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DEPARTMENT OF THE NAVY

DRAFT

ENVIRONMENTAL IMPACT STATEMENT

FARALLON DE MEDINILLA

BOMBARDMENT RANGE

MARIANA ISLANDS

MARCH 1974

DEPARTMENT OF THE NAVY
OFFICE OF THE SECRETARY
WASHINGTON, D. C. 20350

14 MAR 1974

Honorable Russell W. Peterson
Chairman, Council on Environmental Quality
722 Jackson Place, N.W.
Washington, D. C. 20006

Dear Mr. Peterson:

Five copies of the Draft Environmental Impact Statement "Farallon De Medinilla Bombardment Range, Mariana Islands" are provided in accordance with the National Environmental Policy Act of 1969 and your Guidelines issued August 1, 1973.

Sincerely,

PETER W. McDAVITT
Special Assistant to the
Assistant Secretary of the Navy
(Installations and Logistics)

Enclosure

Blind copy to:
ASD (I&L)
ASD (H&E)
ASD (ISA)
JCS-J-5
HQ USAF
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CO PWC GUAM
✔Office of Micronesian Status Negotiations (2)
High Commissioner, TTPI
EPA
EPA (Region IX)
DOI
Department of Commerce
Advisory Council on Historic Preservation
Marianas Political Status Commission, Saipan
CNO (OP-605)

DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR

FARALLON DE MEDINILLA

BOMBARDMENT RANGE

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SUMMARY
DRAFT ENVIRONMENTAL IMPACT STATEMENT
DEPARTMENT OF THE NAVY
FARALLON DE MEDINILLA BOMBARDMENT RANGE
FEBRUARY 1974

1. Name of Action. Administrative.

2. Description of Action. Farallon de Medinilla, the smallest of the fourteen islands within the Mariana District of the U. S. Trust Territories of the Pacific Islands, located approximately 45 miles north-northeast of Saipan, is proposed for continued use as a Navy and Air Force bombardment range. The entire area of the uninhabited island, comprising some 224 acres, is used for training in air-to-ground weapons delivery and shore bombardment. The remote location of the island, its inaccessibility from the ocean and its small size minimize the environmental impact of the action by providing total noise abatement and by limiting the amount of resources committed.

3. Summary of Environmental Impact and Adverse Environmental Effects. The environmental impact consists of explosions and fragmentation of metal shell and bomb casings. The adverse effects are cratering, sprays of shell and bomb fragment, ground disruption, water pollution, air pollution, destruction of vegetation and animal life, and other related effects in varying degrees confined to the target area and not extending to the neighboring populated islands.

4. Alternatives Considered. Alternative possibilities include conducting bombardment training on one of the other seven uninhabited islands in the Mariana District; conducting the training using only nonexplosive or inert ordnance; and halting all further bombardment training.

5. Agencies From Which Comments Have Been Requested:

Environmental Protection Agency

Environmental Protection Agency, Region IX

Department of Interior

Department of Commerce

Advisory Council on Historic Preservation

High Commissioner, Trust Territories of the Pacific Islands

Office of Micronesian Status Negotiations, Washington, D.C.

6. Date Draft and Final EIS made Available to CEQ and Public:

Draft EIS March 1974

Final EIS

PROJECT DESCRIPTION

1. Name. Farallon de Medinilla Bombardment Range.

2. Location.

a. The Trust Territory of the Pacific Islands.

The Trust Territory of the Pacific Islands is composed of some 2,000 islands which are spread over an expanse of ocean covering an area approximately the size of the United States. It is divided into six districts, as follows: Marshall Islands District, Palau District, Ponape District, Truk District, Yap District, and Mariana Islands District. (See Appendix (1)).

b. Farallon de Medinilla.

Farallon de Medinilla is located within the Marianas District at 16° 01' North latitude, 146° 04' East longitude, lying approximately 45 miles north-northeast of Saipan and 154 miles miles north-northeast of the Territory of Guam. (See Appendix (2)).

The Island is approximately 1.6 miles long and 0.25 miles wide at the widest point, containing a land area of approximately 0.35 square miles or 224 acres. This comprises some two-tenths of one percent of the total land area within the Mariana Islands District. The island is uninhabited and of marginal utility. A summary of the areas and populations of the islands within the Marianas District is contained in Appendix (3).

3. Current Military Use. Since October 1971, the island of Farallon de Medinilla has been used as a bombardment range by the U. S. Navy and Air Force. The island is used by both strategic bombers and Navy combatant ships all of which are operating from bases on the island of Guam, approximately 155 miles to the south.

During the peak of the Vietnam bombing operations, the quantity of ordnance delivered on the island was estimated at 22 tons per month. This consisted primarily of air-dropped, 500- and 750-pound bombs. Also included in the total monthly figure were approximately 60 rounds of three-inch ammunition from ships' guns.

Current and future use of the island call for a reduced amount of ordnance delivery. It is estimated that some 40 tons of aerial bombs per year will be dropped consisting also of 500-pound and 750-pound bombs. It is further expected that some 60 rounds per month of three-inch ammunition will be fired at the island. Navy anti-submarine warfare patrol aircraft may occasionally fire air-to-surface "bullpup" missiles at the island. The use of the missiles is not expected to exceed four or five firings a year.

No range facilities have been built or are planned to be built on the island. No provisions are planned for target spotting and no personnel will be located on the island.

4. Geology. Farallon de Medinilla is a narrow, precipitous, rather flat-topped ridge of raised coral limestone. It slopes from an average elevation of approximately 150 feet on the eastern side to about 40 feet on the western side. The highest elevation is 266 feet, arising on the mid-portion of the eastern side of the island. The island is covered by a thin layer of soil interspersed with limestone outcroppings. Two types of soil are in evidence, the first, a red, highly plastic clay and the second, a black humus made up of decomposed vegetation and guano. The island emerged as the result of volcanic action along the same crustal rift which formed, and in some locations, continues to form the higher, volcanic (largely basalt) islands of the group. This rift-line follows a general north-south direction, somewhat bowed to the east.

5. Climate. No meterological data is available for Farallon de Medinilla itself; however, the following data is provided for the island of Saipan. Farallon de Medinilla, located just 45 miles to the north-northeast of Saipan, can be expected to have a comparable climate.

The climate of the island of Saipan is typical of tropical regions, with almost uniformly warm temperatures and high humidity prevailing throughout the year. There is a marked seasonal variation in rainfall. The months of July through December are considered as the rainy season; the remaining months are the dry season. However, some rain is recorded in every month of the year. The average annual rainfall is slightly more than 82 inches with 71 percent of this

falling in the form of showers during the rainy season. January is the driest month averaging 2.6 inches. September is the wettest month averaging 13.3 inches. The steady Easterly Tradewinds, which blow throughout the dry and wet seasons, average 11.1 mph during the dry season and 10.2 mph through the wet season. The prevailing wind direction is easterly-northeasterly yearly, as Saipan is located in a position where it is constantly under the influence of the Easterly Trades. The average maximum temperature is 86.8 degrees with 75.6 degrees as the average minimum temperature. The overall average temperature is 81.2 degrees. The average humidity varies from an early morning high of 88 percent to an afternoon minimum of 74 percent. The high moisture content of the atmosphere during the wet season, combined with the warm temperatures, contributes greatly to the rapid deterioration of many man-made products. Typhoons (severe tropical cyclones---Pacific hurricanes) have their birthplace over the ocean areas near Saipan. Fortunately, most of these tropical cyclones are in their formative stages of development and seldom strike Saipan.

6. Fresh Water. There is no fresh surface water on Farallon de Medinilla. Contact with the Water Resources Division of the U. S. Geological Survey based on Guam indicate no record of investigations of ground water resources on the island. However, due to the small size of the island, the sloping topography of the crown of the island and its limestone composition, it is highly unlikely that any recoverable amount of ground water is present.

rainfall is slightly more than 82 inches

7. Minerals. There are no mineral deposits of commercial value on the island. The island is composed of limestone, which although usable as grading and construction material, is so abundant elsewhere nearer to any potential construction sites that the use of limestone from Farallon de Medinilla would not be economically feasible. The removal of this limestone or any large scale removal of accumulated bird excrement (guano) for fertilizer, would not only be uneconomical, but would have a seriously detrimental and long-lasting effect on the seabird breeding population on the island.

8. Wildlife. Six species of seabirds occur on Farallon de Medinilla. These are:

The Red-Footed Booby or "Gannet" (Sula sula).

The Masked Booby, also called the Blue-Faced or White Booby, or "Gannet" (Sula dactylatra).

The Brown Booby or "Gannet" (Sula leucogaster).

The Great Frigatebird (Fregata minor).

The Fairy or "White tern" (Gygis alba), and

The Common Noddy tern (Anous stolidus pileatus).

These are common species of seabirds found in many parts of the Pacific and Indian Oceans. (Appendix (4)).

All three species of boobies and the Fairy Terns breed on Farallon de Medinilla. The boobies nest as a colony which is fairly evenly distributed over the vegetated top of the island at a rate of about 100 nests to the acre. This would indicate a population of 50,000±

adult boobies on the island. Many juveniles (the young from the previous year) are also present, but their numbers cannot be estimated.

Fairy terns, which do not breed in colonies, nest primarily in the deep limestone caves at the base of the island. As in other areas of the world, they are not as abundant as the boobies, and their numbers on Farallon de Medinilla are estimated at 1,000±.

All six of these species feed on aquatic organisms (primarily the smaller finned fishes) taken from the surface or just below the surface of the water.

The presence of any quantities of these birds feeding in one location is an indication that food is abundant and where such food is abundant, the larger types of fishes are usually also present. Thus, fishermen frequently use these birds to locate schools of fish. Although seabirds may travel thousands of miles in moving from one colony to another, the normal daily feeding range is usually well within 50 miles of the colony.

Other species of birds found on the island include the Pacific Golden Plover (Pluvialis dominica), the Whimbrel (Numenius phaeopus), the Micronesian Starling (Aplonis opacus guami), and two species of doves: The White-throated Gound Dove (Gallicolomba xanthonura), and the Philippine Turtle Dove (Streptopelia bitorquata dusumieri).

A large population of Polynesian rats (Rattus exulans) inhabit the island, as well as a small terrestrial lizard, a skink (Emoia cyanura).

9. Plant Life. With the exception of sharp, irregular limestone outcroppings, the entire top of the island is vegetated. The overstory is composed primarily of Morinda citrifolia, also known as "lada" or "noni", which at this location grows as a small shrub-like tree up to about 12 feet high. In the gulches, a few Calophyllum inophyllum trees, also know as "palo maria" or "true kamini", occur. Other shrubs include Hibiscus tiliaceus called "pago" or "hau" and "gausali", Bikkia marianensis. Of special interest are several large solid stands of Pancratium littorale or "Spider lillies". Some of these stands are an acre or more in size. Several young papaya trees, Carica papaya, are also present.

The most abudant ground cover is a large, coarse sedge, Cyperus spp., which grows in solid stands up to 3 feet tall. Other species of ground covers include beach morning glory, Ipomoea pescaprae, common bermuda grass, Cynodon dactylon, piligrass, Heteropogon contortus, the spurge, Euphorbia spp., as well as Boerhavia spp., Batis spp., and Portulaca spp.

All of the plants named are common species of wide distribution throughout the Pacific and Indian Oceans.

10. Marine Life. The coastline of Farallon de Medinilla is extremely precipitous, broken by numerous sea caves and occasional rock slides

which form a talus slope of large blocks and boulders. These sharp contours continue abruptly from sea level to the ocean floor at a depth of fifteen to twenty fathoms. There is no fringing reef or shallow coastal zone. The ocean bottom slopes irregularly from fifteen to twenty fathoms around the island to between thirty-five to forty fathoms more than a mile from the island, and is predominantly rocky. A shallow shoal (10 fathoms) is located approximately a mile due north of the island. (Appendix (5)).

Farallon de Medinilla is affected by the North Equatorial Drift Current generated by the Northeast Tradewinds system and local wind-induced surface currents. Due to its shape and orientation of the long axis of the island, these currents may be accelerated as they pass along it. There are no bays, inlets, or otherwise sheltered areas for safe anchorage.

Physically, the island affords no amenities to potential users of this area. However, the shoal areas in the vicinity of the island, the most extensive such areas In the Marianas group, provide a suitable habitat for commercially important species of fishes. Jacks (CARANGIDAE), snappers (LUTJANIDAE), groupers (SERRANIDAE), and wrasses (LABRIDAE) found elsewhere in the Marianas (Check List of Guam Fishes, Kami Etal, Micronesia, 1968) most likely occur here. Shoals are also frequently utilized by pelagic species such as tunas, wahoo, spanish mackerel (SCOMBRIDAE), barracuda (SPHYNAENIDAE), and dolphin (CORYPHAENIDAE). These commercially important fishes could be expected to occur in waters adjacent to the island at various

precipitous, broken by numerous sea caves and occasional rock slides

times of the year. A recent study of the marine resources of Tinian I., sixty miles south of Farallon de Medinilla, by Jones, Randall and Tsuda, University of Guam Marine Laboratory (1974), mentioned that the local commercial and subsistence fishermen do, in fact, harvest these above-mentioned pelagic fishes. Thus, a limited commercial fishery employing hand-lining and trolling techniques might be feasible at sometime in the future. At present, according to Mr. John Oakes, TTPI Department of Marine Resources Coordinator and Diving Officer, there are no commercial or sport fishing charter operations in the Marianas District. There is, however, a limited subsistence fishery on Saipan comprising several small craft (up to thirty feet in length).

A program to develop the fishery potential of the area is now being implemented through the Marine Resources Development Loan Fund. Until such time as the fishing activity in these islands increases to the point that new grounds are being sought at some distance from these islands, Farallon de Medinilla cannot be considered a practical, viable commercial fishing ground. Distance from population centers and local wind and sea conditions all but preclude its use as a focal point for commercial and sports fishing activity, including scuba and recreational diving, at the present time.

11. Archeological and Historical Sites. There are no archeological or historical sites on Farallon de Medinilla.

12. History. The Spanish explorer, Ferdinan Magellan, discovered the Mariana Islands in 1521. He named the islands the Ladrones but the name was later changed to Mariana Islands after Queen Marie Anna of Spain. Spain claimed these islands and eventually also the Caroline and Marshall Islands. Spain held title to all three groups for nearly four centuries but during the first half of that period maintained contact with only Guam and Saipan. Each year, Spanish galleons sailed westward across the Pacific from Mexico to Manila, stopping at Guam for fresh water and provisions.

After the Spanish American War in 1898, Guam was ceded by Spain to the United Stated, and the rest of the Mariana Islands were sold to Germany in 1899. The Germans took considerable interest in Micronesia, sending missionaries and doing some colonization and development. They planted large numbers of coconut palms using native labor, and enforced planting quotas.

Japan joined the allies in the First World War and seized Micronesia from Germany in 1914. In 1919 the area was awarded to Japan as a mandate from the League of Nations. During the period preceeding World War II the Japanese developed military and civil air bases on many of the Micronesian islands including Saipan, Tinian and Rota in the Mariana group.

In 1944 and 1945 the United States retook Guam and occupied the Japanese Mandated Islands which became the Trust Territory of the Pacific Islands.

The Trust Territory of the Pacific Islands was placed under the trusteeship system established by Act. 75 of the Charter of the United Nations by means of a trusteeship agreement approved by the UN Security Council on 2 April 1947 and by the United States on 18 July 1947. Executive Order 9875 provided for the interim administration of the TTPI by the Secretary of the Navy.

By Executive Order 10265, the interim administration by the Navy was transferred to the Secretary of the Interior, effective 1 July 1951. For Security reasons, on 10 November 1952, Presidential Executive Order 10408 transferred the civil administration to the Secretary of the Navy, effective 1 January 1953. On 17 July 1953 Presidential Executive Order 10470 transferred the remaining islands in the Northern Marianas except Rota to the Navy. Subsequently, on 9 May 1962 Presidential Executive Order 11021 vested all responsibility for administration of the TTPI in the Secretary of Interior.

Under the terms of the "Land Agreement, Trust Territory of the Pacific Islands", the Government of the Trust Territory shall make available to the DOD lands required for military purposes under a "Use and Occupancy Agreement". Such a "Use and Occupancy Agreement" dated 1 August 1944 provided for use of Naftan Rock as a bombing range. In a letter to the High Commissioner dated 27 March 1968, Manuel D. Muna, representative of the Second District, Congress of Micronesia, suggested relocating the bombing to Farallon de Medinilla. In his letter Senator Muna stated that the bombing of the island was diminishing the seabird population of the area and ruining the liveli-

hood of local fishermen who rely on the birds to guide the way to schools of fish. In addition, Muna noted the possibility of mid-air collisions between commercial aircraft arriving and departing Saipan and military aircraft using the range.

At the request of the High Commissioner, the suggestion was taken under consideration and received the favorable endorsement of the service component. Subsequently, a Use and Occupancy Agreement was entered into on 19 October 1971 providing for use of Farallon de Medinilla. That same agreement which remains in effect terminates the previous agreement for use of Naftan Rock. (Appendix (6)).

ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

1. The Effects of Explosive Ordnance. Live aerial bombing and shore bombardment of Farallon de Medinilla effects the air, terrain, and surrounding ocean waters, disturbing vegetation, wildlife, marine life, and creating noise.

a. Air. The detonation of ordnance releases various products to the atmosphere. These include carbon dioxide, water, nitrogen, hydrogen, methane, hydrocyanic acid and oxides of nitrogen (all as gases). The latter three types of materials will appear in minute quantities, if at all. Since the prevailing winds in the Mariana Islands, including Farallon de Medinilla, are from the northeast approximately 90 percent of the time, most of the materials released by the detonation of an explosive are carried in a southwesterly direction away from any land masses. These materials, some of which may be considered pollutants, are mixed rapidly with the surrounding air and are dissipated.

b. Terrain and Surrounding Ocean Waters. The detonation of an explosive just above, at or below ground surface results in a loosening and pulverizing of the rocks and soil. The blast from the explosive will dislodge varying amounts of the rock/soil substrate in the form of dust particles and larger pieces, some of which is carried away by the wind. The residue, including metal fragments from the projectile, is dispersed in the vicinity of the blast site. Carbon is the only substance produced by the detonation

of ordnance that might persist in the soil for more than a few weeks. All other are subject to dissipation as gases, or chemical reaction with oxygen and soil minerals to form water-soluble products.

During the rainy season, dust particles and dislodged soil on the ground surface along with water-soluble compounds resulting from the blast may be carried in the rainwater run-off to the surrounding ocean waters.

Explosions which may occur in surrounding waters due to malfunction or miss result in the release of gas and other materials into both the atmosphere and water and in the destruction of fishes and other marine forms in the vicinity of the blast.

Ordnance that fails to detonate on impact results in "duds" which create potential hazard to other human usage of the island and adjacent waters.

c. Soil and Vegetation. The explosion of ordnance (primarily aerial bombs) on the top of the island has created craters up to six feet in depth and twenty feet in diameter. Such explosions destroy all the vegetation within the crater and for a time expose the soil to wind and water erosion.

Regrowth of the vegetation within the cratered areas has proven to be extremely rapid. Most of the craters on the island have already been covered with the adjacent species of vegetation. Most are

not visible from the air and in many instances are not even readily visible on the ground. This presents something of a hazard in walking on the island.

Shore bombardment (three-inch ships' guns or smaller) against the barren cliffs of the island has produced no discernible effect. It is not possible to differentiate between the effects of such blasts and the natural sloughing of the cliffs.

d. Noise. There have been no known complaints from the residents of Saipan (45 miles from Farallon de Medinilla) or Alamagan (100 miles) concerning noise or reverbations caused by the bombing or the shore bombardment of the island. The distance to Saipan and Alamagan is apparently sufficient to provide an adequate buffer against noise and shock due to bombardment.

e. Wildlife. Birds within the bursting radius of any type of ordnance will, of course, be killed; however, the effect of noise and minor shock waves at any appreciable distance from an explosion, apparently, have little or no effect on seabirds. Experience in other bombardment ranges indicates that seabirds of the species found on Farallon de Medinilla are extremely tolerant of ordnance detonations. Nesting birds do not abandon their eggs or young, or indicate that they are alarmed or disturbed, even under conditions of noise and mild shock waves that are intolerable to humans. The presence of large numbers of juvenile birds on the island and the even distribution of the currently nesting birds indicate that there

has been no substantial detrimental effect on the bird populations on the island.

2. Secondary Effects of Explosive Ordnance. The use of the island as a bombardment range will inevitably result in residual, unexploded or "dud" ordnance. These "duds" may be air-dropped bombs, missiles or gun projectiles and will be found both on the island and in the surrounding waters. In their unexploded state, they pose a hazard to persons walking on the island and to fishermen operating on the shoals adjacent to the island.

The humid climate and salt spray present on Farallon de Medinilla work to rapidly deteriorate the casings of the ordnance; however, experience has shown that such ordnance can remain in a hazardous condition for periods exceeding thirty years.

If the island were to be converted to human use other than a bombardment range, it would be necessary to thoroughly clear the entire island of ordnance before access could be granted to the public. Even after such clearing, however, it could be expected that some ordnance would remain buried in the soil or in limestone caverns and would pose a continuing hazard to humans.

3. Benefits to the Environment. There are no known direct benefits to the environment resulting from the shore bombardment and aerial bombing of Farallon de Medinilla. [illegible] even distribution of the currently nesting birds indicate that there

PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IN THE USE OF FARALLON DE MEDINILLA AS A BOMBARDMENT RANGE

The direct and secondary effects of bombardment previously discussed are unavoidable consequences of the use of the island as a bombardment range.

ALTERNATIVES TO THE PROPOSED ACTION

Alternative 1. Discontinue practice bombardment within the Western Pacific.

The cessation of practice bombardment would eliminate all further detrimental effects on the environment. It has been decided, however, that a permanent, certified bombardment range is essential for the adequate training of units which currently are, and are projected to be, homeported or operating in the Marianas area (including Guam), and for the Military Assistance Program (MAP) overhaul/turnover vessels scheduled for Guam. Additionally, this range is the only long-term, United States-controlled area in the Western Pacific which will maintain the capability of certifying all units for shore bombardment and close air support. The necessity for maintaining such a facility increases with the cutbacks and withdrawals from other locations within the Pacific area.

Alternative 2. Use nonlive (inert) ordnance for practice bombardment.

Inert ordnance is an acceptable alternative to the use of live ordnance under certain conditions. The detrimental effects on the environment would be minimized but not entirely eliminated. Some damage would still occur on the island due to the impact of even an inert projectile. However, training using live ordnance is, and will remain, a requirement. It is essential that each phase through which

a weapon is processed (i.e., handling, loading, fuzing, aircraft launch, control over target, check-out of ordnance release system, and delivery results) be accomplished to ensure complete system operation reliability.

Alternative 3. Move the bombardment range to another island.

The Department of Defense recently conducted a thorough evaluation of alternate islands in the Marianas that would be operationally suitable for use as an ordnance impact area. The results of the evaluation concluded that, considering the requirements of the Air Force and Navy, the island of Farallon De Medinilla continues to be the strongly preferred location for an ordnance impact area. Use of Naftan Rock and the nearby Aguijan is an acceptable option as a training target and has been used as an ordnance impact area in the past. However the range was moved to minimize adverse environmental effect and to remove the range from the controlled air space of the Saipan airfield and from the vicinity of active commercial shipping lanes. All other uninhabited islands, including Guguan were determined to be undesirable due to operational restrictions such as increased distances from the operating bases of aircraft utilizing the impact area.

The use of any other island in the Mariana District would produce greater adverse effects. Farallon De Medinilla is the smallest island in the Marianas, and thus less land area is affected. Finally, Farallon De Medinilla has the least potential of all the Mariana Islands for development for human use.

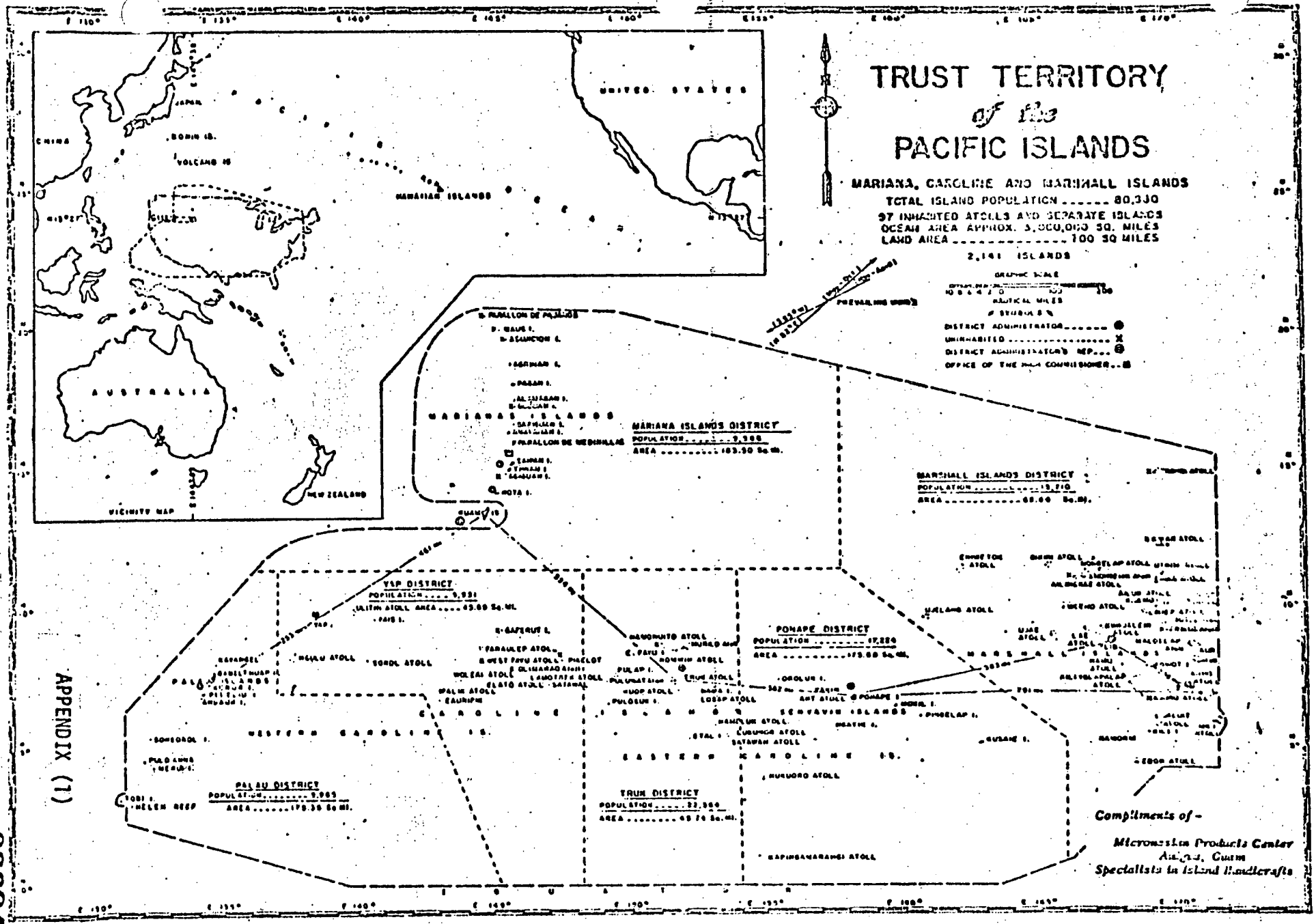
THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USE OF ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The bombardment of Farallon de Medinilla as previously discussed, destroys wildlife and plant life and creates a long-lasting hazard to humans from unexploded ordnance.

However the only foreseeable long-term use for this island is as habitat for seabirds. Such use will not be effected.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS

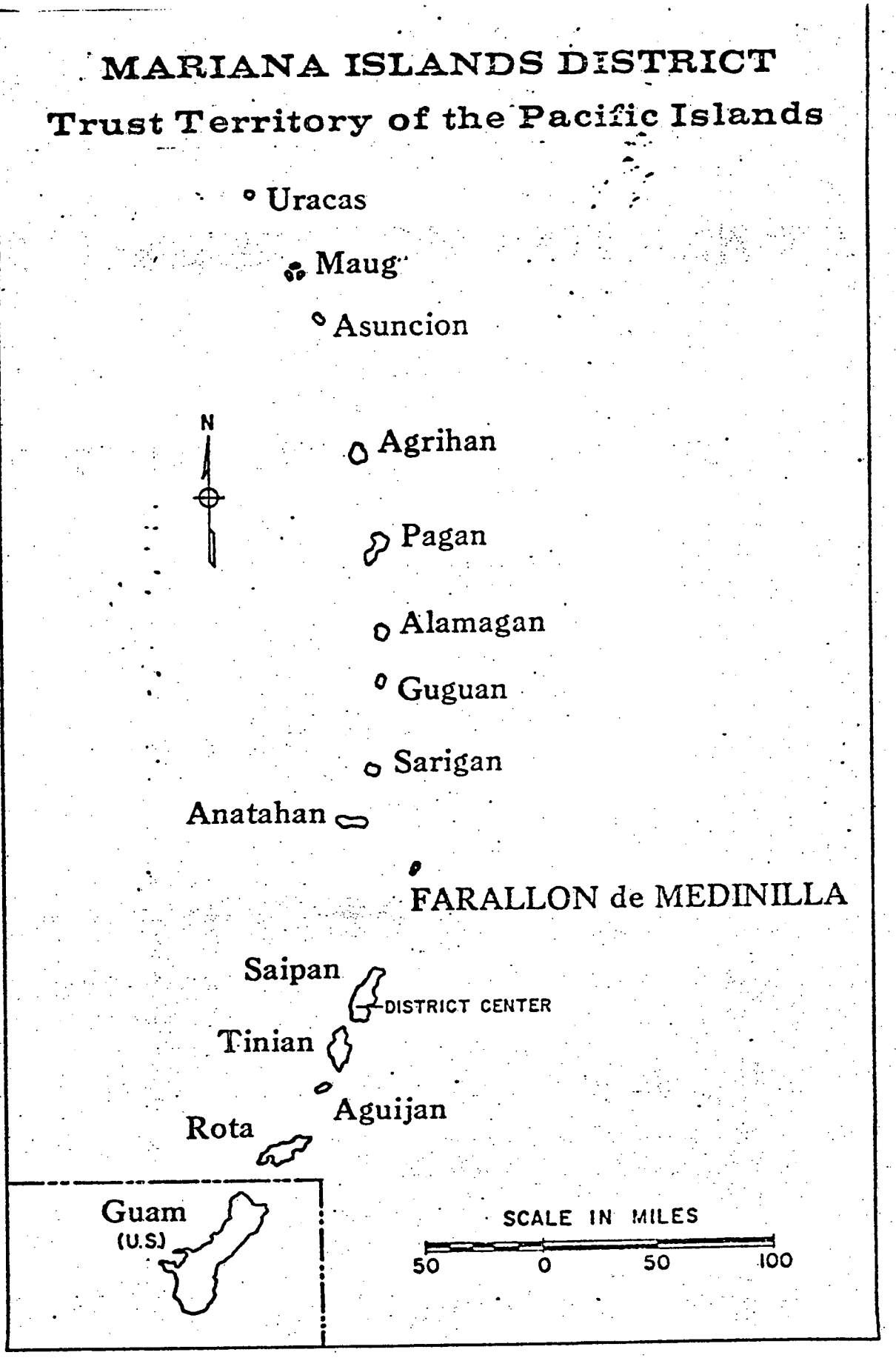
There are no irretrievable uses of resources, changes in land use, or unalterable disruptions in ecosystems resulting from the use of this island as a target range.



APPENDIX (1)

MARIANA ISLANDS DISTRICT

Trust Territory of the Pacific Islands

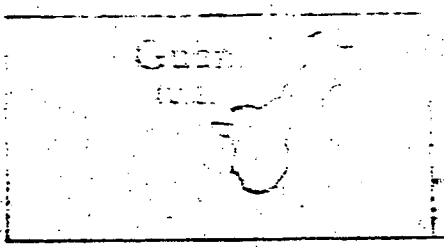


APPENDIX 2

THE MARIANA ISLANDS DISTRICT

The Mariana Islands District is composed of fourteen islands with population and land areas as follows:

	Population	Land Area	
		Acres	Square Miles
Rota	1,104	21,056.0	32.90
Aguijan	0	1,772.8	2.77
Tinian	750	25,145.6	39.29
Saipan	12,387	29,811.2	46.58
Farallon de Medinilla	0	224.0	.35
Anatahan	0	7,987.2	12.48
Sarigan	0	1,235.2	1.93
Guguan	0	1,024.0	1.62
Alamagan	25	2,784.0	4.35
Pagan	24	11,731.2	18.33
Agrihan	45	11,705.6	18.29
Asuncion	0	1,804.8	2.82
Maug (3 islets)	0	518.4	.81
Uracas	0	505.6	.79
	14,335	117,305.6	183.31



APPENDIX (3)

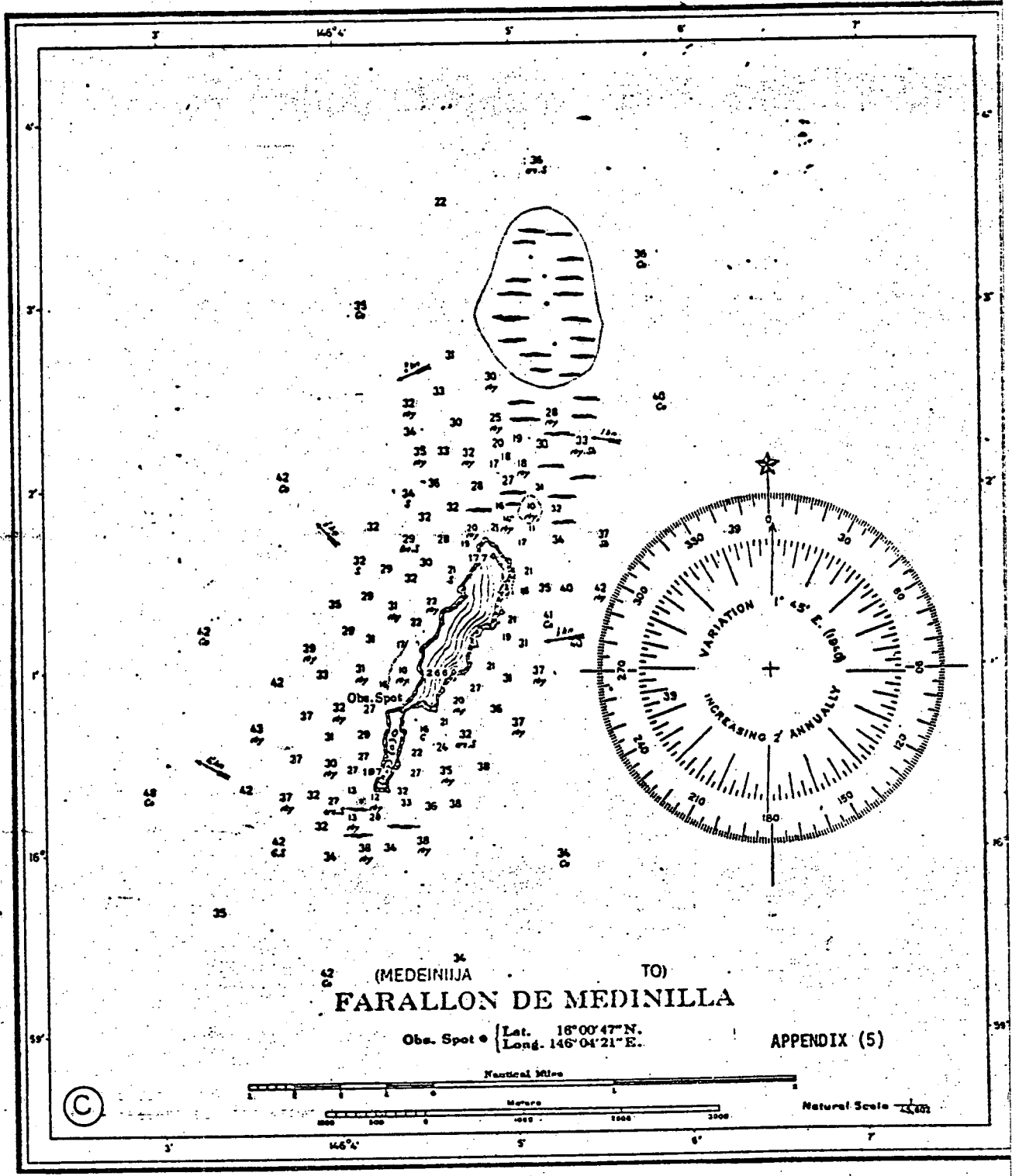
DISTRIBUTION OF SEABIRDS FOUND ON FARALLON DE MEDINILLA IN OTHER AREAS OF THE TROPICAL PACIFIC OCEAN

	Boobies			Great Fricatebird	Fairy Tern	Common Noddy Tern
	Red-Footed	Masked	Brown			
Mariana Islands	B	B	B	NB	B	B
Bonin & Volcano Islands	NB			NB	NB	B
Marcus Islands	B	NB	NB	NB	NB	B
Palau Islands	B		B		B	B
Caroline Islands	B		B	B	B	B
Ellice Islands	NB	NB	NB	NB	B	B
Gilbert Islands incl. Ocean & Nauru	B	NB	B	NB	B	B
Marshall Islands	B	B	B	B	B	B
Wake Island	B	NB	B	B	NB	B
Kermadec Islands		B	NB	NB	B	
Solomon Islands	NB		NB		B	B
Bismark Archipelago		NB	NB	NB	NB	B
New Hebrides incl. Santa Cruz Islands					B	B
New Caledonia incl. Loyalty Islands	NB		B	B	B	B
Fiji Archipelago	B	B	B	NB	B	B
Tonga Islands	NB		B	NB	B	B
Samoan Islands	B	B	NB	NB	B	B
Cook Islands	NB	NB	NB	NB	B	B
Austral Islands	B		B	NB	B	B
Society Islands	B	NB	B	B	B	B
Easter Island		NB		NB	B	B
Pitcairn, Henderson, Ducie, & Oeno Islands	B	B	NB	B	B	B
Tuamotu Archipelago	B	B	B	B	B	B
Marqueses Islands	B	NB	B	B	B	B
Tokelau Islands	NB		NB	NB	B	B
Phoenix Islands	B	B	B	B	B	B
Line Islands	B	B	B	B	B	B
Hawaiian Islands	B	B	B	B	B	B

B = Breeding populations.
NB - Present but not known to breed.

King, W. B., 1967, Preliminary Smithsonian Identification Manual, Seabirds of the Tropical Pacific Ocean, Smithsonian Institution, Washington, D. C.

SOUNDINGS IN FATHOMS
reduced to approximately Lowest Low Water
HEIGHTS IN FEET ABOVE MEAN SEA LEVEL



USE AND OCCUPANCY AGREEMENT FOR LAND IN THE
TRUST TERRITORY OF THE PACIFIC ISLANDS
UNDER THE ADMINISTRATIVE RESPONSIBILITY
OF THE DEPARTMENT OF THE INTERIOR

FARALLON DE MEDINILLA ISLAND
MARIANA ISLANDS DISTRICT

THIS AGREEMENT, made as of the 19th day of October 1971, by and between the Government of the Trust Territory of the Pacific Islands, hereinafter called "Trust Territory", and the United States of America, hereinafter called "United States";

WITNESSETH THAT:

WHEREAS, the United States presently enjoys the use of an island known as Naftan Rock in the Mariana Islands as an impact target area under a Use and Occupancy Agreement with the Trust Territory dated the 1st day of August 1944; and

WHEREAS, the Trust Territory is desirous of terminating such use and occupancy; and

WHEREAS, Trust Territory is the owner of that certain island known as Farallon de Medinilla, hereinafter described; and

WHEREAS, the Trust Territory has received the favorable advice and opinion of the Mariana Islands District Land Advisory Board regarding the use of Farallon de Medinilla by the United States pursuant to the provisions of Section 53(4) of Title 67 of the Trust Territory Code; and

WHEREAS, Trust Territory is desirous to convey, and the United States is agreeable to accept rights to the Use and Occupancy of the hereinabove described property in lieu of the rights enjoyed at Naftan Rock;

NOW, THEREFORE, in consideration of the mutual benefits and advantages to be derived therefrom, it is agreed as follows:

ARTICLE 1. TERMINATION OF AGREEMENT

The United States and Trust Territory hereby agree that with the hereinafter mentioned grant set forth in Article 2 hereof the need for continued use and occupancy of Naftan Rock no longer exists, and that pursuant to Section 2 (D) of the above mentioned Use and Occupancy Agreement for Naftan Rock made and entered into by the parties hereto as of the 1st day of August 1944, such agreement shall terminate thirty

APPENDIX (6)

(30) days from the date of this Agreement.

ARTICLE 2. GRANT BY TRUST TERRITORY

Trust Territory then hereby gives, grants and conveys to United States for an indefinite period of time the exclusive right to use and occupy Farallon de Medinilla Island, hereinafter known as the "Premises" and more particularly described as follows:

> The land mass located at approximately 16° 01' North Latitude, 146° 04' East longitude, approximately 45 miles north, northeast of Saipan, containing a land area of 0.35 square mile, as shown on the attached map, such being a copy of a portion of U.S. Army Map Service Sheet 3372 II SW, Series M843, which is incorporated herein and made a part hereof as Exhibit A.

ARTICLE 3. PURPOSE: USE BY UNITED STATES

The Premises shall be used by the United States for an aircraft and ship ordnance impact target area. The United States may use the Premises for other military purposes, consistent with the provisions of the Trusteeship Agreement relating to the administration of the Trust Territory of the Pacific Islands, with the prior written permission of the Trust Territory.

ARTICLE 4. DAMAGES

The United States shall be responsible to the extent permitted by United States law for any damage or injury to the Trust Territory or to others arising from its use of the Premises; provided that nothing herein shall be construed as requiring the United States to restore the Island to its prior condition. The United States shall further hold the Trust Territory harmless from any and all claims and damages or liability, to the extent permitted by United States law, resulting from the use and occupancy of the Premises by the United States.

ARTICLE 5. REVIEW OF NEED FOR LAND EVERY FIVE YEARS.

On or about October 19, 1976, and on a similar date each five-year period thereafter, the Trust Territory and United States shall jointly review and determine the need for continuing the use and occupancy granted and conveyed hereby.

ARTICLE 6. REVIEW BY THE PRESIDENT

In the event the review provided for in Article 5 does not result in agreement as to the need for continued use and occupancy by United States, the matter shall be presented to the President of the United States for final decision.

ARTICLE 7. TERMINATION

In the event of a decision that a need for the continued use and occupancy of said landsdoes not exist, the use granted, conveyed, and assigned hereby shall terminate thirty (30) days from the date of such decision and all interest in said lands shall revert to Trust Territory.

During said thirty-day period, United States may, if it elects, remove any structures or improvements it has erected or may hereafter erect on said lands; and if the structures or improvements cannot be removed during said thirty-day period, United States shall be permitted such additional reasonable periods of time as may be required.

ARTICLE 8. ASSIGNMENT BY UNITED STATES

It is understood that the agency of the United States having use and occupancy of Farallon de Medinilla is the Department of the Navy with immediate administrative responsibility assigned to the Commander, Naval Forces Marianas. The United States may assign use of Farallon de Medinilla to other United States Federal Department of Agencies with the prior written consent of Trust Territory.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

UNITED STATES OF AMERICA

By: R. M. Sutley
R. M. SUTLEY, CAPT, CEC, USN
OFFICER IN CHARGE OF CONSTRUCTION
NAVAL FACILITIES ENGINEERING COMMAND
CONTRACTS, MARIANAS

GOVERNMENT OF THE TRUST TERRITORY
OF THE PACIFIC ISLANDS

By: Deputy High Commissioner
Edward E. Johnston
High Commissioner of the Trust
Territory of the Pacific Islands

APPROVED AS TO FORM

By: for
Richard I. Miyamoto
Attorney General

Date: JAN 13 1972

APPROVED FOR THE DIVISION OF
LANDS AND SURVEYS

By: Kozo Yamada
Kozo Yamada
Chief, Lands and Surveys

Date: Jan. 13, 1972

APPROVED FOR THE MARIANA
ISLANDS DISTRICT

By:
Francisco C. Ada
District Administrator

Date: January 17, 1972

APPROVED FOR THE MARIANA ISLANDS
DISTRICT OFFICE OF LAND MANAGEMENT

By: Elmer L. Gay
Elmer L. Gay
District Land Management Officer

Date: Jan. 13, 1972

* *

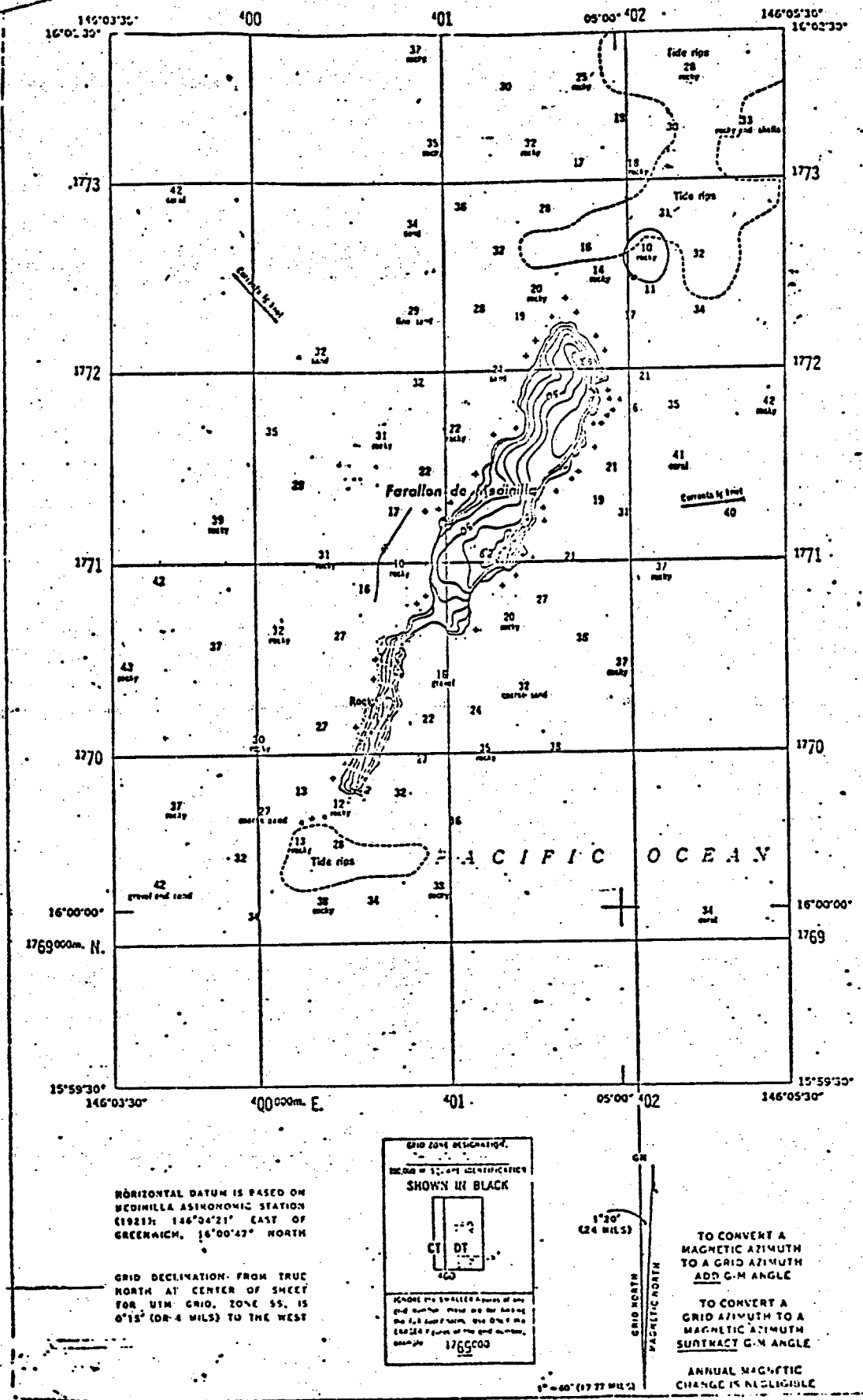
RECORDING DATA

Filed and recorded in Book 1, Page 3 at 1:37 ~~A.M.~~/P.M.

this 19th day of January, ~~1971.~~ 1972

Regino E. Pangelinan
Clerk of Courts
Mariana Islands District

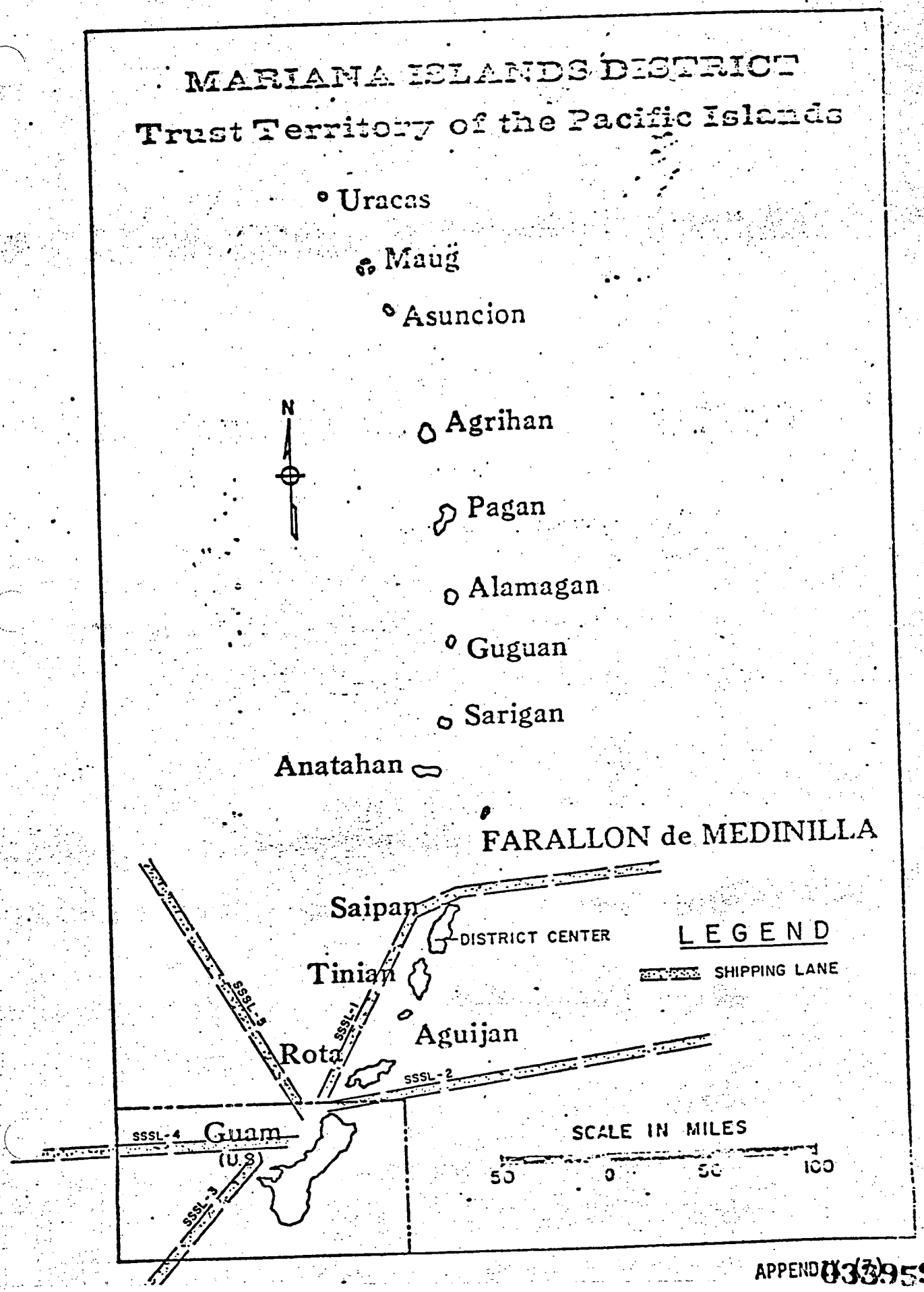
033957



COPY OF A PORTION OF U.S. ARMY MAP
SERVICE SHEET 2272 II SW, SERIES W-613

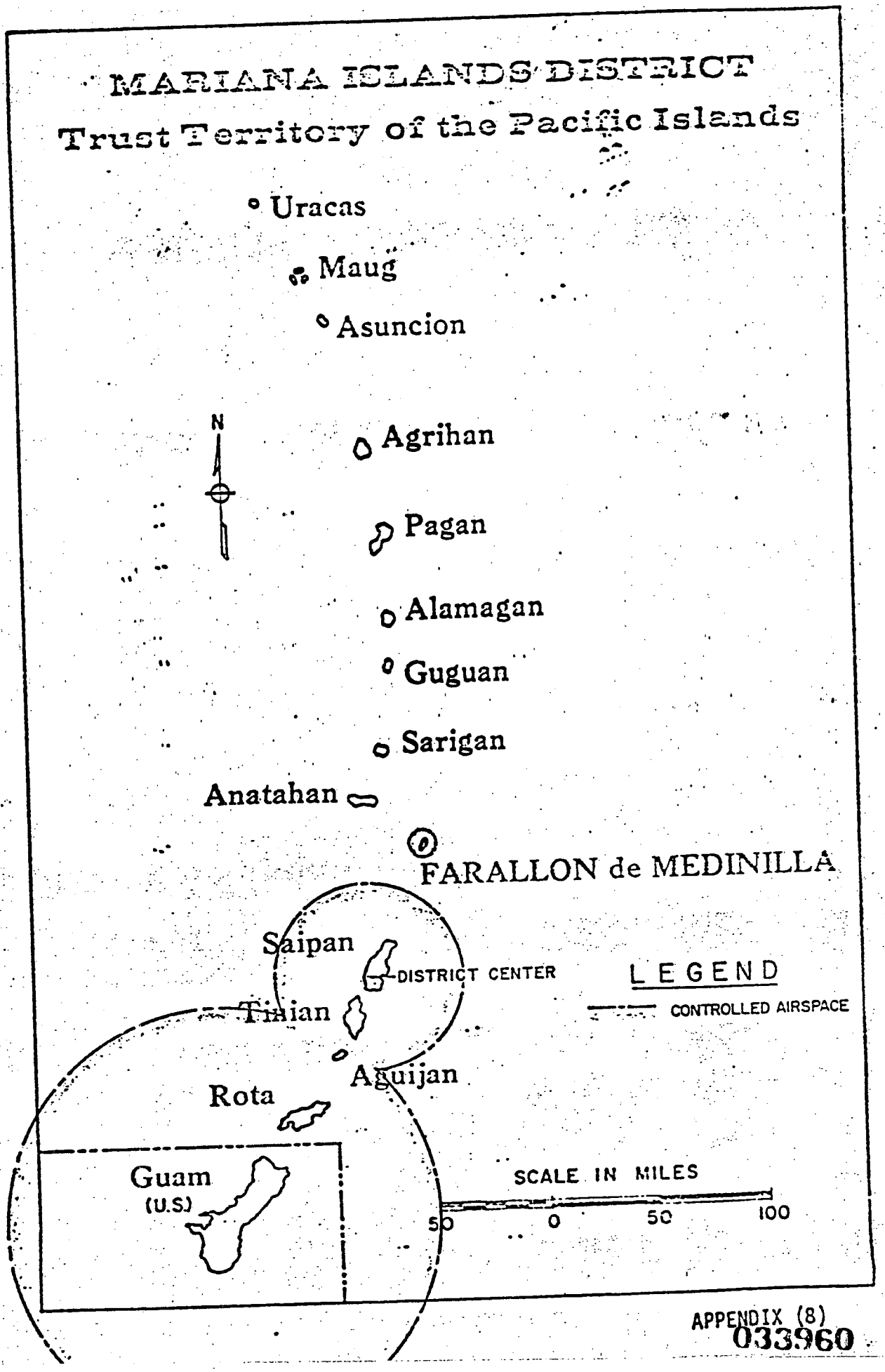
MARIANA ISLANDS DISTRICT

Trust Territory of the Pacific Islands

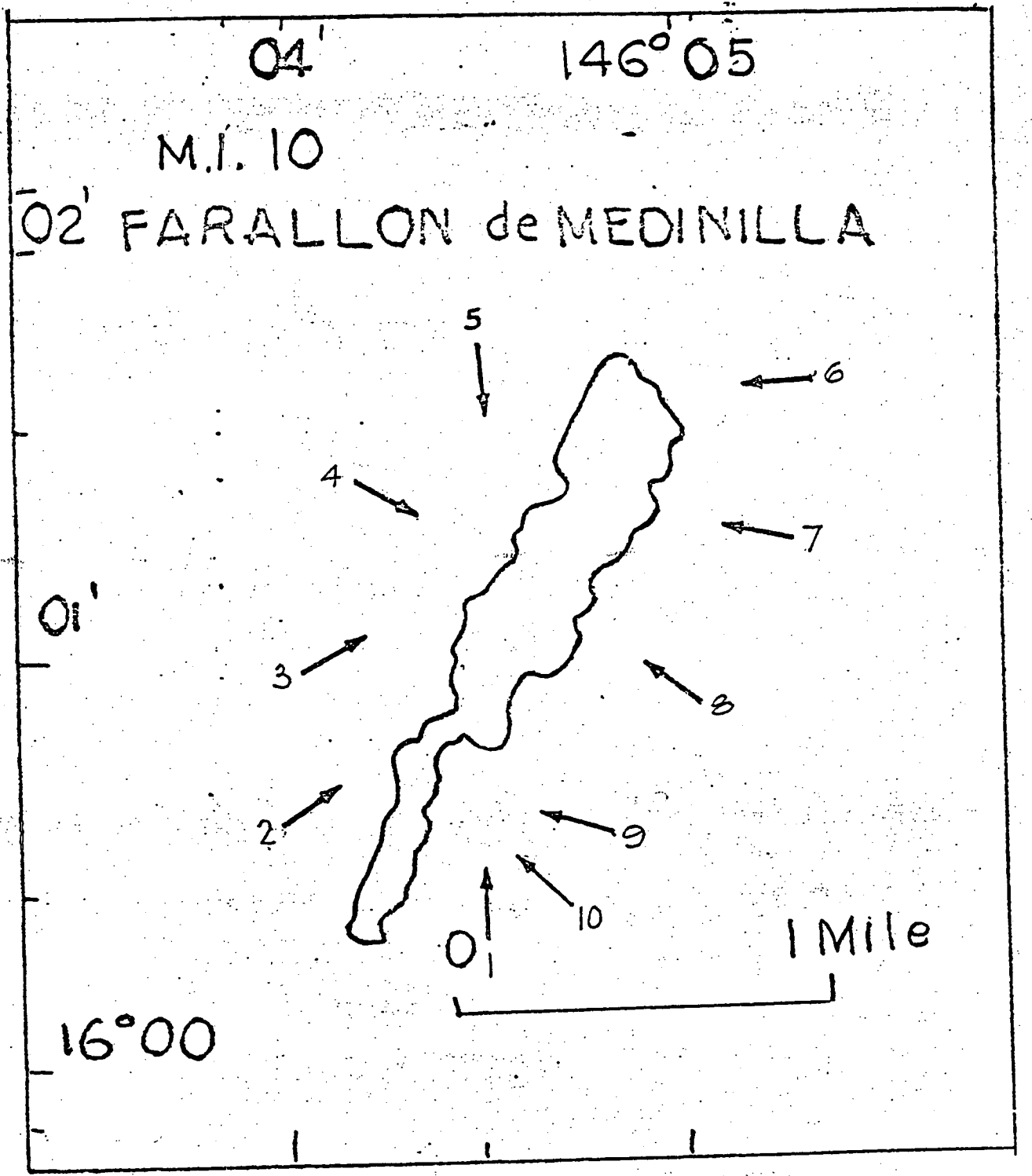


APPEND[illegible](3)

MARIANA ISLANDS DISTRICT
Trust Territory of the Pacific Islands



APPENDIX (8)



APPENDIX (9)

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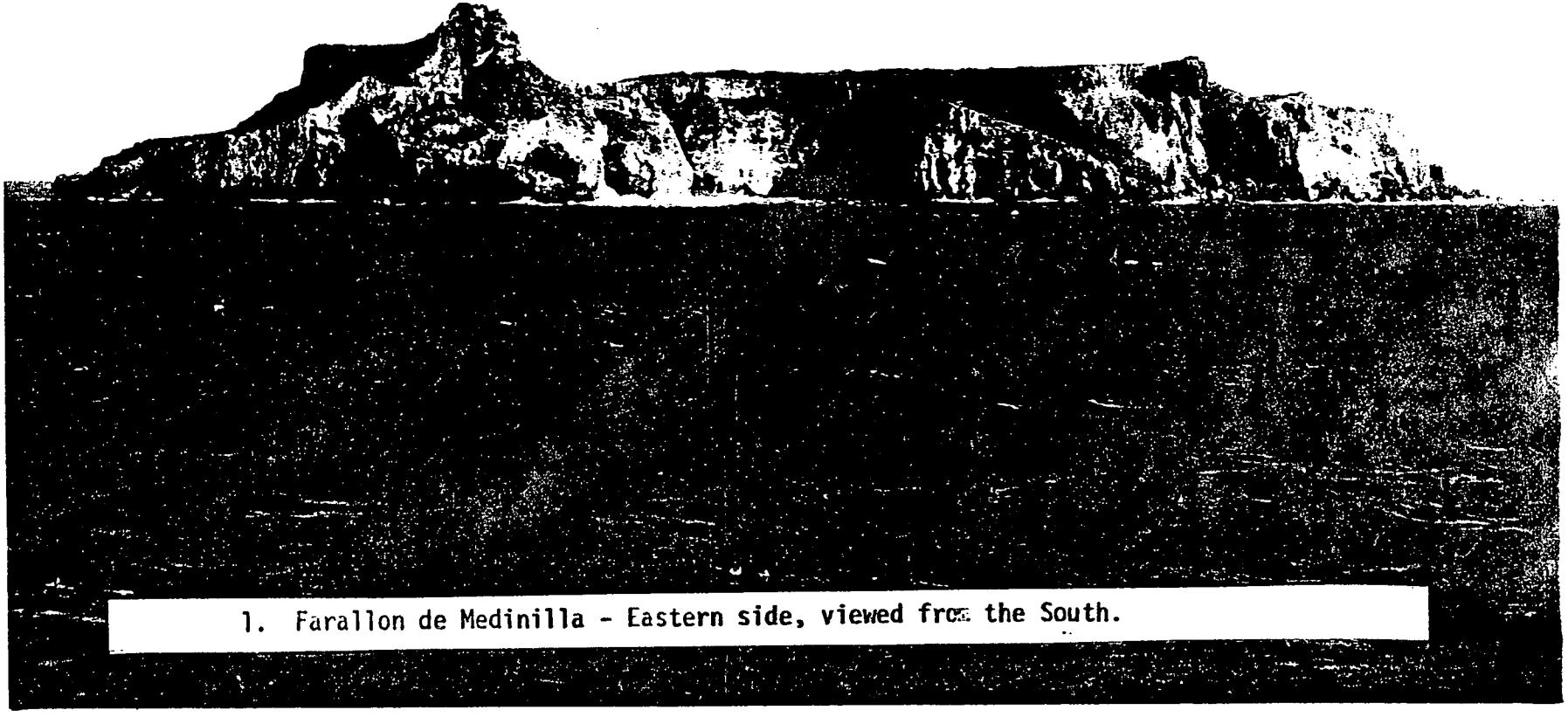
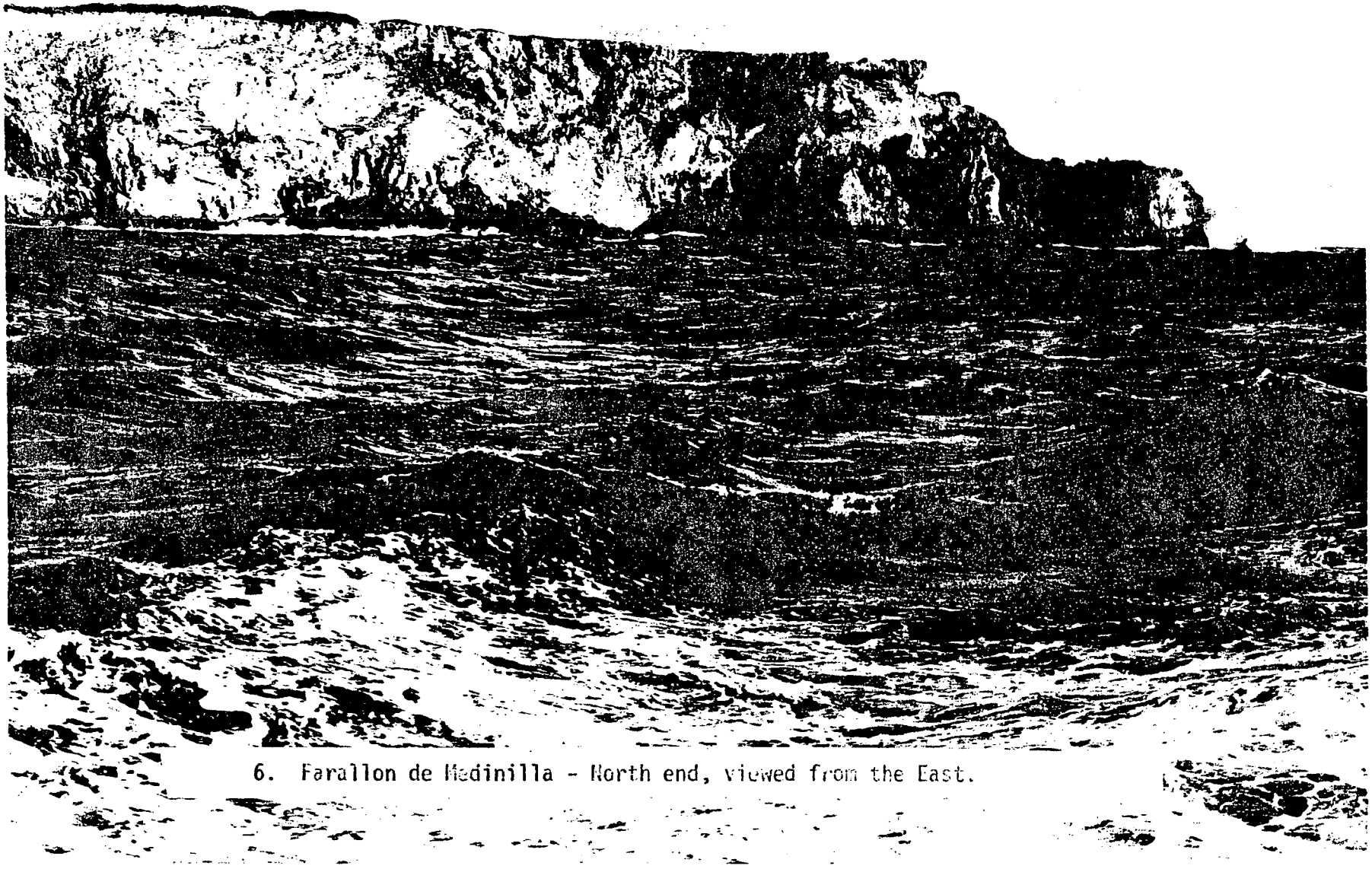


1. Farallon de Medinilla - Eastern side, viewed from the South.

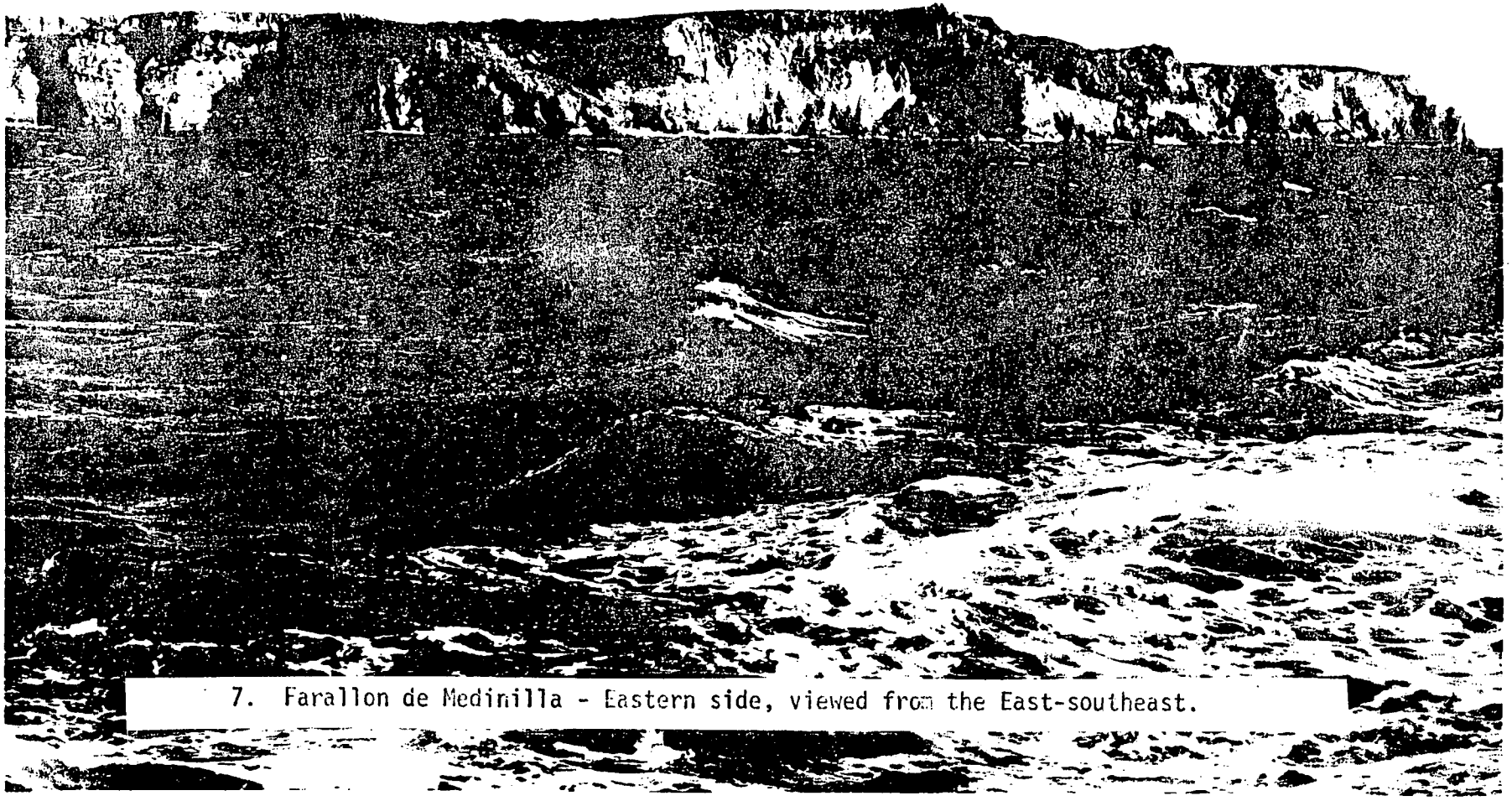
033963

3. Farallon de Pajaros - eastern side, viewed from the southwest.

5. Farallon de Medinilla - Western side, viewed from the North.

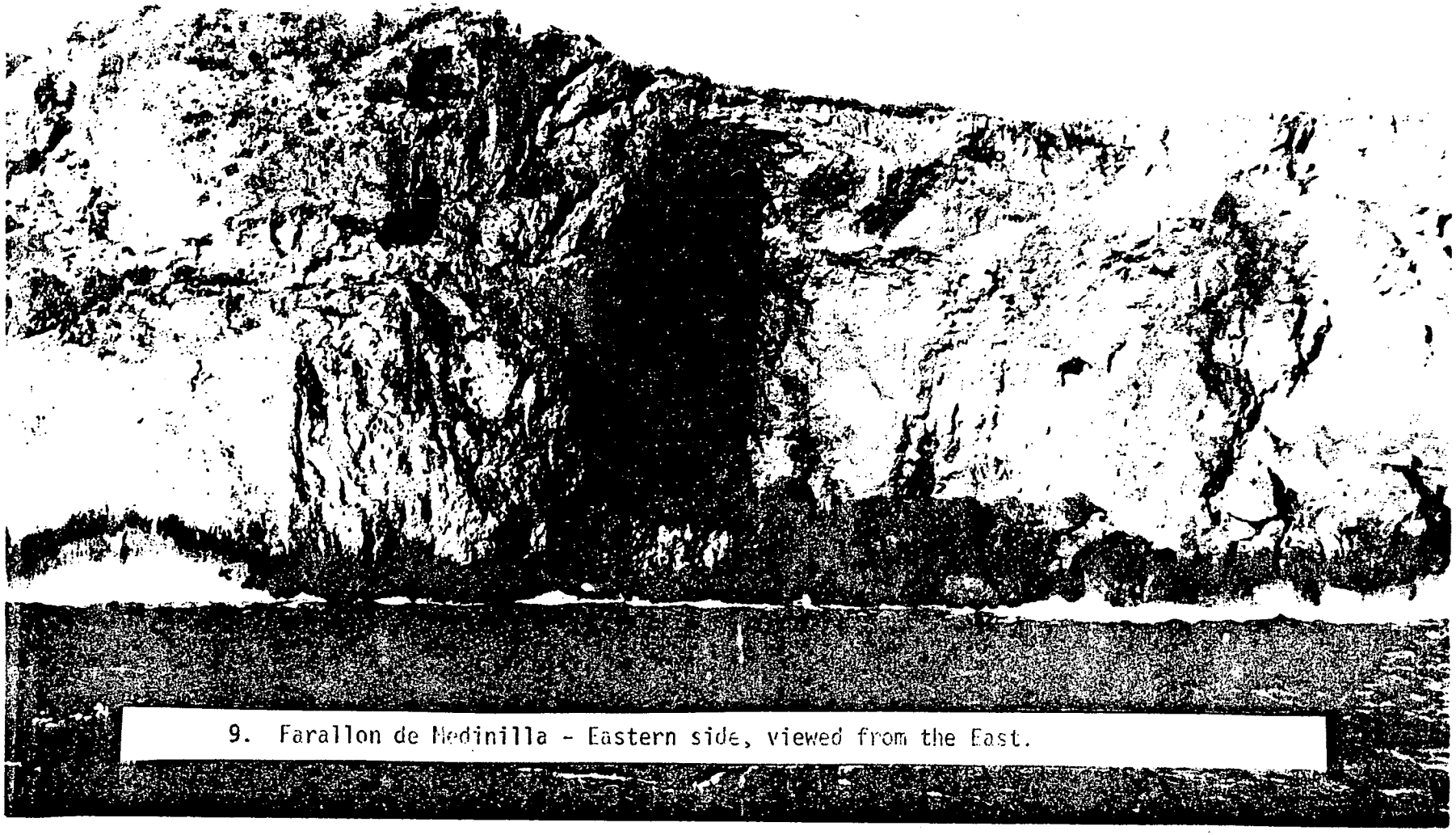


6. Farallon de Medinilla - North end, viewed from the East.

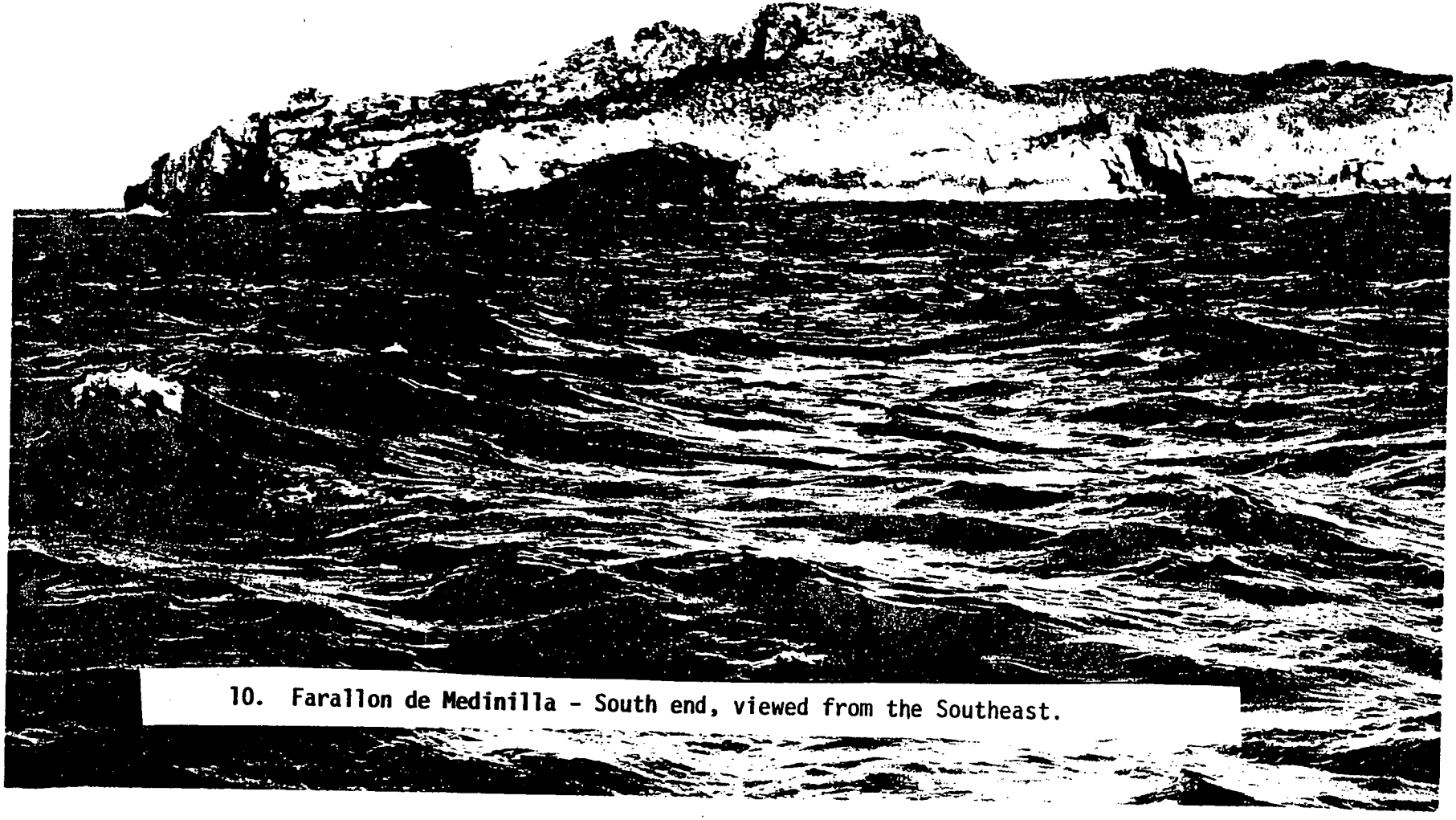


7. Farallon de Medinilla - Eastern side, viewed from the East-southeast.

8. Farallon de Medinilla - Eastern side, viewed from the Southeast.



9. Farallon de Medinilla - Eastern side, viewed from the East.



10. Farallon de Medinilla - South end, viewed from the Southeast.