



**U.S. COAST GUARD**

**LORAN STATION**

**MARCUS**

**General  
Information  
Book**

**1969**

## TABLE OF CONTENTS

### CHAPTER I - GENERAL INFORMATION

- A. Discovery and History of the Island
- B. Geography and Climate
- C. Weather
- D. Population; Civil and Military
- E. National Agreements

### CHAPTER II - OPERATIONS

- A. Aids to Navigation
  - 1. Loran
  - 2. Additional AtoN Facilities
- B. Communications
- C. Search and Rescue
- D. Vehicles

### CHAPTER III - PERSONNEL

- A. Complement
- B. Administration of Personnel Records
- C. Medical Facilities
- D. Training and Education
- E. Morale
  - 1. Outdoor Recreational Facilities
  - 2. Indoor Activities
  - 3. Mail
  - 4. Exchange
  - 5. Beer and Soda
  - 6. Morale Funds
- F. Health and Sanitation

### CHAPTER IV - ENGINEERING

- A. General Engineering
  - 1. Power Plant
  - 2. Damage Control
  - 3. Electrical Systems
  - 4. Heating System
  - 5. Ventilation System
  - 6. Fuel Oil System
  - 7. Refrigerator System
  - 8. Fresh Water System
  - 9. Sanitary Water System
  - 10. Buildings
- B. Electronic Engineering

## CHAPTER V - COMPTROLLER

- A. Commissary
- B. Supply
  - 1. Requisitions and Resupply
  - 2. Boards of Survey
- C. Pay
- D. Fuel and Lube Oil

## CHAPTER VI - ADMINISTRATION

- A. Reports and Logs
- B. Official Correspondence
- C. Organization
- D. Station Bills
- E. Safety

## CHAPTER VII - GUIDANCE FOR RELIEF PERSONNEL

- A. Things To Do After Receiving Orders
- B. Things For New CO To Do
- C. Travel To Marcus Island



## CHAPTER I

### GENERAL INFORMATION

#### A. Discovery and History of the Island

In 1864, CAPTAIN GELETT, commanding the Hawaiian mission vessel, MORNING STAR, announced the discovery of an island located 24°18'N latitude and 153°58'E longitude and claimed it for the United States of America. Due to the barren nature, and lack of fresh water source, no attempt was made to colonize the island by the United States. However, in 1879, the Japanese Government, despite protest from the United States, declared ownership and colonized the island. This and several subsequent attempts (1884-1909), proved fruitless as the scarcity of fresh water prevented the early settlers from establishing a farming type community, and thereby from becoming self-supporting. A cemetery, which entombs the remains of some of the early pioneers still exists on the island and bespeaks, in part, of the hardships these early settlers endured.

During the 1930's as Japan expanded its empire, Marcus Island again became important, this time as part of a far flung defensive outpost structure. Sailors from the Japanese Imperial Navy with a labor force of 300 Japanese criminals constructed an elaborate system of underground bunkers, tunnels, a torpedo factory, and an airstrip. Portions of these still exist throughout the island.

Marcus Island was, for the most part, by-passed by American Forces during WW II. In March of 1942, one of many surprise air raids was made on Marcus by U. S. Navy carrier based aircraft, and diversionary sea bombardment was also carried out by the U. S. Navy. The minute damage incurred speaks highly for the defensive preparation made by the Japanese. Over 4,500 Japanese Imperial Army and Navy troops were removed from Marcus when hostilities ended.

After World War II, the Japanese were permitted to continue operation of a Weather and Radio Beacon Station on Marcus. It was in the 1950's that the United States defensive requirements called for establishment of a more accurate navigation system in the Western Pacific area. Marcus Island was selected to be used as a site for construction of a station in the new Loran-C star chain complex. Work began during the spring of 1963, and concluded with commissioning ceremonies held November 1, 1963.

From November 1, 1963 through August 1968 the Weather Station was operated by the U. S. Department of Commerce, and the Radio Beacon by the U. S. Coast Guard in conjunction with the Loran-C Transmitting Station. On June 26, 1968 the island was returned to the administration of the Government of Japan and on January 17, 1969 the Japanese began construction of a new Weather Station. The Japanese Self Defense Force and Japanese Meteorological Agency now maintain the Weather Station and Radio Beacon as joint tenants with the U. S. Coast Guard Loran Station.



## B. Geography

Located in the Central Pacific, Marcus Island is a triangular shaped island with a sub-tropical climate, approximately 900 miles northeast of Guam, 700 miles west of Wake, and 1020 miles southeast of Tokyo. The island measures approximately 3/4 of a mile in land area (740 acres). A reef, 100 yards wide borders the entire island and serves as an adequate protection against stormy seas. Marcus Island is one of the more isolated inhabited islands in the world.

## C. Weather

The weather is excellent through the year with little seasonal variation. The average monthly temperature ranges between 69 and 85 degrees Fahrenheit, with an average yearly temperature of 78 degrees. Compiled U. S. Weather Bureau and Japanese Meteorological Agency records dating back to 1936 indicate that the highest temperature, 96 degrees, was recorded on July 17, 1951. The lowest temperature, 58 degrees, was recorded on February 8, 1964. Prevailing east southeasterly winds at 10 to 15 knots temper both the heat and the average yearly humidity of 76 percent. Rain fall throughout the year is mainly in the form of showers and averages approximately 40 inches. Depending upon the frequency and/or duration of typhoons affecting Marcus, the yearly average rain fall has differed by as much as 20 inches. On the average, there are three typhoons yearly, mostly during the months of June through December.

## D. Population

The population of Marcus Island is composed entirely of professional personnel of the Governments of Japan and the United States. There are no native inhabitants. Thirty-five U. S. Coast Guard personnel are stationed on the island, whose purpose is the operation and maintenance of the Japanese buildings, runway and aircraft facilities and Radio Beacon.

## E. National Agreements

Upon reversion of Marcus Island to the Japanese Government on 26 June 1968, agreements were drawn up specifying property rights. Essentially the U. S. Coast Guard has sole right to the use of the land area necessary to the operation and maintenance of the station buildings and equipment including the LORAN tower and associated ground system. Certain easements have been granted to the Coast Guard for access to the sewage disposal system which runs under the runway and across Japanese property and for access to and use of the small craft landing facilities. The Japanese have the responsibility of maintaining the Radio Beacon, runway and associated facilities and portions of the seawall in at least the same condition as that which existed at the time of reversion.



## CHAPTER II

### OPERATIONS

#### A. Aids to Navigation

1. Loran: Loran Station Marcus is the Whiskey Slave for the northwest Pacific Loran-C chain, with the Master located at Loran Station Iwo Jima. The other slaves are Loran Station Yap (Zulu), Loran Station Gesashi (Yankee), and Loran Station Hokkaido (Xray). The System monitor for the Master-Whiskey baseline is located at Loran Station Saipan, which also monitors the Master-Zulu signals. Loran Station Marcus has a 1,350 foot antenna for radiation of the synchronized loran pulses that have a peak power of 3 million watts. All ships and planes equipped with Loran-C receivers can use these signals for precise navigation when two or more pairs of signals are present.

2. Additional AtoN Facilities: Marcus Island is also equipped with radio beacon transmitters and antenna which were formerly maintained by the USCG, but have been taken over by the Japanese. The radio beacon equipment and antenna are at the Japanese station at the other end of the runway from the Loran Station.

#### B. Communications

Communications with the NWPAC Loran and Monitor Station, CG Radio Guam and Commander, Far East Section via Kami Seya Radio, is handled by the Radio Room (next to the Timer Room in the Signal Power Building) by one Radioman and two or three SN or SA/SNEW watchstanders on a twenty four hour watch schedule. The radio watchstanders have ample work, sending, receiving and handling the many messages required for operating a complex Loran-C station.

The Radio Room is equipped with three R-840 receivers with associated single side band converters for reception of voice, CW, and radioteletype SSB signals, and three AN/URT-17A, 1,000 watt radio transmitters (one in the radio room, others in the electronics repair shop next to the Radio Room). These transmitters are capable of SSB voice, CW, and radioteletype transmissions with the help of associated tone keyers, two model CTT-28-ASR-AUX teletypewriters, plus additional equipment needed for calibration and testing.

The Radio Room is fully air-conditioned as a precaution against rust and corrosion of the electronics equipment, due to the high humidity condition that exists throughout most of the year.

Intra-station communications are handled by a dial phone system, plus a special sound power phone line between the Signal Power and Loran Transmitting Buildings used for Loran-C operation and maintenance.

### C. Search and Rescue

Capabilities for search and rescue at Marcus Island are limited both in equipment and in ability to perform due to range and sea conditions. Search and Rescue properly falls within the jurisdiction of the Government of Japan, however, the Coast Guard has two "Boston Whaler"s" equipped with two outboards each. These are for rescue in case of an aircraft accident upon landing or take off.

It is the policy that both boats be in the water at the same time. The accesses through the reef are few and the current sometimes strong so that combined with choppy seas, due to strong ocean breezes, operation of the station boats is at best hazardous. Rescue Drills are scheduled periodically.

### D. Vehicles

The stations allowance of vehicles provides for two M-37B1 trucks (4x4), one with a winch. A Jeep Station Wagon is now used and provides transportation but little work capability.

The station is provided with a combination bulldozer/fork-lift which is used for handling heavy loads and for loading and unloading aircraft.

Four bicycles are also provided for the use of all personnel.

All vehicular traffic conforms to Japanese traffic rules (i.e. driving on the left side of the road etc.).



### CHAPTER III

#### PERSONNEL

##### A. Complement

Officers                    1 - LT     Commanding Officer  
                             1 - RELE    Executive Officer

Enlisted                   1 - BMC  
                             10 - SN  
                             1 - ENC  
                             1 - EN1  
                             1 - DC1  
                             1 - EM1  
                             1 - EN2  
                             2 - EN3  
                             2 - FN  
                             1 - ETC  
                             2 - ET1  
                             1 - RM1  
                             2 - ET2  
                             2 - ET3  
                             1 - TT3  
                             1 - CS1  
                             1 - HM1  
                             1 - SK2  
                             1 - CS3  
                             35 - Total

NOTE: The RM1 presently on the station allowance is expected to be deleted in the fall of 1969 due to reduced communications requirements after that time.

##### B. Administration and Personnel Records

Service Records and Health Records are kept in the station office where they are maintained by the Commanding Officer and the corpsman who serves as the station yeoman when not attending to medical duties.

Pay Records and Personal Data Cards are removed from other records as the individual passes through FESEC on the way to Marcus. These two records are kept and maintained at the section office and picked up there after departure from the island.

Entries for the Personnel Diary are made by message to the section office where the actual diary is drawn up.



### C. Medical Facilities

A complete Sick Bay is located in the barracks building and is available at any hour. The Sick Bay is maintained by one Hospital Corpsman First Class and includes facilities for the following:

- a. Emergency treatment and equipment for almost any situation.
- b. Nursing care and associated equipment.
- c. A moderate stock of pharmaceuticals for general ailments and infection.
- d. Laboratory equipment for diagnostic exams and routine lab work, (i.e., blood and urine analysis including WBC, RBC, CBC and cultures).
- e. Casting and correction of minor orthopedic injuries.
- f. Minor surgery.
- g. Immunology.

In situations where immediate major surgery is needed or life hazards are involved, Medical Evacuation by air is immediately available through the 6113th Rescue and Recovery Detachment at Tachikawa Air Force Base, Japan. The 6113th RRD is always available for Medical Evacuation or additional medical assistance.

Medical problems beyond the scope of the station are sent to Tachikawa AFB Hospital for necessary treatment on a TAD basis.

### D. Training and Education

Station training takes the form of scheduled lectures on either a departmental or station level in such areas as may be applicable to the department or in general categories such as First Aid etc. Station drills in Fire Fighting, Aircraft Emergencies, and Typhoon Preparedness are scheduled with sufficient frequency to maintain proficiency of personnel to accomplish their duties.

It is a station requirement that each man have out a course for his next higher rating and that he submit one lesson per month. When all courses for a rate have been completed it is strongly recommended that courses in closely associated rates be taken out.

Self improvement courses from any source especially USAFI and affiliated colleges are highly encouraged.

### E. Morale

1. Outdoor Recreational Facilities: These consist of a variety of activities including use of the swimming pool, conveniently located directly in front of the station, skin diving inside the reef that surrounds the island, fishing, archery, basketball, tennis, volleyball, softball, and badminton.



Fishing is usually from the beach or from the reef and the principle catches are shark, tuna, parrot fish, sea bass and an occasional moray eel. Some fishing gear is provided but enthusiasts are encouraged to bring their own.

Skin diving is restricted to within the reef because of sharks and strong currents which sweep the island. Fins, glasses, snorkles, spear guns, and underwater camera are provided. The water within the reef is relatively shallow, for the most part, making scuba gear unnecessary.

Occasional cookouts are held on the patio beside the pool and at the Safari Club, a home away from home on the other side of the island. Beachcombing for glass fish net balls and sea shells usually gains the interest of nearly all men at one time or another while they are here.

2. Indoor Activities: These include pool, table tennis, photography, and amateur radio. The station has a large assortment of books and magazines and receives 6 new books from the district each month. A stereo record player and tape recorder is on the Rec. Deck. The section office quite often contributes to the collection of records and tapes available at the station. Subscription to magazines and newspapers keeps station personnel up on the happenings of the outside world.

Movies are shown nightly on the mess deck or on the tennis court during the hot summer months. For those interested in exercise, one room of the barracks has been set aside, with all equipment provided, for weight lifting.

An 8mm movie projector and a slide projector are in the morale gear locker and may be checked out at any time.

3. Mail: Mail is sent and received once a week on our weekly log flight on Thursdays. Air Mail from the West Coast takes about 6 days. Regular Mail from the East Coast takes about 9 days. These times are minimums and can be up to 7 days longer if a letter just misses a flight. A letter mailed from Marcus on Thursday will arrive at its stateside destination in about 5 or 6 days. Nearly every mail service (Registered, Certified, Insured, Special Delivery, Parcel Post, etc.) provided at a stateside branch post office is provided on the island including sales of Money Orders and Stamps. The Official Mailing address for Marcus Island is:

BM3 John J. JONES  
c/o Commanding Officer  
USCG Loran Station  
FPO Seattle 98782

4. Exchange: There is no exchange on the island, however, one man is designated to receive orders from all personnel once a month. These orders are consolidated and sent to the Air Force Exchange in Japan where they are



filled and returned. Nearly any item you may desire may be obtained in this way. A very small supply of toiletries are kept on hand for men just arriving who do not have these items. It is recommended that while passing through Japan you will pick up all personal items to last for at least the first month (including laundry soap).

5. Beer and Soda: A special privilege has been granted to Loran Station's to have beer aboard. Marcus has a beer and soda mess whereby cold beer and soda are sold daily, at 15¢ per can for either, to all men. Proceeds of these sales are used to provide morale money for station use.

6. Morale Funds: Marcus has two sources of Morale Funds. From the sale of Beer and Soda enough money is made to pay the PX operator, Beer Mess Operator and those who show the nightly movies. A small amount is left over which is used to make small cash purchases of morale items. The second source is the Air Force Central Base Fund from which we receive approximately \$75.00 per month. This is used as our primary source of morale equipment.

#### F. Health and Sanitation

Health and sanitation are maintained by one Hospital Corpsman First Class, who also serves as the islands Quarantine Officer for the Government of Japan.

Active immunization against the following is required for all U. S. personnel on the island:

- a. Smallpox
- b. Typhoid
- c. Typhus
- d. Cholera
- e. Influenza
- f. Tetanus
- g. Yellow Fever
- h. Hong Kong Influenza Strain

Potable water is caught in a rain water catchment system and stored in underground tanks of 180,000 gallon total capacity. A daily check is made on the chlorination of all potable water, and periodic biological examination by commercial laboratories is made.

The station utilizes a waste heat distiller evaporator capable of producing a maximum 150 GPH of distilled water. The evaporator is used only when annual rain fall is low.

A Septic Tank supplies adequate sewage disposal and is chemically treated as is required for sanitation purposes.

Sanitary brackish water is supplied by a deep well pump from about 50 feet below the surface.

## CHAPTER IV

### ENGINEERING

#### A. General Engineering

1. Power Plant: The station is powered by four D-398A 636 HP Caterpillar diesel engines in combination with four 550 K.W. A.C. generators. These are connected to the master electrical switchboard which is capable of starting and securing the generators, regulating voltage and cycles, and distribution of power throughout the station. Although the power required may be handled by one generator, two are always operated in parallel.

The engines are cooled by a closed water system which runs to four horizontally mounted radiators external to the building. These are arranged so that any combination of engines may be used with any combination of radiators. Normally two are on the line.

2. Damage Control: Damage Control functions are normally carried out by a Damage Controlman First Class who works from a large shop and has a supply of general building and maintenance materials on hand, including a band saw, radial arm saw, joiner, lathe, burning outfit, welder and an assortment of common power tools.

3. Electrical System: Aside from the generators already described, four 32 volt starting batteries are used with each engine.

4. Heating System: Due to climate conditions no heating system is necessary.

5. Ventilation System: Engine room ventilation is accomplished by two large exhaust fans mounted on top of the generator room which draws fresh air through 3 large banks of wall mounted foam filters into the engine room and force hot air out the top of the building.

Each room in the barracks is equipped with a small air conditioning unit which has a vent from which to draw outside air if so desired. Due to high outside humidity these vents are normally kept closed.

6. Fuel Oil System: Fuel oil, which is received once a year by tanker, is stored in twenty-three 30,000 gallon tanks. From these tanks it is pumped, by the transfer pump, to a 500 gallon day tank outside the engine room and thence, through the fuel oil filter, to the engines. Approximately 420,000 gallons of fuel are used annually.

7. Refrigeration System: Four walk-in Econ-o-cold refrigeration compartments, two at freezing temperatures and two at chill temperatures, hold all the food requiring refrigeration. These units are cooled by four Copeland compressor/condenser refer units outside the galley using Freon-12.



The barracks air conditioning is a chilled water system. The heat is transferred by an exchanger, from this system, to a four compressor, 65-Ton, unit using Freon-22. This is in turn cooled by a large condenser located outside the building. Each room has a small unit connected to the chilled water system controllable in both temperature and in fan speed.

The CPO's quarters is equipped with its own air conditioning system.

Other rooms and buildings on the station are cooled by individual self contained wall units.

8. Fresh Water System: A 32,000 square foot catchment system composed of the tennis court and the roofs of the station buildings comprises the main source of fresh water. The water from these catchment areas drains into two 60,000 gallon raw water tanks from which it is pumped, through filter and chlorination units, into two 30,000 gallon treated water tanks for storage. The treated water is pumped, for station use, under pressure into a 500 gallon day tank.

Supplementary water, when rain fall is low, is supplied by a MAXIM waste heat distilling plant. The discharge of the engine cooling water is fed to the plant where its heat is transferred to the brackish water supplied to the unit. A vacuum of 27 inches Hg. is used to obtain steam at a relatively low temperature and from that an output of 150 gallons of fresh water per hour is obtained.

9. Sanitary Water System: Brackish water for the swimming pool and sanitary system is pumped directly through a filter from a 50 foot well at 35 psi.

10. Buildings: The station buildings are constructed of cinder block with concrete floors and linoleum tile decks. All buildings are one story high with the exception of the living quarters of the barracks building. Heavy storm shutters are provided for use in case of typhoons.

a. Signal Power Building: This building houses all the equipment, machinery and supplies for generating power for the station and the electronic signal for Loran-C transmissions. Rooms within this building are: Timer Room, Radio Room, ET Storeroom and Office, ET and Engineering Storeroom, Engineering Storeroom, EM Workshop, Generator Room and Engineering Office, Garage, and DC Shop.

b. Barracks - Subsistence Building: In this building are the living quarters recreational rooms and messing areas for the crew. In addition storerooms, machinery rooms and gear lockers are located throughout the building. Rooms in this building include: 34 rooms available for individual occupancy, post office, weight room, bos'n locker, laundry room (2 washers and 3 dryers), head on each deck, Rec. deck, galley and storerooms, mess deck and movie



projection booth, Ham shack, photo lab, air conditioning machinery room, First Class Petty Officer's quarters (4 rooms with living room and kitchenette), station office, Sick Bay, and BOQ (3 rooms with living room and kitchenette).

c. CPO's Quarters: This building is separate from but in the same area as the barracks building and consists of five bedrooms, two heads, storage room, living room and kitchenette.

d. Transmitter Building: Located at the base of the tower, it has a storage room, transformer room, work area, coupler room and the transmitter room.

e. Pump Houses: The #1 pump house for fresh water is situated directly over the four fresh water tanks and contains four transfer pumps, a day tank, and equipment for filtration and chlorination. The #2 pump house for brackish water is located beside the pool and contains pump and filter equipment.

f. Bunkers: A large triple bunker, approximately a third of a mile from the signal power building, provides a large storage space for Engineering, Deck, and Electronics.

## B. Electronics Engineering

The Electronics personnel on board have a full time job maintaining the numerous items of equipment used to carry out the communications and Loran functions. Communications gear has been described in Chapter II so only the Loran and Miscellaneous equipment will be covered here.

Loran operations are divided between the timer room and transmitter building. The timer room is an air conditioned, shielded room containing two AN/FPN-46 timers, two AN/USH-7 recorders and the AN/URQ-11 frequency standard. The URQ-11 is used only as a spare should the rubidium oscillator that is now used become unstable or inoperative. Using the frequency standard the timer is the heart of the Loran system, creating the Loran-C signals, providing the timing synchronizing and monitoring facilities needed. One ET, SN or SA/SNEW watchstander is on duty here at all times, checking the many functions of the timers for proper operation, keeping the six recording charts properly marked, and maintaining a Loran log and a graphical chart of the stations Loran operation.

The transmitter building, adjacent to the Loran tower, contains two high power AN/FPN-45 Loran transmitters, associated power input transformers, an antenna coupler/Dummy Load, a small parts room and area for electronic repair work. These spaces are not air conditioned, but are kept from overheating by forced air blowers. One transmitter is always on-air while the other is in either a maintenance or standby condition. Should one transmitter fail, the timer room watchstander can remotely switch transmitters with less than a minute of interruption of Loran service.



A duty ET is available at a moments notice, 24 hours a day, for operational failures or when a loran watchstander requires assistance. The ET's all have to stand a minimum number of loran watches upon arriving at the station. While some are standing watches, the other ET's are busy daily, maintaining and repairing an endless number of jobs that have to be done.

The Electronic spare parts stock is maintained by an SK2 that has been assigned for this purpose, and with the help of the ET's logging all spare parts used.

## CHAPTER V

### COMPTROLLER

#### A. Commissary

The station's class "D" mess, rates a Commissaryman First Class and Commissaryman Third Class. The average number of rations in one month is 820 with an average cost of \$1,420.00. Commissary supplies are procured from the Commissary at Tachikawa AFB. Orders are placed two weeks prior to desired receipt and fresh items are received every week. Government issue items and all commissary items are available to the station. The galley has two chill boxes and two freeze boxes with an average inventory of \$5,000.00.

#### B. Supply

1. Requisitions and Resupply: Requisitions are submitted in the normal manner once a quarter (\$800.00 quarterly allocation). Department heads make up their orders which are submitted to the CO for approval. The CO evaluates and submits them to the station's SK for processing on DD Form 1348.

The main source of supply for the station is Naval Supply Depot (NSD), Yokosuka, Japan; it is nearest and quickest means of supply. GSA, however, is used whenever items can be procured at a lower cost and are not priority items. Also, CG Supply Depot Honolulu and CG Supply Center Brooklyn are utilized for items peculiar to the Coast Guard.

Electronics supply requisitions are submitted in the same manner as above, however, they are not submitted directly to the suppliers. They are submitted to O<sup>1</sup>COMFESEC for funding, who in turn inserts the date and price and forwards them to the appropriate supply source, returning the stations file copy.

Requests for Procurement (CG 4248, Green Sheets) are also utilized for items requested from FESEC funds. They are submitted to O<sup>1</sup>COMFESEC who solicits quotations and cuts a purchase order, providing funds are available. If not, it is forwarded to the District to be purchased out of District funds.

In general the supply support at Marcus is good. Approximately 98% of all items ordered are processed and received within approximately 6 to 8 weeks from date of order.

2. Boards of Survey: Boards of survey are submitted by the appropriate department heads to the CO via the XO for evaluation and approval. Upon approval by the CO they are forwarded to O<sup>1</sup>COMFESEC for final approval, with a CG 4248 (Request for Procurement) attached for purchase of new item to replace the one being surveyed. Upon FESEC approval a purchase order is cut for a new item, FESEC or District funded, whichever is appropriate, and the station disposes of the old item in accordance with FESEC instructions or upon receipt of the new item.



C. Pay

Pay records for this command are held and maintained by the section office at Fuchu Air Station in Japan. On the 20th of each month the section office cuts a list of those who are to be paid and submits this list to the Air Force who in turn cuts the checks. The checks are then sent via Registered Mail to Marcus where the Commanding Officer, acting as agent for the Air Force, holds pay call on the last day of the month. Pay call is held once a month so make your financial arrangements accordingly.

Pay may be received in either form cash or U. S. Treasury check at the preference of the individual. Money orders may be purchased at the Post Office for sending money home.

If an individual desires to have money sent to him on the island it is recommended that it be in the form of a Money Order since that is the only acceptable means. Personal checks and Cashiers checks are not acceptable.

D. Fuel and Lube Oil

The station has a tank farm consisting of 23 tanks of 30,000 gallon capacity each for a total of 690,000 gallons of fuel oil. Of this, approximately 420,000 gallons are used each year between refuelings. Refueling is accomplished by Japanese companies around mid May, at about the same time as the CGC KUKUI makes her spring trip. It is preferred that the KUKUI be at Marcus to assist but this is not always possible owing to her tight schedule.

Marcus presently has and provides all the fuel lines for refueling, about 1600 feet, but in view of their slowly deteriorating condition the contract company may furnish the fuel lines in the future.

Lube oil and automotive gasoline are brought by the KUKUI each spring in 55 gallon drums. Approximately 3,000 gallons of each are used annually. It is desired to place the request (solicited several months in advance by the district) so that 4,000 gallons of each are on hand right after delivery is made. This allows a 1,000 gallon reserve in the event the KUKUI is not able to meet her schedule the following year.

## CHAPTER VI

### ADMINISTRATION

#### A. Reports and Logs

Reports and logs maintained on this station are similar to those maintained aboard small floating and shore stations within the Coast Guard. Reports peculiar to each department are the responsibilities of that department head and are filled out in accordance with current directives. A file of all reports due on weekly, monthly, quarterly etc. basis is kept in the office giving the number of copies, routing, reference and other information applicable to each.

#### B. Official Correspondence

A file of all official correspondence both incoming and outgoing is maintained in the station office. All notices, directives and publications appropriate for units designated C:1 are also maintained in the office.

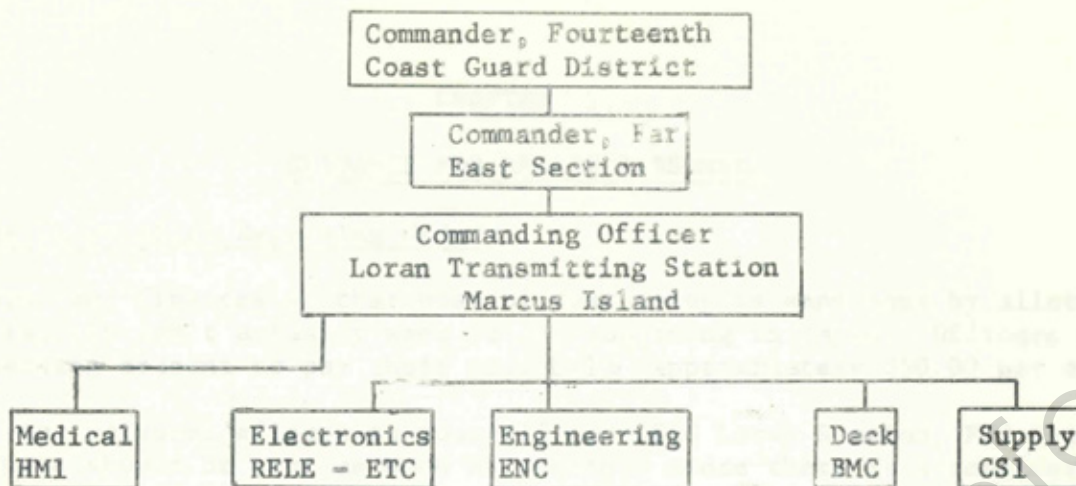
Any official correspondence having any interest to the section office is sent via FESEC for appropriate endorsement.

#### C. Organization

Marcus Island Loran Station is under the operational control of Commander, Far East Section, U. S. Coast Guard, located at Fuchu Air Station in Japan, who is in turn under the operational control of the Commander, Fourteenth Coast Guard District located in Honolulu, Hawaii. The Commanding Officer is assisted in the operation of the station by a warrant officer (radio electrician) and three Chief Petty Officers. The warrant officer heads Electronics with the ETC as his assistant. The ENC and BMC are in charge of the Engineering and Deck Departments, respectively, with the HMI as medical officer and CSI as head of the supply department. The HMI serves as the administrative assistant to the commanding officer.

Station organization follows on the following page:





#### D. Station Bills

Administrative and Operational Bills are set forth explicitly in the Station Organizational Manual. These Bills include procedures and responsibilities for fire, typhoon, aircraft emergency, emergency destruction of classified matter, training, watchstanding, cleaning, supply, communications, etc.

#### E. Safety

In addition to the usual safety hazards encountered around machinery and vehicles Marcus has several unique problems.

Japanese control of the island has necessitated the observance of their rules of the road. These rules are observed both on and off the area limits of the station. All new personnel are cautioned as to this particular safety problem.

A definite hazard, though minor if precautions are observed, exists to those who skin dive within the reef. Station Regulations have been promulgated setting forth restrictions on this activity.

The Safety Board is comprised of the Commanding Officer, Executive Officer, and all department heads. The board holds informal meetings and inspections of the station to disclose undetected hazards. Recommendations are made and corrective action taken.

## CHAPTER VII

### GUIDANCE FOR RELIEF PERSONNEL

#### 1. Things To Do After Receiving Orders

Arrange your finances so that most of your money is sent home by allotment if, that is, you don't actually want it for something in Japan. Officers may want a checking account to pay their mass bill (approximately \$50.00 per month).

Send your personal effects to yourself c/o USCG Loran Station, FPO Seattle 98782. These should be sent as soon as possible since there is a considerably long transit time in the nature of 2 months or more. Do not send your personal effects to CG SupCen Alameda for further shipment.

Items of clothing for enlisted personnel, in addition to a full sea bag, that should be brought are any loose fitting articles of civilian clothing suitable for hot weather. Civilian clothing may be worn after working hours. Khaki shorts may be worn by all personnel during working hours if so desired. Tennis shoes, preferably low cut, are highly recommended since the coral can tear up hard shoes in no time. Baseball caps bearing the station name are issued to each man upon his arrival and these are normally worn. Regular dungaree caps can also be worn by the crew. Garrison caps may be worn by officers and Chiefs. As R&R trips to Tokyo by individuals during winter months are common, winter clothing may be necessary.

Bring or send ahead any recreational equipment that you have and may want to use during your year. Bring books that cater to your own taste in case the station library doesn't. If you have hobby materials, bring these and any other activities that will keep you busy during your free hours. If you have ever desired to take correspondence courses in some civilian field, check into this before you leave and have the materials sent.

#### 2. Things For New Commanding Officer To Do

If you have not already done so write to the present Commanding Officer and request a copy of the station Organization Manual and any other information you may desire. It would be helpful if you would have read these prior to reporting aboard since there will be much to do during the one week allowed for the relief. The present CO will be able to inform you of many pertinent facts prior to your travel through the district and section offices that will make your visits to these offices more profitable.

On the visit to the District and Section you can obtain much information that will be of great value during your tour. Seemingly insignificant bits of information may save you several weeks of correspondence later; it is recommended



that you take notes. In the Section Office determine as much as possible about problems presently existing on the station especially in the area of engineering and get first hand information on the section's plans for these problems. Find out procedures applicable to personnel accounting and transfer and supply.

The relief week at the station will include property inventories; COMTAC & RPS inventories; re-designation of all personnel duties under new CO's signature; familiarization with station reports, supply system and its problems, engineering plant and problems, personnel administration; joint station inspection; commissary inventory; postal affairs; international agreements; review of SSMP cards; plans for relief; relief letter and change of command ceremony. The items listed above are by no means all that will be accomplished and in any case it will be a busy week. The change of command ceremony is normally held on Wednesday prior to plane day and the old CO departs on Thursday.

You may expect to remain in the district office for about 10 working days and in FESEC from the time you arrive until the following Thursday morning.

C. Travel to Marcus

When you receive your orders for transfer to Loran Station Marcus Island, you will be directed to first report to Commander, Far East Section.

Commander, Far East Section is located in building 651, second floor, Fuchu Air Station, Tokyo, Japan, (about 25 miles from downtown Tokyo). Office hours are from 0730 to 1600 on week days. Phone 4-7103 or 4-7121. Personnel reporting after normal working hours, on weekends or holidays call the Loran Monitor Station at Fuchu for instructions. Phone number is 4-5700.

Personnel arriving via Tachikawa AFB from CONUS: Don't panic when your MAC flight lands at Yokota AFB. An Air Force bus will take you to Tachikawa AFB where billets are available for officers and enlisted personnel. Transportation is available from Tachikawa to Fuchu, with buses leaving Tachikawa Main Gate and East Bus Terminal hourly and stopping next to Building 651 at Fuchu. Personnel arriving via commercial conveyance at Tokyo International Airport (Haneda) follow the directions of the next paragraph.

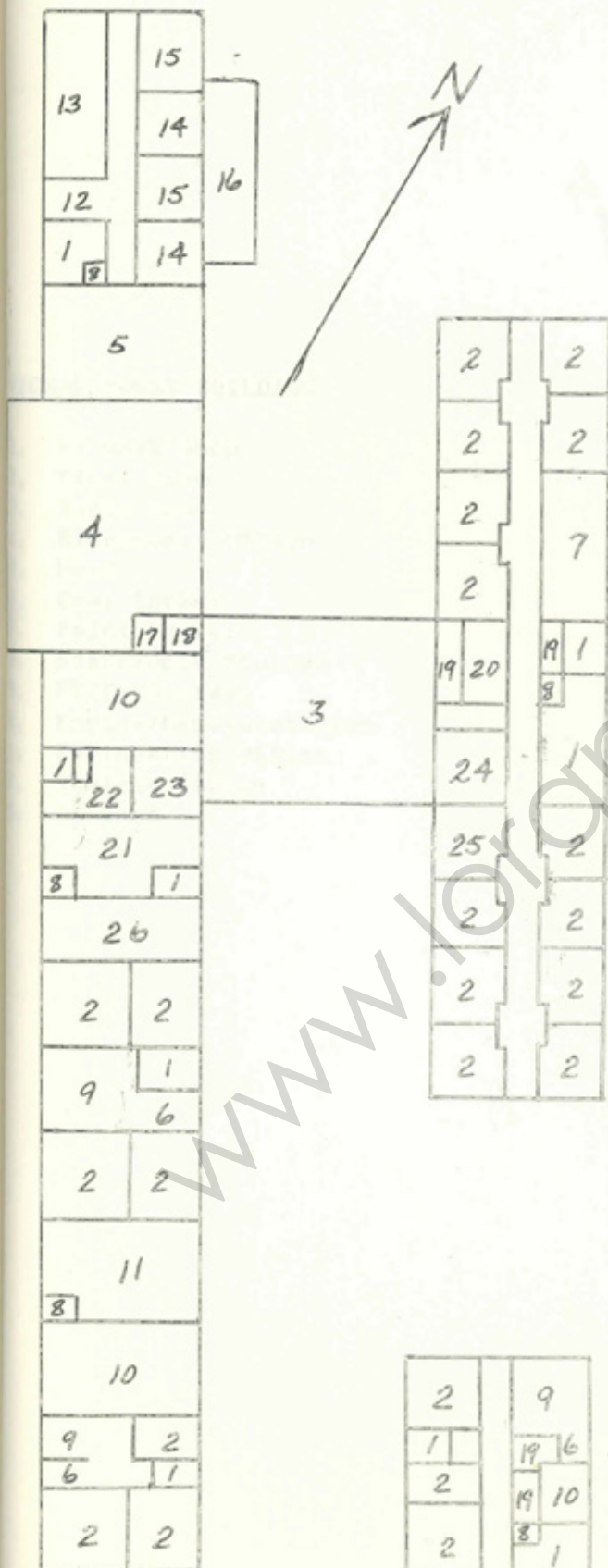
Personnel arriving at Tokyo International Airport (Haneda).

- a. Convert not more than \$20.00 to Japanese "Yen"; the rate of exchange is about 360 yen to \$1.00. This might vary one or two yen.
- b. Get a Japanese cab to Tachikawa Air Base. It is easier to get a Japanese taxicab driver to find Tachikawa than Fuchu. The cost may be anywhere from 1,000 yen to 4,500 yen (depending on the drive - he may take you for a ride). This cab fare is on a reimbursable basis, in other words, the government will return the money to you when your orders are completed.

- c. The cab will not be able to go through the Tachikawa gate, therefore, ask the gate guard at Tachikawa to call an on-base cab if you plan to be billeted on base. Daiwa taxi can be called also which will take you to Fuchu.
- d. Go to the Airman's Transient Barracks and check-in. If arrival is during the week and between the hours of 0730 and 1600 call O'COMFESEC at 4-47103. Personnel arriving on weekends or holidays comply with paragraph 2.
- e. Any yen you may have with you (not exceeding \$200.00) may be converted to dollars with the presentation of a boarding pass at the Air Terminal Cashiers Window immediately prior to leaving Japan.

After you have arrived at COMFESEC your orders will be endorsed and you will be ordered to report to the Tachikawa Air Terminal for the flight to Marcus Island. At COMFESEC you will be told when your flight is scheduled to depart and at what time you should report to the Air Terminal. You should insure that you and your belongings are on the aircraft at the scheduled time as there is only one flight to Marcus Island weekly.



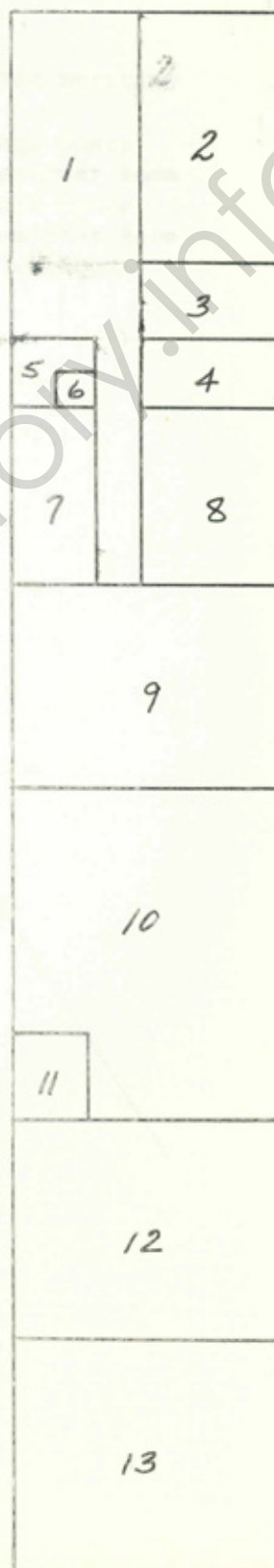


# BARRACKS/SUBSISTENCE BUILDING

1. Head
2. Individual Rooms
3. Recreation Room
4. Mess Deck
5. Galley
6. Kitchenette
7. Wash Room
8. Gear Locker
9. Lounge
10. Patio
11. Station Office
12. Galley Office
13. Dry Stores
14. Refrigerator
15. Freezer
16. Refer Mach. Room
17. Projection Room
18. Beer Mess
19. Storage
20. Bos'n Locker
21. Air Conditioning Mach. Room
22. Photo Lab
23. Ham Shack
24. Stair Well
25. Post Office
26. Sick Bay

# SIGNAL POWER BUILDING

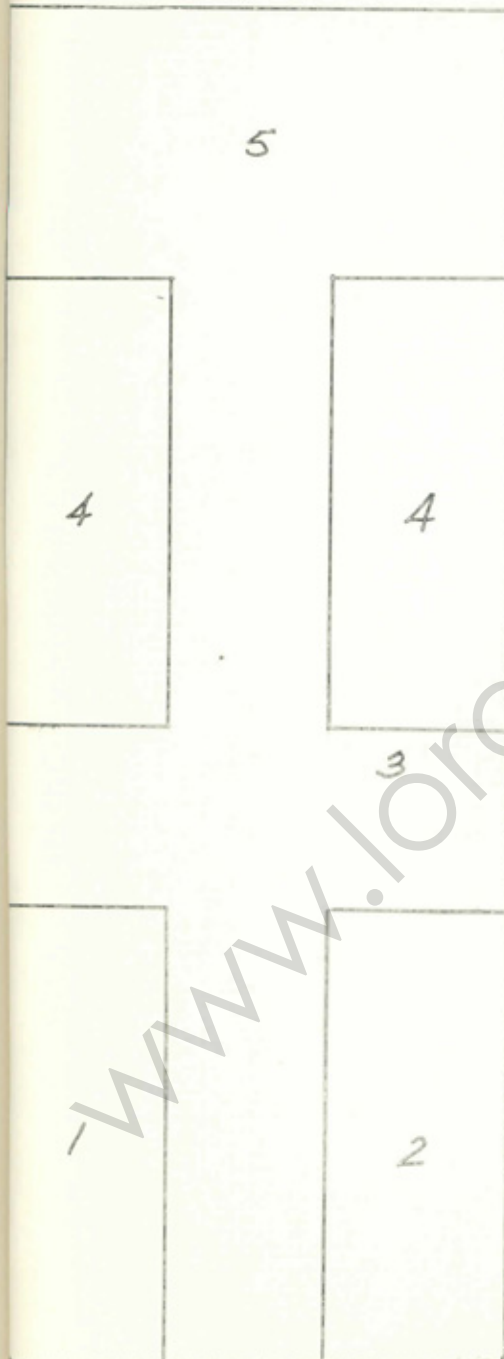
1. ET Work Shop
2. Timer Room
3. Radio Room
4. Electronic Office
5. Head
6. Gear Locker
7. Paint Locker
8. Electronic Storage
9. ET/EN Storage
10. Engine/Generator Room
11. Engineering Office
12. Vehicle Garage
13. DC Shop





TRANSMITTER BUILDING

1. Storage Space
2. Transformer Room
3. ET Work Space
4. Transmitter Room
5. Coupler Room



[www.loran-history.info](http://www.loran-history.info)