



COAST GUARD

Loran Station **GESASHI**



General Information Book

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CHAPTER I

GENERAL

1. GEOGRAPHY: Okinawa is an island in the North Pacific Ocean, 250 miles south of Kyushu, the southernmost island of Japan. Okinawa is the largest island in the Ryukyu Island chain and had been under U. S. control from the end of World War II until 15 May 1972, at which time civil administration reverted to Japan. Naha (est. pop. 1960, 220,000) is the islands largest city and is the main port. The island consists of a sloping bed of volcanic ash over older rocks. The flatter area being to the south and surrounded by coral reefs and the northern three quarters of the island being rugged and mountainous. The highest elevation on Okinawa is about 1650 feet. The island covers 454 square miles in total area, 75 miles in length and varying from 2 to 10 miles in width.

LORAN STATION GESASHI is located at 26°36'N 128°09'E. The station grounds include 180 acres. The station is situated in hilly terrain and extends Northwestward and up to the transmitting antenna which is located approximately 120 feet above sea level.

2. CLIMATE: The climate is similar to that of the Gulf Coast States. The annual temperature is 72°F but the thermometer may dip to the low 40's in the winter and rise above 90° in the summer. Average annual rainfall is 82 inches. Humidity averages 76 percent.

CHAPTER II

STATION ORGANIZATION AND PLAN

1. ORGANIZATION: The Commanding Officer and the CWO (ELC) are assisted in the administrative and supervisory functions by such CPO's as may be assigned as department heads. The primary responsibility of this unit is maintaining Loran-A and Loran-C operations on Okinawa.

2. STATION PERSONNEL ALLOWANCE:

a. Officers: 1 LTJG - CO
1 CWO - ELC

b. Enlisted: 1 BMC
1 ETC
1 EM1
1 RM2
1 MK1
3 ET1
1 SS1
1 SK2
1 HM2
1 DC2
3 ET2
1 SS3
3 ET3
2 MK3
~~1 TT3~~
2 FN/FA
9 SN/SA

c. Indigenous Laborers: 1 Interpreter/Asst. Cook
1 Electronic Technician

3. BUILDINGS, ASSOCIATED DEPARTMENT AND THEIR FUNCTIONS: The complex is centered around a concrete recreation area with the barracks located to the south, signal-power building to the north and seven (7) fuel oil tanks each with a capacity of 30,000 gallons and three (3) water storage tanks of the same size to the west. In this area is also the pump house and the sewage treatment area. Beneath the pump house is additional water storage. The transmitter building and helo pad are removed from this central complex.

a. BARRACKS BUILDING: The building is an "H" shaped construction, the upper leg of the "H" contains the mess deck, galley, CPO quarters, recreation deck, Officers quarters, sick bay and station office. The bottom leg contains crews berthing and head areas. Each member of the

crew is assigned an individual room with a "hollywood" style bed, bureau, writing desk and chair. Galley spaces contain four (4) walk-in type reefers, two (2) which are for chilling and two (2) for frozen foods. In addition there is a large dry stores area. There is a reach-in reefer, deep fat fryer, electric range and garbage disposal unit at the cooks disposal. Meals are prepared cafeteria style. A projection booth is located at the rear of the mess deck and movies are shown daily. CPO quarters consists of four bedrooms, lounge area and head. Each room has the same furnishings as the crews berthing. The station sick bay is complete with all the necessary medical equipment to carry out its mission for a unit of this size. Officer's quarters contains three large bedrooms, lounge and head. Both Officers' and CPO quarters have a kitchenette with a combination electric range, refrigerator and sink. The photo lab is equipped with all the items with which to develop and enlarge film. Station laundry facilities have two (2) tub type washing machines and three (3) automatic electric dryers.

b. SIGNAL/POWER BUILDING: This building contains the Loran-C and Loran-A timer rooms, radio generator room, garage, ET and engineering storerooms, engineering office, electronics office/calibration lab/ham-mars station, and paint locker. The Loran-C timer room contains duplicate timers and recorders. One timer is in operate status while the other is in immediate standby status. The recorders provide a continuous visual record of operation for both timers, cesium beam and frequency standards are also located in the timer room. The Loran-C operates on a SS3 rate. In addition to the Loran-C there is also the Loran-A timer room which contains six (6) timers and three (3) double recorders. Three timers are in operation while three are on immediate standby. The Loran-A operates on three different rates 2S7, 2H5, and 2H6 all of which are secondaries. The radio room contains a console, two (2) 750 watt transmitters and two teletypes. Continuous SSB communications are maintained with CG LORMON/RADSTA KAMI SEYA and other loran stations in the Northwest Pacific Loran Chain. The DC shop is equipped with a table saw, band saw and joiner plus many other wood-working hand tools. The generator room contains the three (3) Caterpillar U-379-A diesel engines which provide emergency electrical power for the station. The station is on commercial power provided by Okinawa Power Company. Also located in the generator room is the main switchboard for the generators and battery charging facilities for the generator starting batteries. The garage area contains all the necessary equipment in which to maintain the station vehicles and other assorted power equipment. The Loran-A transmitter room contains four 160 KW loran amplifiers. Installed also in this area is a bank of UHF radiotelephone equipment.

c. TRANSMITTER BUILDING: This building is located approximately 800 feet from the Signal/Power building and houses two (2) 400 KW Loran-C transmitters, transformers and antenna coupler chambers.

Directly outside the transmitter building is the 625 foot transmitting tower.

d. PUMP HOUSE: This building contains the chlorinating equipment, pressure tank and pumping equipment for the stations' fresh water system.

e. SEWAGE SYSTEM: This system employs a septic tank with leech bed providing adequate sewage disposal for the station.

CHAPTER III

COMMAND FUNCTION AND OPERATION

OPERATIONAL CONTROL:

1. The Commanding Officer of LORSTA GESASHI is directly responsible to Commander, Coast Guard Section Far East at Yokota, Japan.

CHAIN:

2. LORSTA GESASHI transmits signals as secondary-Y within the Northwest Pacific Loran-C chain. Other units within the chain include:

LORSTA IWO JIMA	Master
LORSTA MARCUS ISLAND	Slave-W
LORSTA GESASHI	Slave-Y
LORSTA YAP	Slave-Z
LORMON/RADSTA KAMI SEYA	Systems Area Monitor

LORSTA GESASHI also transmits three (3) loran-A signals as secondary in all three rates in the Northwest Pacific Loran-A system. Other units in this system include:

LORSTA IWO JIMA	Master 2H6 rate
LORSTA MIYAKO JIMA	Master 2H5 rate
LORSTA NOMAIKE	Master 2S7

COLLATERAL OPERATIONS:

LORSTA GESASHI is designated reporting officer for the Skywave Program.

CHAPTER IV

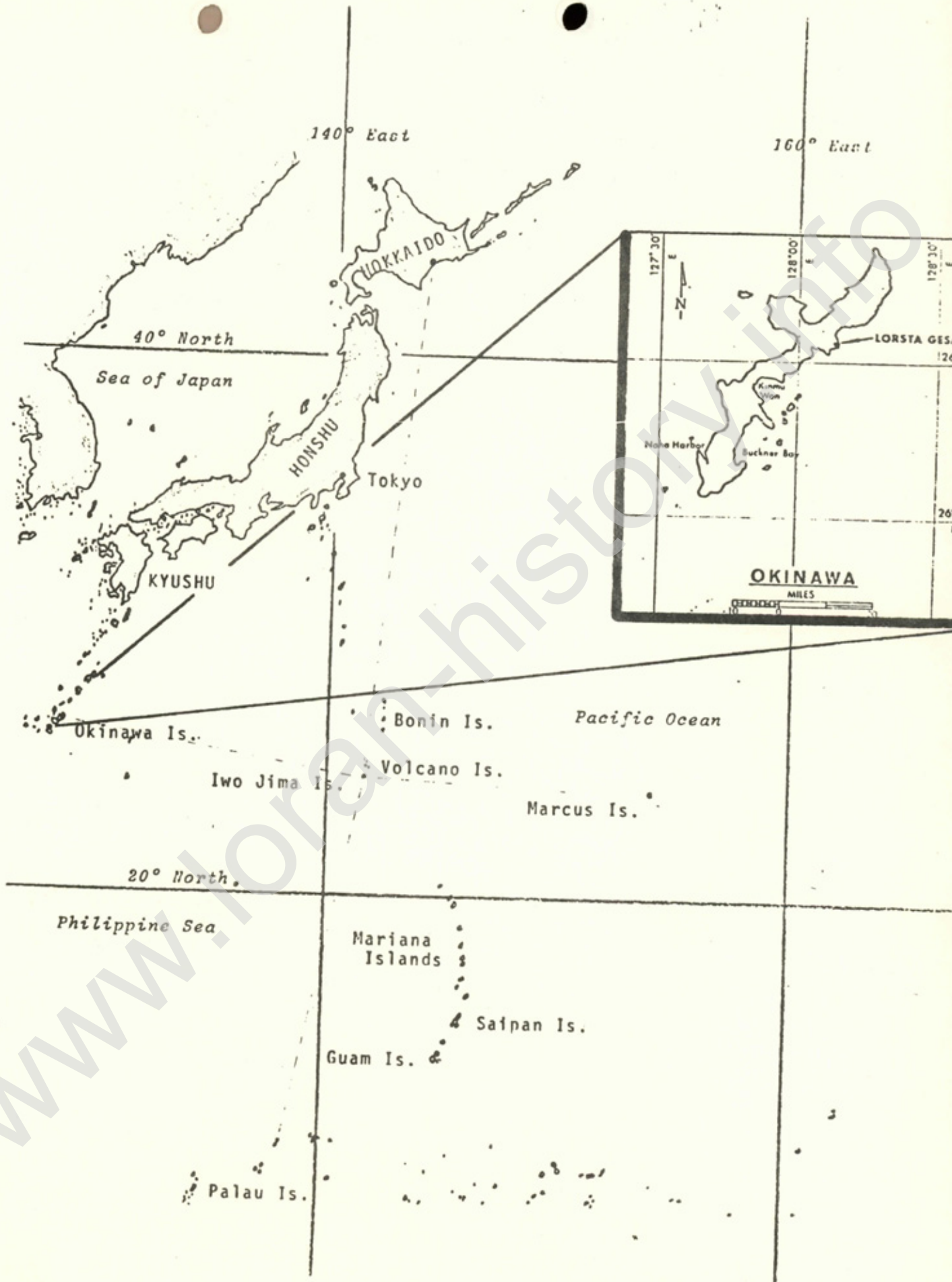
LOGISTICS

1. GENERAL: Supplies are delivered to the Port of Naha or to the Naval Air Facility, Kadena to be picked up by the station logistics runs. Some supplies such as vehicle parts are available at the Army's 2nd LOG COMMAND, located on Okinawa. The distance covered is such that at least three hours is needed to travel between Naha and LORSTA GESASHI; therefore, only one logistic run a week is made.
2. SUPPLY SOURCES:
 - a. General Stores & Housekeeping Supplies: Standard Navy stocks are procured from NSD Yokosuka, Honshu, Japan. Coast Guard peculiar items are procured from Supply Center Brooklyn.
 - b. Fuel: Gasoline and diesel oil are procured through the Army Logistics Command and delivered by contract with an Okinawan Company. Lube oil is procured from NSD Yokosuka.
 - c. Commissary Stores: Commissary stores are procured from the US AB CO, Ft. Buckner.
 - d. Electronics: Electronic parts are ordered from Coast Guard Base Honolulu, Hawaii, or CGSC Brooklyn, New York or NSD Yokosuka, Japan.
3. MAIL: Mail is routed through the Navy FPO Seattle 98770 and is picked up by the station once a week at Kadena.
4. TRANSPORTATION: The station has an allowance for one (1) six passenger Carryall, and one (1) pick-up.
5. MEDICAL: A HM is assigned to the station and has at his disposal a well equipped sick bay. If a situation should arise which is beyond his capabilities, complete hospital facilities are available, approximately 30 minutes away by helicopter.
6. PAY AND PERSONAL ITEMS: Personnel are paid by check at the station monthly. There are quite a few Base Exchanges, which personal items may be procured by the logistics runs, made once a week.

CHAPTER V

LOCAL AREA INFORMATION

1. The Ryukyans are a mixture of several races, probably including Malay, Mongul, and Ainu. The Ainu, a primitive people whose modern descendants live in Japan, are of caucasian stock, with light-colored skin, European like features and luxurious hair. The first settlers in the Ryukyus probably came from the Pacific Island to the South and succeeding waves from China and Japan. Agriculture is the mainstay of the economy. Commercial fisheries have been developed since the war and is increasing the supply and variety of fish available. Approximately 40,000 Ryukyans are employed by the United States Armed Forces in a variety of jobs.
2. Nago is the closest large town approximately one hour's drive from Gesashi, at the neck of the Motobu peninsula. In February an unusual spectacle can be seen at Nago, when the annual roundup of porpoises take place. No one knows why or exactly when the porpoises will arrive in Nago Bay but when it happens everyone in Nago joins in the roundup and at a precise moment the harpoons are thrown, after which the meat is flavored with garlic and ginger and enjoyed by the entire community. For the sightseer, much history can be found on the Motobu peninsula.
3. All personnel attached to LORSTA GESASHI are required to maintain a complete seabag, however, civilian dress is recommended while on liberty. Civilian dress must conform to the highest standards.



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