

COMMANDING OFFICER
USCG LORAN-A TECHNICAL
ASSISTANCE DETAIL
APO SAN FRANCISCO 96528

4900/3260
28 May 1975

From: Commanding Officer, CG Loran-A Technical Assistance Detail,
Manila

To: Commander, Fourteenth Coast Guard District (oan)

Via: Senior Coast Guard Officer, Philippines

Subj: Philippine Loran-A Training

1. Since turnover of the five Loran-A stations, in the Republic of the Philippines, the U. S. Coast Guard has been striving to get the Philippine Coast Guard to establish a Loran-A training program. Numerous offers of assistance have been made by the USCG Philippine Section personnel and subsequently LORTAD personnel.
2. Under the Memorandum of Agreement of 1970, approximately 45 Philippine CG personnel have been transported to and trained at the Governors Island Loran-A School. Also, 14 personnel attended an instructor training school at Governors Island in order to better prepare themselves for conducting their own school, in the Philippines.
3. In late 1973, the USCG LORTAD installed, and made operable equipment for a Loran-A school at Sangley Point in the vicinity of Commander, Aids to Navigation Command. To date, this school has not been utilized.
4. In February, the PCG did establish through the PCG Training Center Command, a Loran orientation course which was convened at Sangley Point. Following some preliminary classroom orientation, a one week on-the-job training phase was conducted by LORTAD personnel (MKC, ETC, EMC), at Naulo Point LORSTA. Field Trip Reports by LORTAD personnel are attached, indicating comments concerning and the extent of training conducted.
5. This command will attempt to have more of this OJT conducted as it is considered a good base to commence from. It has been recommended that subsequent training be extended to two weeks and that present as well as prospective commanding officers of loran stations complete the training.

28 May 1975

Subj: Philippine Loran-A Training

6. Upon completion of the Loran orientation course, this officer was invited by the Commandant, Philippine Coast Guard, to be guest speaker during the graduation exercises. Remarks given are attached as enclosure (5).

L. J. BLACK, JR.

Encl: (1) LORTAD Field Trip Reports
(2) PCG Loran Course Director's general comments
(3) COMDT, PCG ltr of 8 APR 75
(4) Program, Graduation Exercises
(5) Remarks, LCDR L. J. BLACK, Jr.
(6) Photographs, Graduation Exercises, 18 APR 75

30 May 1975

FIRST ENDORSEMENT

From: Senior Coast Guard Officer, Philippines
To: Commander, Fourteenth Coast Guard District (oan)

1. Forwarded.

A. L. OLSEN, JR.

UNITED STATES COAST GUARD
LORAN-A TECHNICAL ASSISTANCE DETAIL, GUINEA

FIELD TRIP SUMMARY

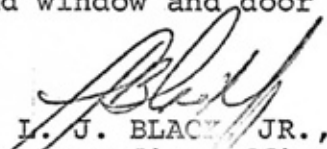
Date: 2 May 1975

1. The following will be completed for "in-house" information at the time the FIELD TRIP REPORT is filed:

- a. Department/Branch: ENGINEERING
- b. Consultant(s): MKC Andrew H. MCCLARY, USCG
- c. Station Visited: PCG LORSTA NAULO POINT
- d. Purpose of Visit: On-the-job training class for engineering.
- e. Date Departed LORLAD: 3 April 1975
- f. Date Arrived Station: 3 April 1975
- g. Date Departed Station: 9 April 1975
- h. Date Arrived LORLAD: 9 April 1975
- i. Mode of Transportation: Chartered aircraft.

j. General Comments: (Condition of station, equipment, etc., cooperation of station personnel and other pertinent information.)

The station is in very good condition, but needs painting, new window screening, doors, and window and door framing.

Noted:  L. J. BLACK, JR., LCDR, USCG
Commanding Officer

ENCLOSURE (1)

4900

13 May 1975


FIRST ENDORSEMENT on CG LORTAD FIELD TRIP REPORT of 2 MAY 75
(PCG LORSTA NAULO POINT)

From: Commanding Officer, U. S. Coast Guard Loran-A Technical
Assistance Detail, Manila

To: Distribution

Subj: Field Trip Report PCG LORSTA NAULO POINT; comments
concerning

1. Forwarded.


L. J. BLACK, JR.

DISTRIBUTION:
COM, AIDS TO NAVCOM
LORSTA NAULO POINT
HQ, PHILIPPINE CG
LORTAD FILE ←
DEPARTMENT FILE

UNITED STATES COAST GUARD
LORAN-A TECHNICAL ASSISTANCE DETAIL, MANILA

FIELD TRIP REPORT

2 May 1975

1. The following station was visited for the purpose of providing technical consultation and/or administrative assistance for the operation of the Loran-A transmitting equipment.

Station: PCG LORSTA NAULO POINT

Dates of visit: 3-9 April 1975

Consultant: MKC Andrew H. MCCLARY , USCG

2. The power generating equipment was inspected.

3. No discrepancies were noted in the power generating equipment.

4. The assistance of the U. S. Coast Guard team was not required this visit.

5. The following instruction was given:

The purpose of this visit was for a five-day on-the-job training class for loran personnel in engineering and electronics watchstanding.

6. General Comments

a. The following is a report on the on-the-job training class held at Naulo Point from 4 to 8 April 1975 by the U. S. Coast Guard. The class consisted of nine enlisted men and two officers that were assigned to the class did not attend the training at the station.

b. The class was given oral classroom instruction on electrical power generating units.

c. The class was then taken to the engineroom and performed the operation of checking the engine, gas, oil, water,

fuel supply and return valves, starting the engine shifting to diesel operation and controlling the engine speed for placing the power unit on the board in parallel with the operating unit.

d. This operation was repetitive for each and every student until he was sure on the procedure and understood the importance of each operation.

e. The time for this training was insufficient. The time allotted did not allow any time for the training in preventive maintenance, except to prevent damage to the engine and generator when placing in operation.

f. It is recommended that all future commanding officers for the loran stations be required to complete this two weeks of on-the-job training, and, if possible, the commanding officers on the stations now should be required to take this course as soon as possible. I think this would make our job easier as advisors. The commanding officer will know what we are talking about in the post visit conference.

7. No follow-up action is required.

Submitted by: *A. H. McClary*
A. H. MCCLARY
MKC, USCG

Approved by: *J. G. Jimenez*
J. G. JIMENEZ
CW02(ELC), USCG
Head, Operations &
Engineering Dept.

UNITED STATES COAST GUARD
LORAN-A TECHNICAL ASSISTANCE DETAIL, MANILA

FIELD TRIP SUMMARY

Date: 14 April 1975

1. The following will be completed for "in-house" information at the time the FIELD TRIP REPORT is filed:


- a. Department/Branch: ELECTRONICS
- b. Consultant: ETC-P6 Brigido V. PAHED , USCG
- c. Station Visited: PCG LORSTA NAULO POINT
- d. Purpose of Visit: Assist on-the-job training for Loran-A watchstanders.
- e. Date Departed LORTAD: 31 March 1975
Date Arrived Station: 31 March 1975
- f. Date Departed Station: 1 April 1975
Date Arrived LORTAD: 1 April 1975
- g. Date Departed LORTAD: 3 April 1975
Date Arrived Station: 3 April 1975
- h. Date Departed Station: 9 April 1975
Date Arrived LORTAD: 9 April 1975
- i. Mode of Transportation: Chartered aircraft.
- j. General Comments: (Condition of station, equipment, etc., cooperation of station personnel and other pertinent information.)

The students/trainees (9 enlisted men) showed a lot of enthusiasm for the course, especially after having been enlightened further on the various concepts, functions and importance of Loran-A synchronization techniques. These basic concepts of Loran-A were stressed, because some of the watchstanders observed at various stations have been neglectful on this type of duty. It was pointed out to these men that the mere presence around the operating equipment does not in itself constitute the ideal watchstander unless he is alert and is able to correct any discrepancies that may threaten the reliability and accuracy of the system due to neglect.

After this presentation, the nomenclature and hands-on type of instructions were carried out with fairly good results.

There was no formal examination implemented, but each potential watchstander was asked to perform the actual operating adjustments on the equipment (electrical synchronization adjustments, etc.). Some students actually did good, and a few took a longer time to grasp the procedure. Upon termination of the class, the students were declared boot electronics watchstanders.

Noted:


L. J. BLACK, JR., LCDR, USCG
Commanding Officer

UNITED STATES COAST GUARD
LORAN-A TECHNICAL ASSISTANCE DETAIL, MANILA

FIELD TRIP REPORT

Date: 14 April 1975

1. The following station was visited for the purpose of providing technical consultation and/or administrative assistance for the operation of the Loran-A transmitting equipment.

Station: PCG LORSTA NAULO POINT

Dates of visit: 31 March - 1 April 1975; 3-9 April 1975

Consultant: ETC-P6 Brigido V. PAHED , USCG

2. The following equipment was inspected:

- a. Loran-A transmitting equipment.
- b. Testing and calibrating equipment.
- c. Loran-A transmitting antennas.
- d. Single side band voice transmitting and receiving equipment.

3. The following discrepancies were noted:

- a. SBA 1000A Linear Amplifier - no output.

4. The following assistance was given:

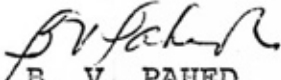
- a. SBA 1000A Linear Amplifier - realigned channel selector switch and retuned.

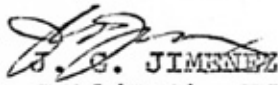
5. The following instruction was given: On-the-job training on loran watchstanding course.

6. General Comments. The students/trainees (9 enlisted men) showed a lot of enthusiasm for the course, especially after having been enlightened further on the various concepts, functions and importance of Loran-A synchronization techniques. These basic concepts of Loran-A were stressed, because some of the watchstanders observed at various stations have been neglectful on this type of duty. It was pointed out to these men that the mere presence around the operating equipment does not in itself constitute the ideal watchstander unless he is alert and is able to correct any discrepancies that may threaten the reliability and accuracy of the system due to neglect.

After this presentation, the nomenclature and hands-on type of instructions were carried out with fairly good results. There was no formal examination implemented, but each potential watchstander was asked to perform the actual operating adjustments on the equipment (electrical synchronization adjustments, etc.). Some students actually did good, and a few took a longer time to grasp the procedure. Upon termination of the class, the students were declared boat electronics watchstanders.

7. Follow-up action is required by station personnel: Replace loran receiving antenna guy lines.

Submitted by: 
B. V. PAHED
ETC-P6, USCG

Approved by: 
J. G. JIMENEZ
CWO2 (ELC), USCG
Head, Operations &
Engineering Dept.

4900

13 May 1975

FIRST ENDORSEMENT on CG LORTAD FIELD TRIP REPORT of 14 APR 75
(PCG LORSTA NAULO POINT)

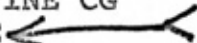
From: Commanding Officer, U. S. Coast Guard Loran-A Technical
Assistance Detail, Manila

To: Distribution

Subj: Field Trip Report PCG LORSTA NAULO POINT; comments
concerning

1. Forwarded.


L. J. BLACK, JR.

DISTRIBUTION:
COM, AIDS TO NAVCOM
LORSTA NAULO POINT
HQ, PHILIPPINE CG
LORTAD FILE 
DEPARTMENT FILE

UNITED STATES COAST GUARD
FORM-A TECHNICAL ASSISTANT DETAILS REPORT

FIELD TRIP SUMMARY

Date: 11 April 1975

1. The following will be completed for "in-house" information at the time the FIELD TRIP REPORT is filed:

a. Department/Branch: ENGINEERING/ELECTRICIAL
b. Consultant(s): EMC-P3 Maximino C. RICASATA, USCG

c. Station Visited: PCG LORSTA NAULO POINT

d. Purpose of Visit: TRAINING OF PHILIPPINE COAST GUARD
PERSONNEL AND REPAIR OF NUMBER FOUR GENERATOR.

e. Date Departed HOME: 3 APRIL 1975

f. Date Arrived Station: 3 APRIL 1975


g. Date Departed Station: 9 APRIL 1975

h. Date Arrived LORSTA: 9 APRIL 1975

i. Mode of Transportation: CHARTER AIRCRAFT AND TAXI.

3. General Comments: (Condition of station, equipment, etc., cooperation of station personnel and other pertinent information.)

Station is in good condition. Equipment is in good condition. Cooperation was excellent. Dextrose supply in sick bay expired in 1967. Snakes have been killed in hot water heater (barracks) in 1970. Grass is kept trimmed. Recommend that all personnel complete on-the-job training in watchstanding.

Noted:  L. J. BLACK, JR., LCDR, USCG
Commanding Officer

4900
13 May 1975

FIRST ENDORSEMENT on CG LORTAD FIELD TRIP REPORT of 11 APR 75
(PCG LORSTA NAULO POINT)

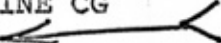
From: Commanding Officer, U. S. Coast Guard Loran-A Technical
Assistance Detail, Manila

To: Distribution

Subj: Field Trip Report PCG LORSTA NAULO POINT; comments
concerning

1. Forwarded.


L. J. BLACK, JR.

DISTRIBUTION:
COM, AIDS TO NAVCOM
LORSTA NAULO POINT
HQ, PHILIPPINE CG
LORTAD FILE 
DEPARTMENT FILE

UNITED STATES COAST GUARD
LORAN-A TECHNICAL ASSISTANCE DETAIL, MANILA

FIELD TRIP REPORT

Date: 11 April 1975

1. The following station was visited for the purpose of providing technical consultation and/or administrative assistance for the operation of the Loran-A transmitting equipment.

Station: PCG LORSTA NAULO POINT

Dates of visit: 3-9 April 1975

Consultant: EMC-P3 Maximino C. RICASATA , USCG

2. The power generating equipment was inspected.

3. The following discrepancies were noted:

a. Number One generator and switchboard.

(1) Pilot lamp out.

(2) Water pump belt loose.

b. Number Two generator and switchboard. None noted.

c. Number Three generator and switchboard. None noted.

d. Number Four generator and switchboard.

(1) Brush holder stud, collector ring cracked and caused a short.

(2) Exciter armature shorted.

(3) Pilot lamp out.

4. The following assistance was given:

a. Number One generator and switchboard.

(1) Brought to PCG attention.

(2) Brought to PCG attention.

- b. Number Two generator and switchboard. None.
- c. Number Three generator and switchboard. None.
- d. Number Four generator and switchboard.

(1) Renewed brush holder stud. Station electrician was charged with the job and two trainees were present.


(2) Replaced exciter armature.

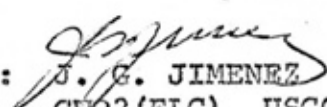
(3) Brought to PCG attention.

5. The following on-the-job training was given:

- a. Generator and exciters used in loran chain.
- b. Switchboard components.
- c. Care and maintenance of batteries.
- d. Safety circuit, components and wiring.
- e. Starting and securing generators.
- f. Paralleling and shifting generator.
- g. Magneto explained and illustrated.
- h. Parts of generating set. How electricity is produced was explained.
- i. Watchstanding explained.
- j. Preventive maintenance explained.
- k. Records and reports.
- l. Tools, instruments and components in engineroom explained.

6. Comments (on-the-job training): Although a student may receive a passing grade it does not necessarily qualify him as a watchstander. Further familiarization is required.

Submitted by: 
M. C. RICASATA
EMC-P3, USCG

Approved by: 
J. G. JIMENEZ
CWO2(ELC), USCG
Head, Operations
& Engineering Dept.

PCG Loran Station Naulo Point
Sta. Cruz, Zambales, PI

08 April 1975

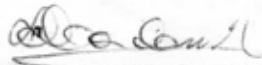
GENERAL COMMENT ON THE COURSE

(Basic Loran Orientation Course)

1. The basic knowledge is sufficient.
2. Exposure of the students on the actual equipment and machineries is limited.
3. Instructors ^{are specialists} ~~know~~ their particular field and determined to impart what they know.
4. The teaching is very effective especially on the OJT phase.

RECOMMENDATION

1. OJT period should at least be a two weeks duration.
2. Students should be 50% Black Gang and 50% ET's or related rate.
3. Students should be new hands and not men from the Loran Stations.
4. Future OIC of the stations should undergo the same instruction.
5. Enough support from higher Headquarters must be sufficient to accomplish the task.


ESTELITO DONDONILLA
ETC PN
LORAN CRSE DIRECTOR
CGTC, PCG

ENCLOSURE (2)

April 8, 1975

LCDR IFO BLANCH JR.
Commanding Officer, Loran Tech Assist Detail
USCGC Seafront Compound, P.C.

Dear LCDR BLANCH:

The Philippine Coast Guard is continuously striving to train its personnel to successfully accomplish its varied missions and functions.

The LORAN ORIENTATION COURSE which was convened on 12 February 1975 will be graduating two (2) Coast Guard Officers and eleven (11) enlisted personnel on 101000Z April 1975 at CPO's Club, Naval Station Sangley, Cavite City. The objective of the course is to orient the students prior to their assignment to the different Loran Stations the technical know-how on the operation and maintenance of Loran equipment.

It is therefore my pleasure to invite you as guest speaker during this graduation exercise. Your expertise in this matter shall serve as guidelines and inspiration in the performance of their functions and responsibilities.

We hope to hear from you soon. Thank you.

Very truly yours,

JOSEPH B. COBARRAL
Commandant, PCC

ENCLOSURE (3)

ORATION



1011th 10 100th

251000

CLASS-01-75

Friday 181000H
April 1975

CWO2 Joe Kansas, Jr.

This Serves as an Invitation

ENCLOSURE (4)

P R O G R A M M E

PAMBANSANG AWIT

Insang Awit Everybody

ation LTJG P E REBUTILLO PN

ente on of Graduates.. ENS JOSE C PINZON JR PN

roduction of the

uest Speaker..... CDR EXEQUIEL C ADANEA PN

ess by the

ent Speaker..... LCDR LEW J BLACK JR

Commanding Officer

Lorted, USCG

ing of Certificates... Guest Speaker

- REFRESHMENTS -

Conference Room

adearters Aid to Navigation

val Station Sangley

Cavite City

Bayang magiliw, perlas ng silanganan,
Alab ng puso, sa dibdib mo'y buhay
Lupang hinirang, duyan ka ng magiting
Sa manlupig, di ka pasisilil.

Sa dagat at bundok
Sa simoy at sa langit mong bughaw
May dilag ang tula at awit
Sa paglayang minamahal.

Ang kislap ng watawat mo'y
Tagumpay na nagniningning
Ang bituin at araw niya'y
kailan pa ma'y di magdidilim.

Lupa ng araw, ng luwalhati't pagsinta
Buhay ay langit sa piling mo,
Aming ligaya na pag may mang-aapi
Ang mamatay nang dahil sa iyo.

ENCLOSURE (4)

COAST GUARD TRAINING CENTER STAFF

CDR EXEQUIEL C ADANZA PN
Superintendent

ENS JOSE C PINZON JR PN
Training/Operations Officer

P/ENS FLORENTINO DELA CRUZ RDC Caleb G Malaga PN
Supply Officer POIC, Training Section

BMC Rosario T Taasan PN BMC Rossini I Astillero PN
Crse Dir, Merchant Seaman Crse Dir, PO Leadership Crse

RDC Placido C Cobarrubias ETC Estelito L Dondonilla PN
Crse Dir, EOC Crse Dir, Loran Orientation

CPO Romualdo L Codilan ENL Antonio T Furren PN
Crse Dir, Disaster/Safety Crse Dir, Merchant Seaman

POI Nestor Alcudia PN POI Angel Laureano PN
Asst IAC, BMC TACPO, BMS

Salva for Don PN ENL Remon Gaetos PN
Instructor, Don Bosco

DCC Rodolfo C Yuang PN DCC Teofilo O anacay PN
Crse Dir, FFC Instructor

ENL Antonio B Lamorena PN EN2 Meliton M Adap PN
Instructor, Don Bosco Instructor

EN3 DiOrtural Castro PN SN2 Expedito V Monasterial
Instructor, Don Bosco Illustrator, Draftsman

A Flores SN2 Alberto C Catan PN
Crse Dir, BMS Chief Commissaryman

SN2 Antonio J Tagle SN2 Gil O Garcia PN
Records Seaman Asst Storekeeper

Mrs. Bonnita T Gaurano Mrs. Levina F Alegre
Clerical Aide Clerical Aide

THE GRADUATES

1. SO3 Arturo V Navarro 541539 PN
2. EN3 Marcelino A Labrador 550653 PN
3. S2RM Romualdo A Teofisto 593276 PN
4. F2DC Virgilio T Sulat 593204 PN
5. F2CD Benjamin D Mirabona 586813 PN
6. S2RM Jesus A Quijalvo 593358 PN
7. S2RM Placinto A Lucero 591325 PN
8. S1ET Epifanio P Pablo Jr 564855 PN
9. S2ET Radrigo B Estigoy 568224 PN

INSTRUCTORS

- ETC Estelito L Dondonilla ETC Melchor B Abubo
EN2 Flaviano E Tesoro ET2 Efrén P Hernández
ET2 Rolando N Nueva ET3 Pedro N Moraleta

CLASS ORGANIZATION

PCG LORAN ORIENTATION COURSE

President SO3 Arturo V Navarro PN
 Vice-President..... QM3 Marcelino A Labrador PN
 Secretary S2RM Romualdo A Teofisto PN
 Treasurer F2DC Virgilio T Sulat PN
 Auditor F2CD Bajamin D Mirabona PN
 Business Mgr..... S2RM Jesus A Quijalvo PN
 O S2RM Plokinto A Lucero PN
 Sgt-at-Arms S1ET Epifanio P Pablo Jr PN
 S2ET Rodrigo B Estigoy PN

PHILIPPINE COAST GUARD CENTRAL & PERSONAL STAFF

COMODORE ERNESTO R OGBINAR AFP
 Commandant, Philippine Coast Guard

CAPTAIN ESTELITO D VELOSO PN (GSC)
 Deputy Commandant, Philippine Coast Guard

CAPTAIN NOE V BARRERAS PN (GSC)
 Chief of Staff

CDR EDUARDO A OCAMPO PN CDR VIRGILIO Q MARCELLO
 Dir for Manpower Director for Intel/Info

CDR CIPRIANO E EVANGELISTA PN LCDR PATROCEL DUQUE PN
 Dir for Operations Dir for Logistics

CDR EDUARDO A OCAMPO PN LCDR ROQUE R FLORES PN
 Dir for Maritime Safety Coast Guard Comptroller

CDR VALDENAR TAMAYO PN CDR PLARIDEL TOMBOCON PN
 Dir for Affairs Dir for M & R

CDR MARCIANO I BACALLA PN LT VICTOR V ROMERO PN
 Dir for Legal Affairs Coast Guard Inspector

LCDR ROMEO A LABRA PN LCDR FRANCISCO V ALGER J
 CG Public Works Officer CO IV Finance Service Unit

CPO Eriberto Belmonte
 Senior Chief Petty Officer
 Philippine Coast Guard

Remarks of LCDR L. J. BLACK, Jr., Commanding Officer, USCG Loran-A Technical Assistance Detail, Manila, at graduation exercises of the Loran Orientation Course Class 01-75, 18 April 1975.

It is an extreme pleasure and an honor to be invited here today to address the initial Loran Orientation Course Graduating Class 01-75. The graduation of this class marks the beginning of (what we of the United States Coast Guard hope will be) a continuous external Loran training program ultimately contributing to an ability on the part of the Philippine Coast Guard to completely maintain the Loran system without the assistance of the United States Coast Guard.

I take this opportunity to give you, the graduating class, a synoptic background of this system of navigation which you are being trained to operate.

Loran is an acronym from the term long range navigation.

In 1940, the United States Army Signal Corps proposed requirements for a precision navigational equipment for guiding airplanes. The criteria for this equipment was that it be extremely accurate at a maximum distance of 500 miles and at an altitude of 35,000 feet and that the best accuracy be at 1000 feet altitude at 200 miles. Experimentation was started, and in 1941, Massachusetts Institute of Technology commenced tests. In 1942, two United States and two Canadian stations started regular service. The first shipboard receiver was installed on the Battleship NEW YORK in that same year.

By the end of 1942, 45 receivers were in use; and by the end of the following year, the United States Coast Guard had assumed full responsibility for the system, and about 40 US ships as well as some Royal Canadian naval ships had receivers installed. Charts were then made available, and the Loran system was considered operational.

During the remainder of World War II, Loran continually expanded to meet the requirements of the allied forces. The service area was expanded at a rate of 10 million square miles per year between 1942 and 1944. After 1944, with full acceptance of the system, the expansion rate increased to 40 million square miles a year. By VJ day, the nighttime service area covered about 70 million square miles.

It is significant to note that by 1945 Loran was in use, nightly, as navigation for bombing over Germany.

In the years immediately following World War II, the world-wide Loran-A system was reconstructed to reflect the shift to peacetime conditions. Loran stations whose usefulness was limited to the war-time effort were decommissioned, and many temporary stations built during the war were replaced by modern, permanent plants.

ENCLOSURE (5)

New developments were continually incorporated into the system during the 1950's and 1970's, and over the years, the Loran system has been gradually expanded to provide coverage along the entire United States coastline.

Through cooperation with the International Civil Aviation Organization and North Atlantic Treaty Organization, new stations have been established overseas to meet the growing needs of the international community. In addition, several US built Loran-A chains have been turned over to foreign governments, including Japan and the Republic of the Philippines.

As of January 1972, a total of 83 Loran-A stations were providing sky wave coverage over approximately 74% of the Northern Hemisphere. Forty-two of these stations were operated by the United States Coast Guard with the remainder being operated by NATO countries and other governments.

The Republic of the Philippines' Loran-A system, consisting of five stations located on Batanes Island, at Naulo Point, on Talampulan Island, on Tarumpitao Point, and on Little Panay Island, provide precise all weather navigation capability in the Republic and South China Seas. The Coast Guard of the Republic of the Philippines assumed responsibility for this system in April, 1971, and the United States Coast Guard established a Loran-A Technical Assistance Detail, Manila to assist as necessary.

You may now ask - we know what it does, but of what significance is Loran to the Republic of the Philippines?

Loran, for many vessels and aircraft, is the only means of all weather navigation in the Philippine and South China Seas areas. Loran is also utilized as a backup system, as well as a means of updating other systems. It is of significant note that Loran is a system that can be of use to any nation, and that there is an international commitment and a national security requirement on the part of the Republic of the Philippines to insure the integrity of the Loran signal.

You, the Loran station operators and technicians, are tasked with this tremendous responsibility. This becomes increasingly significant in light of the effort on the part of the Government of the Republic of the Philippines to take a greater and more decisive role in today's world.

As pointed out, Loran plays an integral part in this effort, and it is imperative that Loran station personnel are aware of its contribution to Philippine goals within the international community.

Once again I congratulate you as graduates of the Loran Orientation Course and hope that knowing more about the job you will be or are presently performing will enhance your feelings for the system.