



COAST GUARD

Loran Station **ENEWETAK**



General Information Book

CHAPTER I

FACTS ABOUT THE ISLAND AND STATION

1. LOCATION: $11^{\circ}21'N$ $162^{\circ}21'E$. The western atoll of the northern Marshalls; 530 nautical miles Southwest of Wake Island, 200 West of Bikini, 1,050 East of Guam, and 2,380 Southwest of Honolulu.
2. SIZE AND TOPOGRAPHY: The atoll consists of a chain of 42 islets surrounding an oval lagoon 25 miles by 20 miles wide and slightly elongated in a northwesterly direction. The total land area of the islands is 2.26 square statute miles. Most of the islets are less than 13 feet high. Three entrances penetrate the reef. The deep entrance, at the Southeast Side, is about $3/4$ of a mile wide and has a depth of 31 fathoms between Parry Islet and Japtan Islet. South Channel, on the other hand, is very wide, about 6 miles, but the charted depths are only 6 to 12 fathoms. Southwest Passage is shoal with depths of about 1 fathom maximum. Tidal currents of 4 knots in Deep Entrance, and 1 knot in South Channel have been observed.
3. CLIMATE: The Northern Marshalls have a tropical marine climate characterized by uniform temperature, high humidity, cloudiness, and to a lesser extent, constant winds. The prevailing weather conditions are partly cloudy skies and moderate easterly tradewinds. Convective activity is primarily responsible for weather changes, and bad weather usually consists of relatively brief showers and infrequent thunderstorms. Typhoons are relatively uncommon.

There are two seasons. One extends from mid-September to mid-June and is characterized by the dominance of the northeast tradewinds; from mid-June to mid-September, the season may be characterized by either doldrum conditions or southeast tradewinds.

Temperatures are remarkably constant. The mean annual temperature is 82 degrees and the mean monthly temperature does not vary from this by more than 2 degrees; absolute maximum temperatures vary from 90 - 92 degrees; absolute minimums vary from 71 degrees to 73 degrees, a range of 24 degrees.

Mean relative humidity is 80 to 84 percent; mildew problems are frequent. Annual precipitation is about 78 inches, the major portion falling between July and November. Maximum mean rainfall is 10.4 inches in October; mean minimum rainfall is 1.8 inches in February.

4. BIOTA: In general, the northern half of Eniwetok Atoll, subject to AEC tests, does not have a normal vegetation. Site Irene, for ex-

ample, is devoid of all vegetation. Heavy fighting in World War II destroyed most of the trees on the larger islets and, indeed, not one tree survived into 1946 on Eniwetok. Since then, on the major islets, most available space has been utilized for construction, and the area is almost fully surfaced. Japtan, however, is currently supporting coconut palms and other indigenous plants, Scaevola, primarily. Riggil Islet is occupied by dense jungle.

5. ISLAND HISTORY: The island was part of the Japanese Mandate in the Pacific after 1920, and was seized by American forces in February of 1944 and converted into an air and naval base from which attacks were launched on Japanese Bases. It is now part of the U. N. Trust Territory of the Pacific Islands. From 1946 to 1960 the Atomic Energy Commission used the island for testing nuclear weapons. Native inhabitants were permanently moved to Ujelang, another Marshall Island atoll before the testing began. In July of 1960, the control of Eniwetok Proving Ground passed from the AEC to the Pacific Missile Range of the United States Navy. There are still four pits in the atoll that nuclear detonations have caused and the resulting craters are still visible. In January 1974 control of the Atoll was transferred to the Defense Nuclear Agency.

6. STATION HISTORY: The site for the Loran-A station at Eniwetok was first selected by the Coast Guard in February 1949, and the location and property area was confirmed by the AEC and CINCPAC at a conference in Washington held on 12 December 1949. Land permit for this site was issued to the Coast Guard by the Department of the Navy on a revocable basis on 15 August 1950. The station was built by the AEC contractors, Holmes and Narver, and completed on 24 January 1951. Operation was started on that date as a double master Loran-A station on rates 1L0 and 1L1 with a crew of one officer and eight enlisted men. The station is provided with complete base support including power, water, telephone services, messing facilities, land and water transportation, shop and warehousing facilities, and limited local supply support by the civilian contractor. An additional building was erected on Parry Island, Eniwetok Atoll on 24 January 1951 for use as a Loran Monitor Station. This facility was later discontinued having served its purpose. The original station consisted of the Signal-Power Building only. The crews quarters were completed in July of 1953 and renewed in 1955. The storeroom and paint locker were completed on 16 July 1962. A rehabilitation project was begun in September 1967. An eight foot addition was made to the barracks, the entire building was air conditioned, and rooms were formed out and finished off. Each man in the complement was provided with his own air conditioned room. The Loran operations building was rehabilitated and completely air-conditioned with the exception of the engine room. This project was accomplished by station personnel

with technical help from the Support Contractor. It was completed in March 1968. In late 1969 the entire command was moved into a new air-conditioned, three story concrete block barracks building on the east side of the island. This barracks now provides single and double occupancy quarters for the entire permanent population of the island, and is connected by phones to the station three tenths of a mile away. The barracks building also houses the dining hall, dispensary, post office, and support contractor offices. The move to the new barracks necessitated the institution of a 24 hour security watch at the station, and sleep-in and berthing requirements were met at that time. The old barracks building is presently utilized as a laundry, an air-conditioned storage area, and offices.

CHAPTER III

COMMAND

1. LORAN STATION OPERATIONAL CONTROL: The Commanding Officer, USCG Loran Transmitting Station Eniwetok, is directly responsible to Commander, Fourteenth Coast Guard District.
2. ENIWETOK ISLAND OPERATIONAL CONTROL: Eniwetok Atoll is controlled by FCDNA Kirtland AFB, New Mexico. The Site Manager of the support contractor, acts as the FCDNA representative on the atoll. He also is the UN Trust Territory representative. There are no permanently assigned Air Force personnel on the atoll, nor any indigenous population.
3. CIVILIAN SUPPORT: At the time of this writing MATSCO is the support contractor, responsible for the upkeep of the island and support of the tenant activities (Coast Guard, various marine biological studies, etc.). Presently they employ around twenty men. Because of the many fluctuations of operations on the atoll, however, the number of support personnel varies considerably.

CHAPTER V

LOCAL AREA

1. ENIWETOK ISLAND: Offers support to the station in the ways of services, facilities, and recreation. The services and facilities include: post office, theater, bar, barber shop, camp store, and club. Recreation facilities include pool tables, shuffle board and ping pong tables at the club, a limited amount of recreation equipment that can be checked out, and -- weather and operations permitting -- fishing and/or overnight trips on weekends. A weight room is located across from the barracks, and an asphalt regulation basketball court. A volleyball court and softball diamond are located by the theater and a concrete tennis court near the station. Work is presently being done to rehab the salt water swimming pool by the station. Card games are played at the club nightly.

2. CUSTOMS:

a. Dining Hall: Shirts are required wearing apparel in the dining hall. Swim trunks and barefeet are prohibited. Alcoholic beverages will not be carried into or consumed in the dining hall.

b. Clothing: Aloha shirts, knit shirts, bermuda shorts, jeans and shower shoes are accepted items of wear during non-working hours for all island and station personnel.

c. Movie Theater: The support contractor holds a nightly movie at 2000. In addition, an alternate movie is often held in the rec room of the Loran Operations Building.

3. DEVELOPMENT: Before atomic testing began on Eniwetok in the late 40's there were approximately 175 native Marshallese on the atoll. When testing began the natives were removed to another island in the Marshall chain. As of this writing they have not been returned to Eniwetok, though discussion of that possibility is going on between the Marshallese and the Trust Territory.

4. SHOPPING HINTS: The Camp Store stocks an adequate supply of basic toiletry items, tobacco, civilian clothing, and liquor. No articles of the military uniform are carried. Gift and luxury items are not available. Prices are very good on liquor. PACEX and NAVAL EXCHANGE (Yokosuka) catalogs are available and frequently used. Island and station personnel returning to Hawaii on leave, Saturn Airlines stewardesses, and District Staff personnel often purchase items unavailable on Eniwetok for the crew.

d. SAFETY: The following are several hazards peculiar to this area:

a. Sunburn: The severe intensity of the sun at Eniwetok can cause serious burns. It is strongly recommended that you get your suntan in gradual stages and do not delay in getting medical attention at the dispensary in case of painful burns. It is advisable to get some sun in Hawaii prior to reporting if at all possible.

b. Coral Abrasions: Cuts and abrasions caused by contact with the coral which makes up these islands are more than ordinary infections. Report to the dispensary immediately for all such injuries.

c. Underwater Hazards: Potentially dangerous marine life in the area include sharks, barracuda, stonefish, turkeyfish, puffers, moray eel, and stingray. Other venomous invertebrates are: poisonous jellyfish, the Portuguese Man O' War, poison cone shells, and stinging sea urchins. Certain corals are also dangerous.

CHAPTER VII

BATTLE OF ENIWETOK

This account of action in the Eniwetok battle is a summary of the Admiral Nimitz report to Commander-in-Chief, U. S. Fleet, dated 3 June 1944.

GENERAL PLAN

With the capture of Baker, Howland, Tarawa, and Makin Islands in the Gilberts, our strategy of short steps by island hopping came to an end. It was decided after long consideration and many conferences between Army, Navy and Air Force authorities to move in a single coordinated operation. The taking of the Marshalls in a matter of a few weeks not only threw the Japanese off-stride, but constituted a tremendous saving of time and casualties in the Pacific campaign.

The enemy expected our next attacks to be made on Wotji and Maloeap, or possibly on Mili and Jaluit. However, it was decided to bypass all of these islands and strike at the very heart of the Marshalls at Kwajalein and Eniwetok. The major units selected for this task were:

- The 7th Infantry Division, USA
- The 4th Marine Division, USN
- One Regimental Combat Team of the 27th Infantry Division, USA
- The 7th Air Force, USAF
- Task Force 52, USN
- Task Force 53, USN
- Attack Group 51.2, USN

The joint expeditionary force was commanded by Rear Admiral Turner, who also commanded Task Force 52. Task Force 53 was commanded by Rear Admiral Hill.

With the Southern Attack Force (TF 52) was the Southern Landing Force consisting of the 7th Infantry Division, commanded by Major General Corlett; and with the Northern Attack Force (TF 53) was the Northern Landing Force consisting of the 4th Marine Division, commanded by Major General Schmidt, USMC.

With the attack group was the Majuro Landing Force consisting of the 2nd Battalion, 106th Infantry of the 27th Division, reinforced by the 5th Amphibious Corps Reconnaissance Company, and commanded by LT COLONEL Sheldon, USA. The Reserve Landing Force consisted of the balance of the 106th Infantry and all of the 22nd Marine Regiment under

the command of Brigadier General Watson, USMC. It was this Reserve Landing Force which fought the battle of Eniwetok Atoll.

All troops involved in this force received thorough battle-conditioning training in the Hawaiian Islands. They were put through course of instruction and practice in, jungle fighting, jungle living, booby traps, demolitions, sniping, infiltration, patrolling, ambushing, and assault of Japanese-type pill boxes. Battalion landing teams were instructed in the use of floating equipment and embarkation-debarkation procedures. Exercises were conducted in the attack of fortified position, involving the use of chemical mortars, flame throwers, grenades, engineer-infantry teams, and tanks. Rehearsals were held in areas approximating the conditions of the Marshalls, on the Island of Maui, and Navy-Ground Forces co-ordination was carefully checked.

While all these preparations for "D" Day were taking place, the Navy and Air Force proceeded with their softening-up process on all islands upon which Japanese installations were located. Beginning on 1 January 1944, the Marshalls were bombed by Army planes from Tarawa and Makin. Daily the tempo of this bombardment was increased, and beginning with "D" Day minus 2, was further augmented by aircraft off the Carrier Force and by the guns of heavy cruisers which raided the islands. One of these forces, the Carrier Force, was under the command of Rear Admiral Marc Mitscher. You will remember this as the famous Task Force 58, which took such an important part in driving the Japanese Navy out of the Western Pacific.

Not satisfied with merely softening up the enemy positions in the Marshalls, Army and Carrier Base aircraft carried out bombing assignments as far West as Truk in order to attain and keep air supremacy during the battle. Proof of the successful accomplishment of their mission lies in the fact that during the assault on the Marshalls, no enemy planes were encountered on the ground or in the air. It was a demonstration of complete American air supremacy. Kwajalein was assaulted on 1 February 1944. "D" Day for Eniwetok was set for eighteen days later.

Eniwetok lies 330 miles Northwest of Kwajalein. It is almost a completely circular atoll, roughly 40 miles across, and consists of 30 small islands. The three largest islands, Engebi, Eniwetok, and Parry were defended in strength by the enemy. Aerial photographs taken periodically showed that these three islands were in the process of being built up into strong defensive positions by the Japanese. Striking as we did several months sooner than they expected prevented the completion of these fortifications.

Admiral Hill, the Commander of the Eniwetok Expeditionary Force, planned four phases for the operation. The first phase was to include the

seizure of the two small islands, Canna and Camellia, South of Engebi, where artillery was to be installed to lay down a barrage on Engebi. This artillery was to come from the 104th Field Artillery and the 2nd Separate Marine Pack Howitzer Battalion. The two small islands were to be seized by the Recon Troop of the 5th Amphibious Corps.

The second phase was to be seizure of Engebi by the 22nd Marine Regiment, with the 106th Infantry in reserve.

In the third phase, the 106th Infantry was to seize both Eniwetok and Parry.

The fourth phase envisioned the completion of the capture of the remaining islands in the atoll by both the 106th Infantry and the 22nd Marines.

ASSAULT OPERATIONS

The seizure of the atoll involved amphibious assaults on three strongly defended islands. Under terms of the broad plan, these islands were to be attacked one at a time, capture of each to be completed before the assault began on the next. The usual procedures in island campaigns were followed. The islands were subjected to heavy gun and bomb attack, which was continuous from the time of the arrival of the task group until troops landed on the island. For a period of two hours immediately before the landing of troops, each island was subjected to concentrated destructive fire. Landings were made on all these islands from the lagoon beaches, in each case with two battalions abreast.

Under the plan, Engebi, Parry, and most of the minor islands were to be a Marine show; Eniwetok was to be the mission of the Army Ground Troops. "D" Day was 17 February 1944. On the morning of 17 February, the task force moved into the lagoon by way of Wide Passage and Deep Entrance and took up its positions preparatory to the launching of the concentrated bombardment. Air strikes were correlated with the fire of heavy, medium, and light guns of Naval craft ranging from battleships to destroyers. Action with the enemy commenced at 0700, when the INDIANAPOLIS and the PORTLAND began laying down fire on the main islands flanking the lagoon entrances. The Japanese did not return this fire. It was learned later that they had orders not to fire on ships entering the lagoon in order that their presence on these islands would not be disclosed. After this fire was completed, the INDIANAPOLIS and PORTLAND remained outside until the lagoon could be swept for mines by the ORACLE, SAGE, CHANDLER, and ZANE. Only one mine field was located. This field was in the Southern part of the lagoon, running in an East-West direction and partially covering the

PORTLAND, and later the TRATHEN. Several fires were started, presumably in Japanese installations.

Following the usual pre-landing procedures, an intense bombardment and air strike took place on Engebi beginning at 0843 on 18 February. Two Battalions of Marines landed and overcame enemy resistance very quickly. By 1600 the island was reported secured. During the attack by the Marines on Engebi, elements of the 6th Amphibious Corps Recon Company and the Scout Company were methodically occupying the smaller islands along the reefs. Japanese resistance of Engebi, although ferocious, was marked by an obvious lack of preparation. Numerous underground shelters and coral-lined pill boxes were found as were sniper position in coconut trees. However, so rapid was the Marine advance that few requests were made upon the ships for call fires.

In the attack on Engebi our losses were 78 killed, 166 wounded, and 7 missing, for a total of 251. The Japanese dead buried on Engebi numbered 934. Sixteen prisoners were taken.

So heavy and accurate was the Navy and air bombardment that observers stated destruction was greater than that which had occurred on Kwajalein. Practically all structures above ground were demolished. A prisoner stated that about half the defenders were killed or wounded prior to the landings.

During the afternoon of 18 February, advance preparations were made for the attack on Eniwetok Island. The 106th Regimental Combat Team of the 27th Division was designated to make this assault.

Eniwetok was attacked on the morning of 19 February but because of strong enemy resistance, heavy jungle growth, and accurate enemy fire, this island was not secured until the evening of the 21st. The 3rd Battalion of the 22nd Marine Regiment, which was the reserve for the 106th Regimental Combat Team, was landed early in the afternoon of the 19th to aid the Infantry Battalion, which was attacking to the South. It was this Battalion of Marines which struck and won the main Japanese defensive position of the island.

Naval gun fire which supported this day and night operation came from the PORTLAND, INDIANAPOLIS, TRATHEN, HOEL, and HARRARD. Our losses on Eniwetok Island were 34 killed, 94 wounded and 3 missing, for a total of 131. Seven-hundred Japanese were buried on the island and 25 prisoners were taken.

Because progress on Eniwetok Island was slow, it was decided on 20 February to delay the attack on Parry Island in order that re-organization of combat troops could be accomplished. According to plans, Parry Is-

Land was subjected to continuous bombardment from the afternoon of February until the morning of 22 February, the time of the landings. The following ships participated in this bombardment: TENNESSEE, PENNSYLVANIA, COLORADO, INDIANAPOLIS, LOUISVILLE, PORTLAND, HALL, ALYWN, MACDONOUGH, MONAHAD, JOHNSTON, MCCORD and HAILEY. It was reinforced by the fire of the Pack Howitzer Battalion from Japton Island located just North of Parry.

As in the case of Engebi and Eniwetok, an air strike was made just before the assault troops landed. The 1st and 2nd Battalions of the 22nd Marines were selected for the assault and proceeded to the lagoon beach approximately in the center of Parry. The first wave met some opposition at the beach from rifle and mortar fire, but casualties were small. Troops advanced rapidly about 100 yards after which the advance slowed down; however, about 1315 the North end of the island was in our hands. At 1330 a co-ordinated attack was launched to the South by two battalions. Full use was made of artillery, Naval gun fire and tanks. In spite of dense jungle growth, the attack moved forward at the rapid rate of about 250 yards per hour through the day. At 1924 the island was declared secured but mopping-up operations continued throughout the night and until about 1000 the following morning.

During the night fighting, star shell illumination was maintained over the island continuously. The illumination proved to be very effective, in one instance revealing a party of Japanese in the act of launching a counterattack. These Japanese were quickly annihilated. Our losses on Parry was 57 killed, 261 wounded and 16 missing, for a total of 334. One-thousand twenty-seven (1,027) Japanese were buried on that island.

From 17 February until 22 February various Navy and Army units made successful landings on the smaller islands such as Bokonaarappu, Aomon, Muzinbaarikki, and Runnitto. By evening of the 23rd, Eniwetok Atoll was ours.