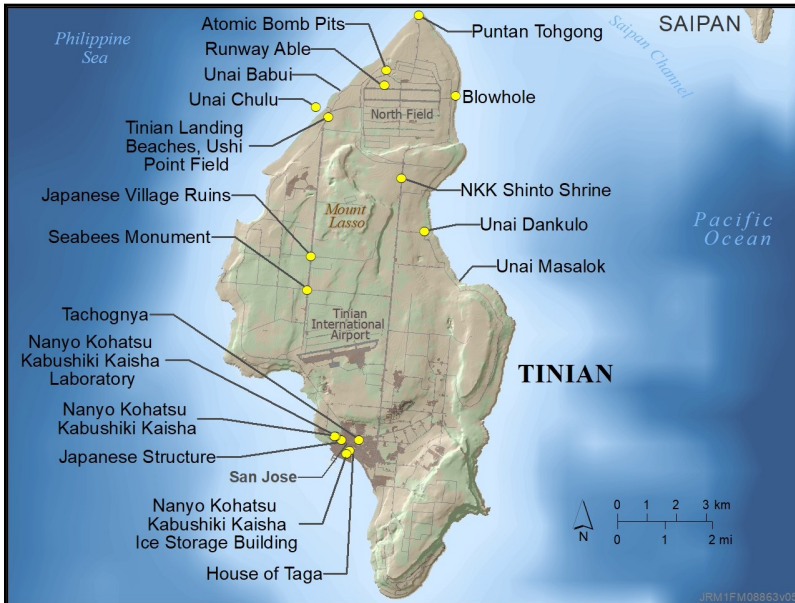
Terrain: Nearly horizontal limestone platforms and cliffs, coastal limestone plains, and marshland.



Tinian

Historical and Cultural Resources

More than 340 cultural resource sites associated with Tinian are considered eligible for or listed in the NRHP, including one national historic landmark, one individually listed resource (the Unai Dankulo Petroglyph site), 90 pre-contact sites, and 257 historic archaeological sites.



North Field and Runway Able

North Field, a set of four runways constructed and used during World War II, is a national historic landmark. Runway Able, the northernmost runway, was used in the strategic atomic bombing of Hiroshima and Nagasaki.

Atomic Bomb Loading Pits

B-29 Superfortress bombers Enola Gay and Bockscar carried the atomic bombs “Little Boy” and “Fat Man” that were dropped on Hiroshima and Nagasaki, respectively. These bombs were assembled and stored in pits constructed to load the bombs. The loading pits are now encased for the public to view.

Unai Chulu and Unai Babui Landing Beaches

In 1944, U.S. Marine Corps forces landed on Unai Babui (White Beach 1) and Unai Chulu (White Beach 2), resulting in the capture of Tinian from Imperial Japan. By selecting almost impossibly small landing beaches, the Marines surprised the Japanese defenses and successfully established beach-heads with minimal casualties.

The back-beach area of Unai Chulu is designated as a “No Training Area” except for the access roadways.

Unai Dankulo Landing Beach

Unai Dankulo is also known as Long Beach One. A series of ancient Chamorro petroglyphs carved in the bedrock are located here. Do not tamper with these carvings. This site was listed in the NRHP in 1999.

Cultural/Historic Constraints

Training constraints and maps were developed due to the presence of historic properties and cultural resources on Tinian.

- ◆ **No Training Areas** (dark orange highlighted areas on maps) are off-limits, and no training events or non-training events shall be scheduled or shall occur within these areas.
- ◆ Designated back-beach areas are off-limits at Unai Chulu and Unai Dankulo (See maps on pages 54 and 55).
- ◆ **Limited Training Areas** (orange highlighted areas on maps) are primarily designated as pedestrian-traffic areas with vehicular access limited to designated roadways. No pyrotechnics, demolition, digging, cutting vegetation, or bivouacking is allowed.
- ◆ North Field runways, taxiways, parking aprons, historic buildings, and invasion beach are located within a National Historic Landmark.
- ◆ No ground disturbance is allowed to runways, taxiways, parking aprons, etc. If use of grounding rods, tent stakes, radar/antennae array anchor points are required, coordination with and approval by the JRM CRM is required. Any disturbance to these areas must be restored with acceptable materials approved by the JRM CRM.
- ◆ Historic buildings or structures at North Field can be used during training events, but must be coordinated with and approved by the JRM CRM. Historic buildings or structures include Air Administration Bldg., Air Operations Bldg., Airfield Air Raid Shelters, Generator Plant Bldg., Generator Plant Fuel Storage Bldg., and Radio Communications Bldg. (located off Broadway Ave.).
- ◆ No digging or vegetation removal is allowed unless authorized by the JRM CRM and Navy Environmental.

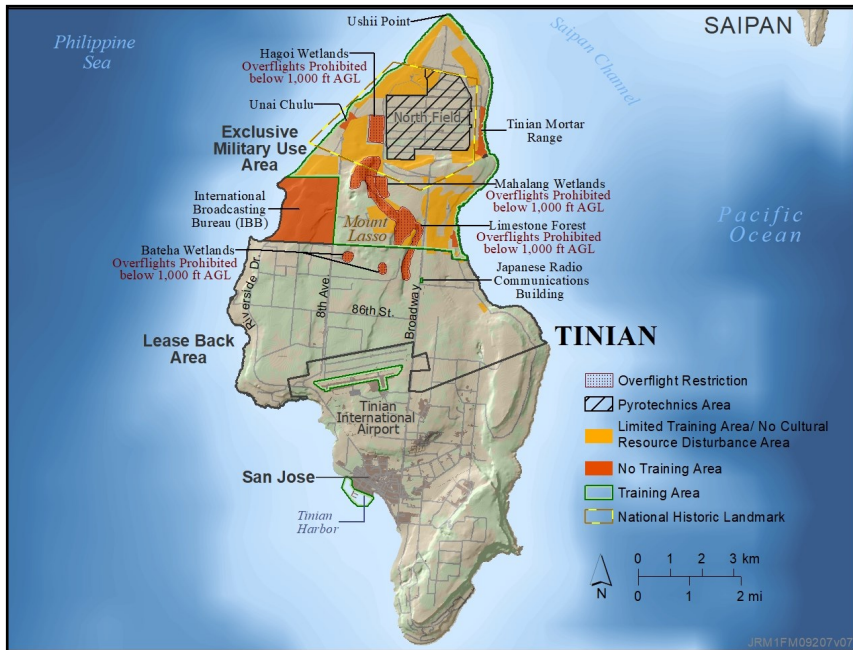
Safety Constraints

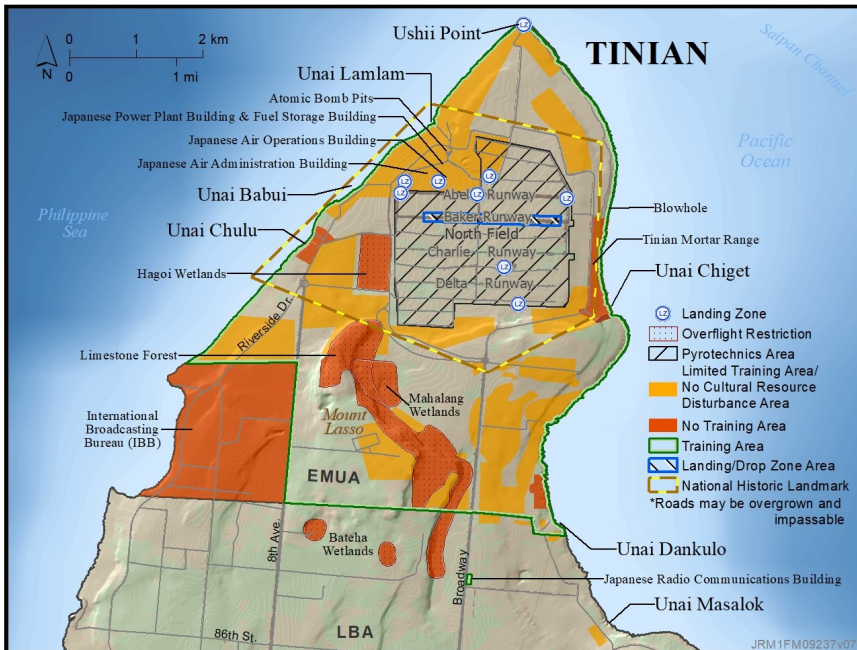
Safety constraints were developed due to potentially hazardous or dangerous areas on Tinian.

- ◆ Tinian Mortar Range: No Training Area east of North Field along the coast and south of the Blowhole is a fenced area contaminated with post-World War II UXO.
- ◆ Ocean conditions: Reef areas rapidly increase from shore from shallow to deep, creating strong rip currents along inundated zones close to shore. Current conditions can be extremely dangerous, so avoid reef margin areas. Lives have been lost at MLA beaches.

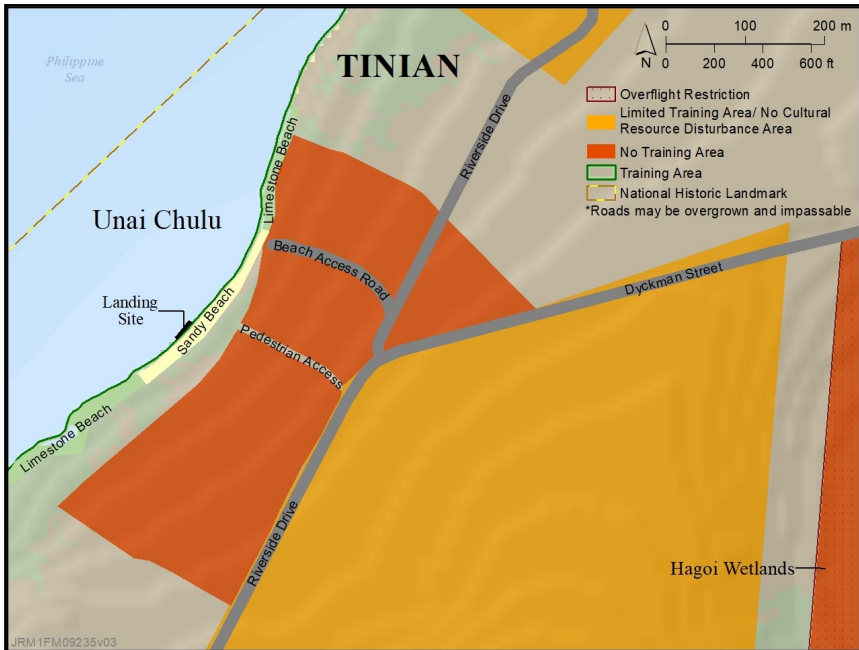


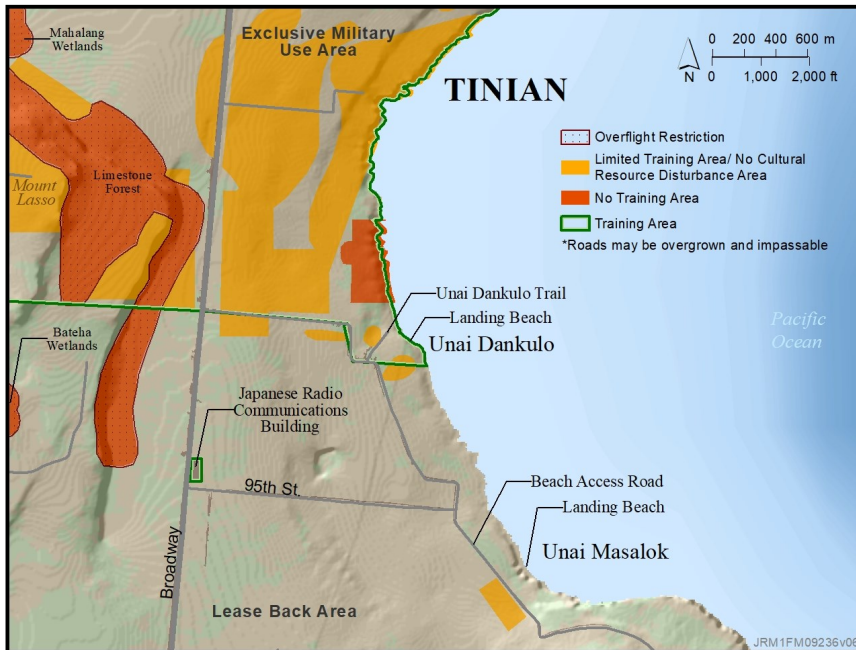
Tinian





Tinian





Natural Resources Constraints

Training constraints and maps were developed due to the presence of endangered species and sensitive habitat on Tinian.

Ground Maneuvers

- ◆ Wetland locations (Hagoi, Mahalang, Bateha) are off-limits to all ground activities to avoid impacts on the endangered Mariana moorhen.
- ◆ Limestone forest areas along ridgelines associated with Mt. Lasso are off-limits to all ground activities to avoid impacts on the endangered Mariana fruit bat and Micronesian megapode.
- ◆ No driving, camping, campfires, digging, or vegetation removal is allowed at beaches.
- ◆ Vehicle use is restricted to existing roadways; off-road driving is prohibited.
- ◆ Vegetation removal is prohibited unless coordinated with and approved by JRM Environmental.

Wildfire Prevention

- ◆ JRM Fire Management Plan must be followed (COMNAVMARINST 3500.4C).
- ◆ No live-fire or tracer rounds are allowed on Tinian.
- ◆ Use of pyrotechnics, flares, blank fire, and other potential fire-starting activities are restricted to existing cleared runways at North Field.
- ◆ Cooking by individuals is limited to MRE heating tabs in training areas.
- ◆ Airfield crash-fire-rescue equipment and crews at North Field are required to be maintained for the duration of major-exercise airfield operations.
- ◆ Any military-related fires must be controlled before the loss of any wetland or native limestone forest habitat. Any military-related fires in tangantangan forests must be controlled before the loss of five acres.

Aircraft Overflights (Wetlands/Limestone Forest)

All aircraft must comply with overflight requirements for wetlands (Hagoi, Mahalang, Bateha) and limestone forest associated with Mt. Lasso, in which aircraft must maintain an altitude $\geq 1,000$ ft. (305 m) above ground level (AGL). This avoidance measure is to reduce impacts on the endangered Mariana moorhen, Mariana fruit bat, and Micronesian megapode.

Amphibious Landings

- ◆ Coral reefs in Tinian consist of raised reef tables that are exposed at extremely low tides, especially during summer.
- ◆ Mechanized landings (Landing Craft Air Cushion; Amphibious Assault Vehicle; Landing Craft, Utility; etc.) are not authorized for Tinian MLA beaches.
- ◆ JRM environmental monitors must survey landing beaches for active sea turtle nests no more than six hours before the start of amphibious or beach activities.
- ◆ If an active sea turtle nest is less than 50 days incubation, a 20 ft. (6 m) buffer area will be flagged out from the nest and designated as an off-limits area.
- ◆ If an active nest is beyond 50 days of incubation, night training will be prohibited until the nest hatches or a 30 ft. (9 m) wide buffer is designated from the active nest to the water.

- ◆ If an active nest has been discovered to have a pre-hatch hole, night training will be prohibited for five days. A pre-hatch hole indicates the nest will hatch that evening.
- ◆ A JRM environmental monitor must observe beach insertion and extraction activities for the duration of the event to ensure no impacts on nests or nesting females.
- ◆ The exercise must cease if a sea turtle is observed on a beach. The event may only recommence after the sea turtle exits the beach and any nests are flagged for avoidance.

Small Boat Operations

- ◆ Lookouts required to visually survey for marine mammals and sea turtles.
- ◆ Implement avoidance measures, as necessary.
- ◆ Ensure Protective Measures Assessment Protocol compliance requirements.

Over Reef Insertions/Extractions: Combat Rubber Raiding Craft (CRRC)/Swimmers

- ◆ Must be accomplished during high tide.
- ◆ CRRC props must be lifted out of the water before crossing over the reef margin and while over reef flat areas and paddle to/from beach.
- ◆ No walking or standing on the reef edge, reef flat areas, or sea grass beds.

On Beach Activities

- ◆ No digging or removal of vegetation.
- ◆ No driving vehicles.
- ◆ No camping or open fires.
- ◆ No lighting will be used in the vicinity of active sea turtle nests that are past 50 day incubation.
- ◆ Only turtle-friendly lighting will be used during sea turtle nesting season.

Saipan

Background

Saipan is infrequently used by the U.S. military for training. Land navigation training can be conducted on non-DoD lands. The Army Reserve Unit Saipan has access to the CNMI Public Safety Small Arms Range Complex on non-DoD lands. The Saipan Army Reserve Center contains an armory, classrooms, administrative areas, maintenance facilities, and laydown areas that support command and control, logistics, anti-terrorism/force protection, bivouac, and other activities. Saipan can also be used for military operations on urban terrain (MOUT)/direct action special warfare training in conjunction with local authorities. The Marpi Maneuver Area (MMA) supports limited dismounted land navigation training.

Geography

Land area: 44.55 mi² (115.4 km²)

Highest elevation: 1,560 ft. (475 m)

Highest point: Mount Tapochau

Largest municipality: Garapan

Population: 3,983 (2010 Census)

Coordinates: 15° 20'N 145° 72'E

Terrain: Nearly horizontal limestone platforms and cliffs, coastal limesand plains, and marshland.



Historical and Cultural Resources

The Saipan Army Reserve Center was constructed in 2006 and is not considered a historic architectural resource. Leased pier space on Saipan consists of approximately 100 acres in the Wharf area. Even though this area is highly developed, intact cultural resources could be identified in the future.





Cultural/Historic Constraints

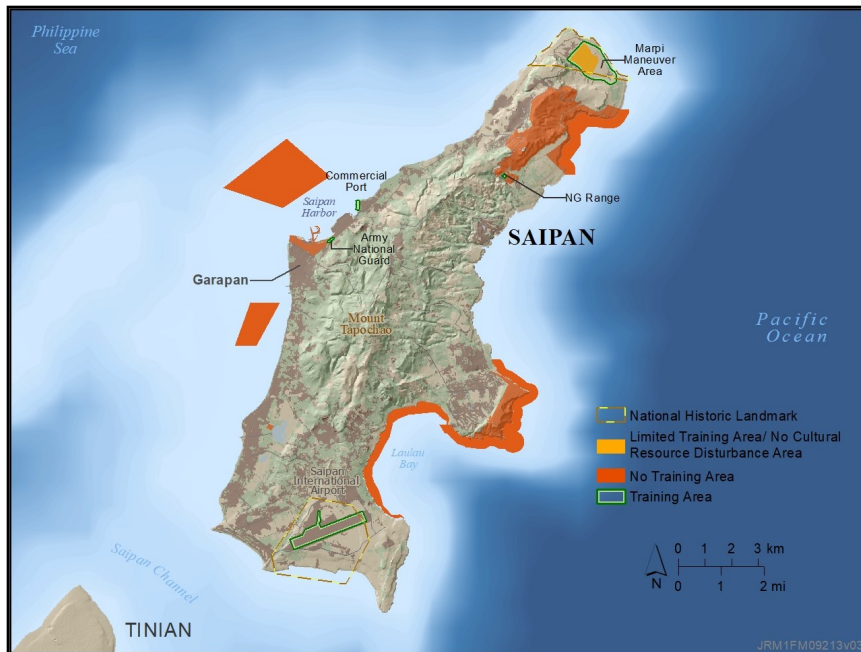
Training constraints and maps were developed due to the presence of historic properties and cultural resources on Saipan.

- ◆ **No Training Areas** (dark orange highlighted areas on maps) are off-limits, and no training events or non-training events shall be scheduled or shall occur within these areas.
- ◆ **Limited Training Areas** (orange highlighted areas on maps) are primarily designated as pedestrian-traffic areas with vehicular access limited to designated roadways. No pyrotechnics, demolition, digging, cutting vegetation, or bivouacking is allowed.
- ◆ The majority of the MMA and the Saipan Airport are located within National Historic Landmarks.
- ◆ No ground disturbance is allowed on old taxiways, parking aprons, etc., in the MMA.
- ◆ If use of grounding rods, tent stakes, anchor points are required, coordination with and approval by the JRM CRM is required. Any disturbance to these areas must be restored with acceptable materials approved by the JRM CRM.
- ◆ No digging or vegetation removal is allowed unless authorized by the JRM CRM and Navy Environmental.

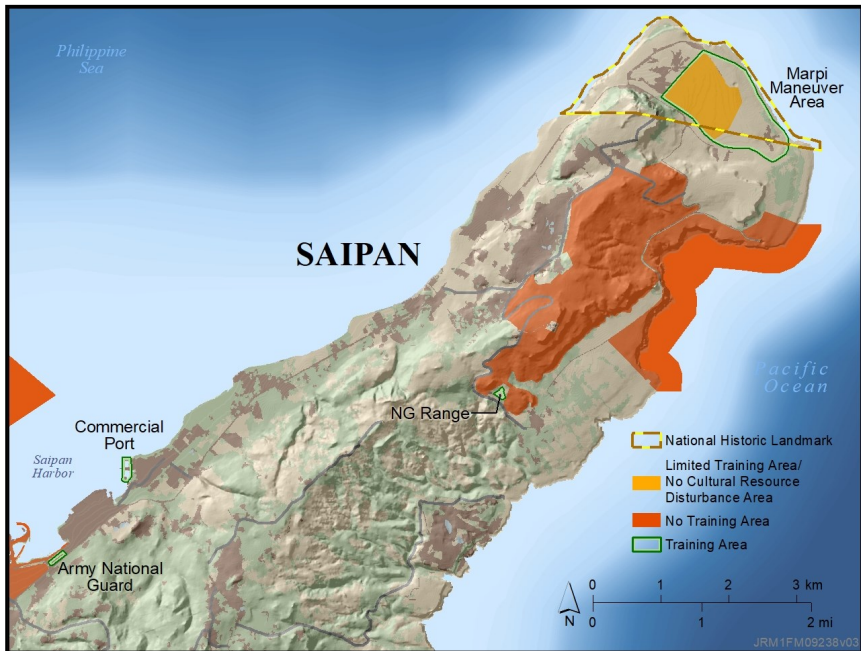
Safety Constraints

Safety constraints were developed due to potentially dangerous areas on Saipan.

- ◆ **Ocean conditions:** Reef areas rapidly increase from shore from shallow to deep, creating strong rip currents along inundated zones close to shore. Current conditions can be extremely dangerous, so avoid reef margin areas. Lives have been lost at CNMI beaches.



Saipan



Natural Resources Constraints

Training constraints and maps were developed due to the presence of endangered species and sensitive habitat on Saipan.

Ground Maneuvers

- ◆ Amphibious beach landings and other beach activities are prohibited.
- ◆ Within the MMA, training is limited to land navigation training in open areas, e.g., open grasslands, and training activities are prohibited in forest, scrub, and mixed shrub habitats to minimize impacts on endangered forest birds.
- ◆ Land navigation maneuvers will remain tactical and not establish support camps.
- ◆ Vegetation removal is limited to the maintenance of existing bivouac areas and must be coordinated with and approved by JRM Environmental.
- ◆ No ground disturbance or vegetation removal of any kind is permitted along the southern border of the MMA.
- ◆ Vehicle use is restricted to existing roadways; off-road driving is prohibited.

Wildfire Prevention

- ◆ JRM Fire Management Plan must be followed (COMNAVMARINST 3500.4C).
- ◆ Pyrotechnics are prohibited during training activities on Saipan.
- ◆ Smoking is not permitted during training activities and fire-safe-portable receptacles for cigarette butts must be used during periods of rest between training activities.
- ◆ Fires are not permitted during training activities.
- ◆ Cooking by individuals is limited to MRE heating tabs in training areas.

Rota

Background

Rota is about 45 mi (72 km) north of Guam and is capable of supporting limited training between Guam, Tinian, and FDM. Boat refueling can be conducted at the commercial marina. Possible types of special warfare training include hostage rescue, non-combatant evacuation operations, and MOUT training. This training can be conducted with local law enforcement on non-DoD land. The West Harbor/East Harbor and Rota Airport are capable of supporting waterborne and airborne training activities.

Geography

Land area: 32.97 mi² (85.38 km²)

Highest elevation: 1,624 ft. (495 m)

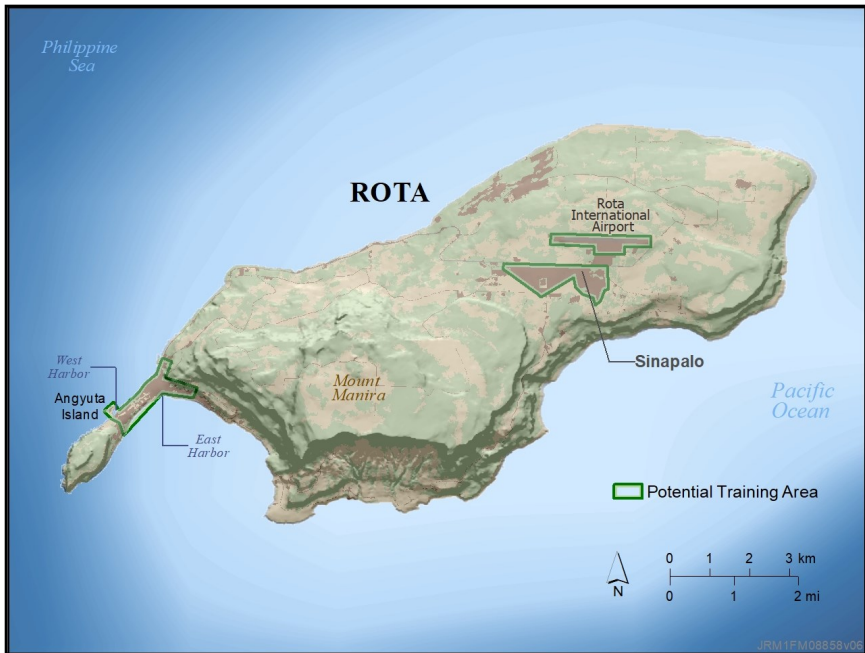
Highest point: Mount Manira

Largest settlement: Sinapalo

Population: 1,297 (2010 Census)

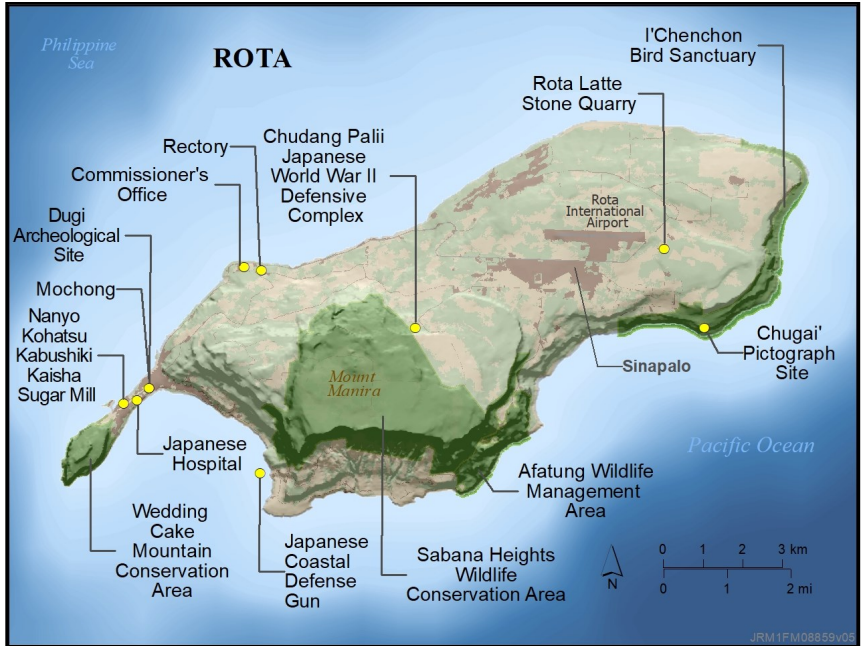
Coordinates: 14° 16'N, 145° 23'E

Terrain: A volcanic base capped with coral limestone, giving it a terraced appearance.



Historical and Cultural Resources

Leased pier space on Rota includes the use of Angyuta Island seaward of Songsong's West Harbor (see map on page 67) as a forward staging base/overnight bivouac site. The island is adjacent to the commercial port facility used for boat refueling and maintenance. No historic properties were identified during a visual field inspection of Angyuta Island in February 2009.



Cultural/Historic Constraints

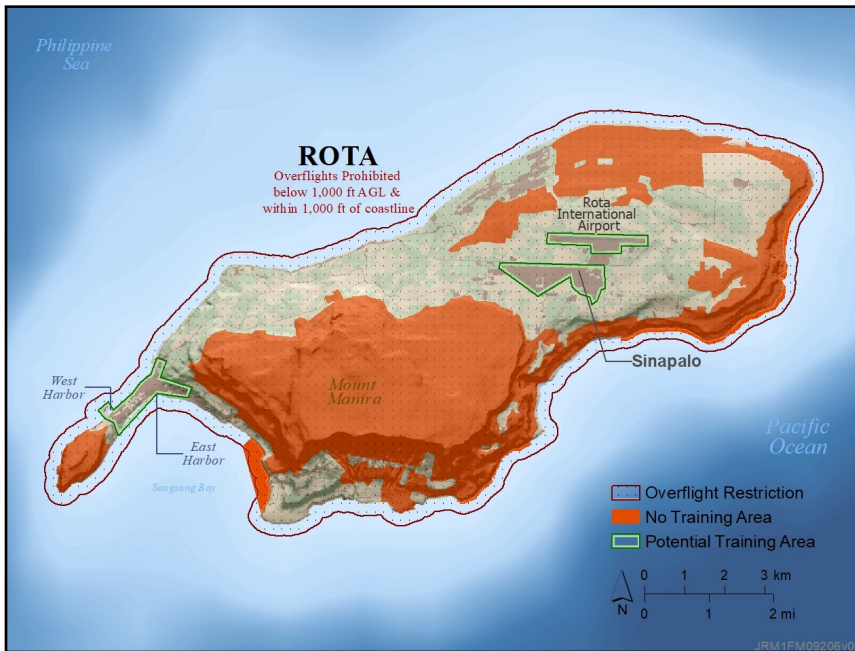
Training constraints and maps were developed due to the presence of historic properties and cultural resources on Rota.

- ◆ **No Training Areas** (dark orange highlighted areas on maps) are off-limits, and no training events or non-training events shall be scheduled or shall occur within these areas.
- ◆ No ground disturbance is allowed.
- ◆ If use of grounding rods, tent stakes, anchor points are required, coordination with and approval by the JRM CRM is required. Any disturbance to these areas must be restored with acceptable materials approved by the JRM CRM.
- ◆ No digging or vegetation removal is allowed unless authorized by the JRM CRM and Navy Environmental.

Safety Constraints

Safety constraints were developed due to potentially dangerous areas on Rota.

- ◆ **Ocean conditions:** Reef areas rapidly increase from shore from shallow to deep, creating strong rip currents along inundated zones close to shore. Current conditions can be extremely dangerous, so avoid reef margin areas. Lives have been lost at CNMI beaches.



Natural Resources Constraints

Training constraints and maps were developed due to the presence of endangered species and sensitive habitat on Rota.

Ground Maneuvers

- ◆ No training activities will occur near or within critical habitat, habitat occupied by listed species, or other habitats designated for conservation use.
- ◆ Training activities are restricted to urbanized areas (Rota International Airport, West Harbor, East Harbor, SongSong Village, Sinapalo Village).
- ◆ Amphibious beach landings and other beach activities are prohibited.
- ◆ Vehicle use is restricted to existing roadways; off-road driving is prohibited.
- ◆ Vegetation removal is prohibited.

Wildfire Prevention

- ◆ JRM Fire Management Plan must be followed (COMNAVMARINST 3500.4C).
- ◆ Pyrotechnics and open fires are prohibited during training activities on Rota.

Aircraft Overflights (Wetlands/Limestone Forest)

All aircraft must comply with overflight requirements for the entire island of Rota, in which aircraft must maintain an altitude $\geq 1,000$ ft. (305 m) AGL and within 1,000 ft. (305 m) of coastlines, except for takeoff and landings at the airport. This avoidance measure is to reduce impacts on the Mariana fruit bat and Rota bridled white-eye.



