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REPORT

OF THE

CLARK CONGRESSIONAL DELEGATION REGARDING
ITS INSPECTION OF U.S. COAST GUARD LORAN A
AND C STATIONS IN SOUTHEAST ASIA AND ITS
MEETINGS AND CONSULTATIONS CONCERNING
MARITIME POLICIES, PROGRAMS,
AND PROBLEMS

OF THE

COMMITTEE ON
MERCHANT MARINE AND FISHERIES
UNITED STATES HOUSE OF REPRESENTATIVES
(92d Congress)



MAY 23-JUNE 10, 1971

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REPORT
ON THE
CLARK CONGRESSIONAL DELEGATION REGARDING ITS
INSPECTION OF U.S. COAST GUARD LORAN A AND C
STATIONS IN SOUTHEAST ASIA AND ITS MEETING
AND CONSULTATIONS CONCERNING MARITIME POLI-
CIES, PROGRAMS, AND PROBLEMS

INTRODUCTION

The congressional delegation undertaking the matters set out in this report was headed by the Honorable Frank M. Clark (Democrat of Pennsylvania), chairman of the Subcommittee on Coast Guard of the House Merchant Marine and Fisheries Committee. The delegation also consisted of the Honorable Philip E. Ruppe (Republican of Michigan), member of the House Merchant Marine and Fisheries Committee, Ernest J. Corrado, counsel to the committee, and Captain John E. Bruce, Legislative Liaison, United States Coast Guard.

The congressional delegation will hereinafter be referred to in this report as the "delegation," "Codel Clark," or just the "Codel." Codel Clark conducted its work from May 23 through June 10, 1971, visiting installations and facilities and attending meetings in Japan, Hong Kong, Thailand and South Viet-Nam.

The purpose of this delegation was generally dual and thus this report will follow along the lines of the general dual objectives of the Codel mission. The primary function of the delegation was to visit certain Coast Guard Loran A and C stations in Southeast Asia. This was to enable the Congressmen to make an on-the-spot assessment of the general operations and conditions at these installations. However, the overriding purpose of the visit to these Coast Guard facilities was to examine the equipment and the operation with a view to recommending the installation of modern electronics equipment in the stations in the Southeast Asian chain.

Secondly, the Codel participated in a series of meetings and consultations with shipowners, agents, port and harbor officials and government officials in Japan, Hong Kong, Thailand and South Viet-Nam.

These meetings focused on such port and harbor related problems as bridge-to-bridge radiotelephone requirements and the regulation of port and harbor traffic by means of statutes and mandatory regulations. These subjects were examined and questioned at each major port in Southeast Asia because of radiotelephone and port and harbor safety legislation pending before the House Merchant Marine and Fisheries Committee. The Codel also discussed with maritime officials in these areas such important matters as the Merchant Marine Act of 1970, the impact of container operations in the Southeast Asian ports and the application of the LASH concept in these areas.

Although the Codel arrived in San Francisco at 11:00 p.m., and left for Hawaii at 10:00 a.m., the following morning, members of the delegation discussed aspects of the Merchant Marine Act of 1970, with Samuel D. Timmons, Counsel to Kaiser Industries. Lt. Governor Ed Reinecke, a former Member of the House Merchant Marine and Fisheries Committee requested the delegation to meet with Counsel Timmons.

Mr. Timmons raised with Subcommittee Counsel the possibility of repealing the so-called Grandfather Clause in the Merchant Marine Act of 1970, which phases out the foreign-flag operations of United States ship owners participating in the subsidy program under the Act by limiting continued foreign-flag holdings during a 20 year period to bulk cargo vessels rather than all vessels. This 20 year period for divestiture of foreign holdings for program participation would begin April 15, 1970. Mr. Timmons said this provision of the Act was a disaster and that entrepreneurs would not invest vast sums in building American-flag vessels when they were going to be penalized financially by being divested of their foreign-flag vessels.

It was explained to Mr. Timmons that the provision in question was the most controversial provision in the Merchant Marine Act of 1970, that it generated great controversy and deep feelings. It was also pointed out to him that the 20 year period for holding the foreign-flag vessels and also receiving subsidy was arrived at only after the greatest of difficulty and that there was strong support and pressure to have the phase out occur after 10 or even five years. Mr. Timmons said that if this provision could be repealed, he could come forward with 10 or 12 companies which would be willing to invest large sums of money in building for the American-flag under the program. It was pointed out to Mr. Timmons that due to the controversial nature of this provision, it would be next to impossible to come in now and attempt to repeal it. Also, it was pointed out to Mr. Timmons that the 1970 Act was in the legislative mill for almost a year and Mr. Timmons was asked why he and his interests did not come forward during this entire period when the measure was under consideration. It was pointed out to him that the time for them to appear was during the consideration of the bill and that now it is rather late in the game for them to come forward complaining of this provision and promising to build under the Act if it is repealed. It was suggested to him that it was doubtful whether these interests would ever really come forward with cash in hand to build under the Act with or without the so-called Grandfather Clause.

The meeting concluded with Mr. Timmons promising to put his proposal and all its ramifications in writing and submitting it to the House Merchant Marine and Fisheries Committee.

Since this time, Andrew Gibson, Assistant Secretary of Commerce for Maritime Affairs, has made several strong statements to the effect that this 20 year period for retaining foreign-flag vessels and receiving subsidy should be eliminated in its entirety. It seems fairly certain that the Maritime Administration will come forward sometime in the near future with a legislative proposal which would allow shipowners with foreign-flag vessels to retain these vessels without limitation and still receive subsidy under the Merchant Marine Act of 1970.

Section I

UNITED STATES COAST GUARD LORAN STATIONS IN SOUTHEAST ASIA AND OTHER COAST GUARD ACTIVITIES IN THAT AREA

This section of the Report sets out the CODEL'S visit to the Coast Guard Loran C stations in Southeast Asia, as well as the Delegation's work with respect to the Coast Guard, Merchant Marine, Aids to Navigation, Port Security and Waterways Details and the Explosive Landing Detachments.

This section begins with an explanation of Loran-C time synchronization and with a general discussion of the Loran-C system in Southeast Asia and the other activities of the Coast Guard in Thailand and South Vietnam. This is followed by fairly detailed treatment of the Loran Stations at Udorn, Thailand; Sattahip, Thailand; Lampang, Thailand; Con Son, Republic of Vietnam; Tan My, Republic of Vietnam.

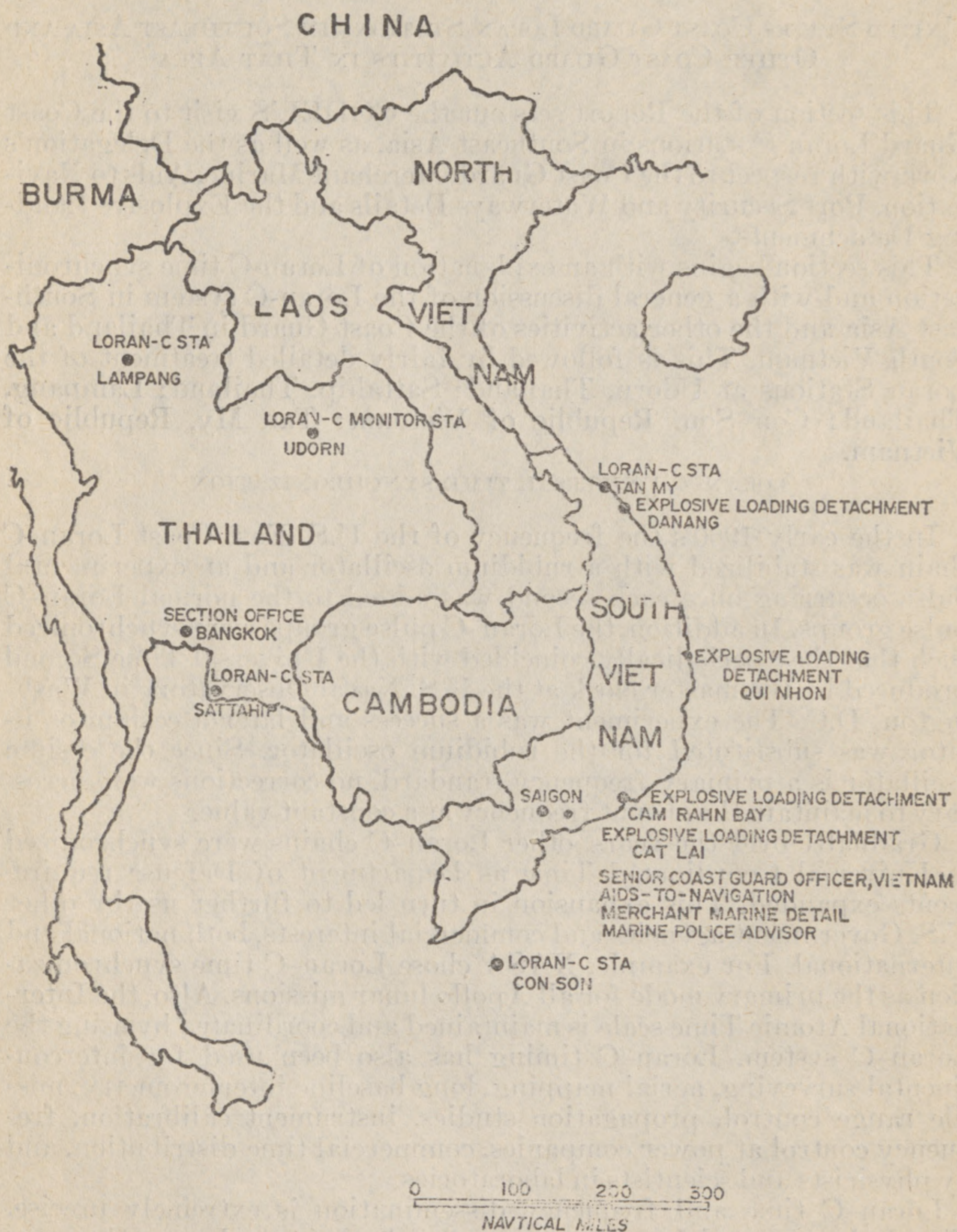
LORAN-C UNIVERSAL TIME SYNCHRONIZATION

In the early 1960's the frequency of the U.S. East Coast Loran-C chain was stabilized with a rubidium oscillator and an experimental pulse occurring once each second was added to the normal Loran-C pulse groups. In addition, the Loran-C pulse groups were synchronized such that they periodically coincided with the Universal Time Second produced by the master clock at the U.S. Naval Observatory in Washington, D.C. The experiment was a success and later a cesium oscillator was substituted for the rubidium oscillator. Since the cesium oscillator is a primary frequency standard, no corrections were necessary to maintain the output frequency at a constant value.

Gradually over the years, other Loran-C chains were synchronized to Universal Coordinated Time as Department of Defense requirements expanded. This expansion in turn led to further use by other U.S. Government agencies and commercial interests, both national and international. For example, NASA chose Loran-C time synchronization as the primary mode for all Apollo lunar missions. Also, the International Atomic Time scale is maintained and coordinated by using the Loran-C system. Loran-C timing has also been used for intercontinental surveying, aerial mapping, long baseline interferometry, missile range control, propagation studies, instrument calibration, frequency control at power companies, commercial time distribution, and by physicists and scientists in laboratories.

Loran-C time and frequency dissemination is extremely precise. The clocks operated from the cesium standards in the Loran-C system would not lose or gain a whole second in more than 10,000 years. User's can measure clock's differences using Loran-C to less than 0.1 microseconds (a tenth of a millionth of a second). Users may calibrate frequency standards using Loran-C to within one part in ten to the minus twelfth (1×10^{-12}). This is equivalent to measuring the distance from

the Earth to the Sun with a precision of six inches. Thus, although far in excess of the needs of the morning commuter trying to catch the last train, Loran-C provides an extremely useful, and at present unparalleled, medium for dissemination of precise time and frequency for government and commercial uses.



MISSION

The mission of U.S. Coast Guard Section, Southeast Asia is to provide and maintain a highly accurate and reliable Loran-"C" radio position fixing and navigation aid system over Vietnam, Laos, Cambodia and Thailand; and through Senior Coast Guard Officer Vietnam Staff—supervise and administer the activities of an Aids to

Navigation Detail, a Port Security and Waterways Detail, and four (4) Explosive Loading Detachments in the Republic of Vietnam. The Merchant Marine Detail Saigon is assigned for administrative cognizance and is controlled directly by CCGDFOURTEEN in operational matters. All elements of these missions are concerned with the support of U.S. Forces in Southeast Asia.

BACKGROUND

In early 1966 construction commenced on the Loran-“C” Chain and late in the year operations began with three stations and one monitor station. In 1969 an additional station was added to the system at Tan My to provide additional accuracy over the northern coverage areas. Concurrent with this history, Coast Guard Forces in Vietnam were controlled by Coast Guard Activities Vietnam. Reduction of our units by late 1970 led to redesignation of the staff element to Senior Coast Guard Officer Vietnam. This office is now included as part of the overall Section Staff.

UNITS

Section Office.—The office of COMSEASEC is located in Bangkok, Thailand. The staff of 8 officers and 9 enlisted men operate directly under the Fourteenth Coast Guard District in Honolulu, Hawaii and has overall responsibility for operational control and administrative and logistic support of the Loran-“C” Navigation System stations and Coast Guard Forces in Vietnam. Senior Coast Guard Officer Vietnam exercises direct supervision over all non-Loran-“C” units in Vietnam. SCGOV Staff consists of 2 officers and 2 enlisted men.

Loran-C stations.—The Loran-C system in Southeast Asia consists of a Master or a reference transmitting station at Sattahip, Thailand and three secondary transmitting stations located at Lampang, Thailand, Con Son Island, Republic of Vietnam, and Tan My (Republic of Vietnam). The systems accuracy is maintained with the aid of a monitor receiving station located on the Royal Thai Air Force Base, Udorn, Thailand.

The Loran-C system reliability (percent of usable time) must always remain greater than 98%. During the most recent 24 month period, the Southeast Asia Chain has consistently maintained a 99.7% or greater usable time. To the user, this means that in a 30 day month containing 43,200 minutes, the system would have been unusable for a maximum of 130 minutes. Most individual periods of unusable time were shorter than 5 minutes.

Since late 1970 this Loran-“C” Chain has been free-running utilizing cesium beam oscillators. In addition, a program is being established to provide for the calibration and repair of test equipment. This will be accomplished at the Section Office by (eee) personnel.

REPUBLIC OF VIETNAM

The following non-Loran activities included within the overall Section's mission are directly administered and coordinated, operationally, through the Senior Coast Guard Officer, Vietnam:

Merchant Marine Detail.—Working out of the U.S. Embassy in Saigon, Republic of Vietnam, carries out the merchant marine functions as specified in Title 14, U.S. Code and acts in liaison with foreign government agencies having functions similar to those of the U.S.

Coast Guard. They perform all Merchant Marine investigative duties, and serve as advisors to the Consul General Saigon, Bangkok, and Singapore on maritime affairs.

Aids to Navigation Detail.—In Saigon, Republic of Vietnam, has the responsibility for coordination of all U.S. controlled aids to navigation throughout Southeast Asia. They are supported by the USCGC BLACKHAW in planning service and replacement of the aid to navigation system in Vietnam.

Port Security and Waterways Detail.—Located at Long Bihn, Republic of Vietnam, operates under the direction of the Commanding General, U.S. Army Vietnam and functions as an advisor on matters pertaining to the safe handling of explosives and on port and waterways security. They also advise subordinate commanders on the technical operation and employment of river patrol boats and other small craft employed in port and waterways security.

Four Explosive Loading Detachments.—Located at Danang, Qui Nhon, Cam Ranh Bay and Cat Lai, Republic of Vietnam, operate under the Port Security and Waterways Detail. They advise port officials on the safe handling of explosives and hazardous munitions from moored or anchored vessels to the transshipment sites and supervise the loading, off-loading and storage of explosives and hazardous materials.

PERSONNEL ROSTER

U.S. Coast Guard Section Office, Bangkok

Capt. C. D. Budd (COMSEASEC) DEROS: August 72
 Comdr. G. W. Mizell (DEPCOMSEASEC-Electronic Engineer)
 DEROS: July 71
 Lt. Comdr. J. R. Wallace (Civil Engineer) DEROS: August 72
 Lt. W. B. Ferm (Asst Electronic Engineer) DEROS: August 72
 CWO3 W. S. O'Neill DEROS: July 71
 CWO3 C. W. Dierolf DEROS: July 72
 CWO3 H. C. Webb DEROS: July 72
 CWO3 K. E. Clark DEROS: July 71
 CWO2 W. J. Kaszubski DEROS: June 73
 W. N. Albright, ETCM
 D. L. Bertany, YN1
 H. R. Borchert, YN2
 W. Court III, SN
 B. N. Kroenung, TT1
 F. M. Lawter, SK1
 T. J. Panzero, SK1
 L. A. Waller, RMC

Senior Coast Guard Officer Vietnam

Comdr. C. W. Jenkins (SCGOV) DEROS: June 71
 Comdr. P. D. Corson, (Due to report 25 May 71)
 CWO3 T. L. Wofford DEROS: Oct. 71
 R. E. Seekins, YN1
 C. D. Tapio, SK1

Aids-to-Navigation Detail

Lt. Comdr. A. E. Sharkey (ATON Coordinator) DEROS: August 71
 G. W. Doepker, QM1

Merchant Marine Detail

Lt. Comdr. P. H. Spiker (OINC) DEROS : June 71
 Comdr. W. B. Alvey (Due to Report 18 May 71)
 Lt. Comdr. D. C. Mania DEROS : June 71
 A. P. Dizon, YNC

Port Security and Waterways Detail

Lt. Comdr. L. D. Gordon (OINC) DEROS : May 71
 Lt. Comdr. J. M. Mullen, (Due to Report 25 May 71)
 H. B. Stephens, BMCM-D1

Explosive Loading Detachment 1

Lt (j.g.) C. F. Perkins Jr. (OINC) DEROS : June 71
 L. L. Geisz, DCC
 P. L. Johnson, EN1-D1
 L. J. Krucenski, BM1-D1
 R. C. Perkins, BM1-D1
 H. L. Prince, BM1-D1
 G. R. Smith, BMC

Explosive Loading Detachment 2

Lt. (j.g.) T. M. Bills (OINC) DEROS : December 71
 R. G. Cianfarani, BM1
 A. N. Sanders, GM1
 G. V. Schambeau, DC1-D1
 J. H. Schumacher, BM1-D1
 T. L. Smith, BMC-D1

Explosive Loading Detachment 3

D. W. Sothoron, BMC-D1 (Acting OINC)
 W. E. Ambrose, DC1-D1

Explosive Loading Detachment 4

Lt. (j.g.) D. L. Powell (OINC) DEROS : December 71
 J. R. Glenn, GM1
 L. F. Haydon, BMC-D1
 C. V. Osteen, EN1-D1

*U.S. Coast Guard Aviators Serving in Vietnam With the 37th
Aerospace Rescue and Recovery Squadron*

Lt. Comdr. J. L. Crowes DEROS : May 72
 Lt. R. Martin III DEROS : March 72

U.S. COAST GUARD LORAN—"C" MONITOR STATION, UDORN,
THAILAND

LOCATION-DESCRIPTION

CGLORMONSTA Udorn, commissioned on 15 September 1966, is located aboard Royal Thai Air Force Base at Udorn in Northeast Thailand about fifty miles from Vientianne, Laos. The town adjacent to the base is called Udorn Thani and it has a population of about 40,000. The towns people subsist primarily by catering to the needs of the Americans stationed in the area, ie. shops, bars, clubs, hotels, etc.

PERSONNEL

The station presently has a personnel allowance of two (2) officers and sixteen (16) enlisted men, however, when the present commanding officer (a LT) is rotated, the electronic officer (a CWO) will assume command and the senior billet will then be deleted.

FACILITIES

The monitor station consists of four (4) transportable skid mounted trailer type vans and one (1) utility building. Berthing and messing is not available at the monitor facility but is provided aboard the RTAFB.

LOGISTICS

The pay accounts for the personnel are handled by the Section Office and the men are paid monthly by check. POL products are obtained from the U.S. Air Force POL Farm in the area. General stores come from routine Coast Guard channels such as GSA, Navy and Coast Guard supply, and of course some local purchases handled by the Section Office. A full range of personnel support facilities—medical, recreation, base exchange, banking, postal, etc. are available within the AFB proper.

PROJECTS

Recently completed.—The station utility building which is used for storage and shop areas has just been completed. It was contracted by OICC Thailand and constructed by a local Thai firm.

A complete set of work benches and storage bins were just completed by a local carpenter to update the station spare storage system and to provide electronic and mechanical work spaces.

Utilizing station labor and local premix concrete, the unit has constructed a slab and sidewalk system that interlocks and connects all the buildings and vans aboard the station.

Large areas of deteriorated van decking has just been restored and repaired. This project has eliminated the problems of sagging floors and the warping of the electronic apparatus cabinets.

Pending.—The station shore power installation is presently approximately 85 percent completed. The final stages have been contracted through OICC Thailand and should be completed by the end of May. This project will allow Udorn to utilize power generated by the U.S. Air Force complex aboard the base.

In conjunction with this power project, a new 3 phase 4 ton air conditioning unit has been supplied by CCGD14 for installation in the electronics van.

PERSONNEL ROSTER UDORN LORAN MONITOR STATION

Lt R. G. Frame (CO) DEROS: June 71 (Billet to be deleted)
 CWO3 C. B. Branch (XO) DEROS: January 72 (To be CO on rotation of present (CO))

J. E. Alexis, Jr, ET2	J. A. Migliaccio, SA
C. A. Branton, EN3	J. B. Nyman, EN1
R. T. Brown, ET3	M. S. Ost, FA
D. W. Greer, ET3	S. R. Plumb, ET3
D. P. Haggart, SNET	J. V. Ryan, ET3
C. W. Hanna, ET3	J. R. Smith, SA
B. R. Kevan, SN	E. D. Timm, SN
T. Lemond, ET3	S. E. Umbright, SN

U.S. COAST GUARD LORAN "C" TRANSMITTING STATION, SATTAHIP,
 THAILAND

LOCATION-DESCRIPTION

CGLORSTA Sattahip, the Master for the Southeast Asia Loran-C Chain, was commissioned on 29 August 1966. This unit is located in a small valley inside a Royal Thai Naval Reservation. Adjacent to the Loran site are several other military bases, including RTAFBU-Tapao, Camp Samae San, and the Sattahip Deep Water Port. The town of Sattahip itself is a modest size port of 30,000 population whose major industries are farming and fishing. The station, in addition to Loran-C operations, provides light attendant service for twelve aids to navigation located at the U.S. Army Terminal Command at Sattahip Harbor.

PERSONNEL

The station has an allowance of two (2) officers and twenty-six (26) enlisted men. Nine (9) indigenous personnel have been hired to assist on the station and fourteen (14) Thai Security guards are assigned to Sattahip for duty.

FACILITIES

Sattahip is the largest of the semi-permanent stations, having four (4) major buildings and four (4) minor buildings. H. H. Robertson Galbestos Steel is used for the signal power, subsistence and pump buildings. The station warehouse is masonry and the boat house is conventional steel (Steelox) construction.

LOGISTICS

The general mess at Sattahip is supported by supplies from RTAFB at U-Tapao and by some local purchases. General stores are obtained by normal Coast Guard channels, U.S. Army Support facility at Camp Samae San and USAF Supply Activity, U-Tapao. Pay accounts are handled by the Section Office and personnel are paid monthly by check. The station fuels are contracted through SAPO-THAI and delivered routinely by truck. A full range of personnel support facilities, such as medical, dental, recreation, PX, banking, postal etc. are available at the local U.S. Military complexes.

PROJECTS

Recently completed.—The station is crisscrossed with erosion drainage control ditches recently installed to re-direct the large volumes of run-off water from the surrounding high ground.

A \$1700.00 contract was just completed to sandblast and paint the interiors of the two station 25,000 gallon water tanks. The corrosive water in the Sattahip area requires constant treatment and control and the tanks require frequent cleaning and maintenance.

Pending.—Materials are being received routinely to install a dummy load bank similar to those being built at Con Son and Lampang. This system will enable engine generator checks to be performed without affecting the electronics load.

Bids are being solicited at this time to install a terrazzo floor topping in the galley area. This improved wearing surface will contribute to the cleanliness and provide a better atmosphere in the galley.

PERSONNEL ROSTER SATTAHIP LORAN STATION

Lt. J. R. Neu (CO) DEROS: November 71
ELC3 R. L. Kennedy (XO) DEROS: October 71 relief: CWO3 T. J. Christiano o/a 15 October 71

K. E. Beucler, SNEW	W. J. Pate, FNEN
J. B. Butler, ET3	R. D. Paul, ETC
K. C. Cox, ET3	T. P. Sangston, ET3
M. E. Dash, ET3	D. H. Senker, SK1
G. L. Diseth, FA	F. M. Showers, EN1
E. Dorest, Jr., SA	J. R. Snedaker, SN
B. L. Fox, YN2	L. E. Strode, BM3
W. J. Griggs, IV, SNET	R. C. Stroot, SNET
W. G. Hamilton, Jr., ET1	R. A. Totterdale, SNET
P. J. Hayner, EN3	J. M. Tribbett, CS3
S. R. Jensen, FA	R. W. Wilkie, EM2
P. N. Knight, EN3	B. D. Williams, SN
N. M. Marasigan, CS2	C. D. Williams, ET3
C. P. McCorkel, DCC	T. D. Witman, SNEW
R. W. Morse, FN	K. T. Wolverton, SNET

U.S. COAST GUARD LORAN "C" TRANSMITTING STATION, LAMPANG,
THAILAND

LOCATION-DESCRIPTION

CGLORSTA Lampang is paired with the master at Sattahip to form the X-Ray leg of this Loran-C Chain. Lampang was commissioned on 18 August 1966. The station is located in Northern Thailand approximately forty miles Southwest of Cheing Mai. Hang Chat is the small township adjacent to the unit and has a population of about 3000. The city of Lampang lies about twelve miles Southeast of the station. Farming is the major industry in the area, however, other industries are growing rapidly.

Although there are presently no major U.S. Forces located in the area of Lampang, there is a small contingent of U.S. Army Special Forces advisors. A new U.S. Air Force electronics site is under construction near the station.

PERSONNEL

Lampang has a personnel allowance of two (2) officers and twenty-five (25) enlisted men. Eight (8) indigenous employees have been hired to assist as station domestics. In addition, a Thai Security Force of fourteen (14) men is quartered aboard the station.

FACILITIES

The signal power and subsistence buildings aboard the station are made of Galbestos steel by H. H. Robertson Co. The BEQ was built by local Thai contract and is masonry type. The station has three other minor buildings and a swimming pool located behind the BEQ.

LOGISTICS

The Section Office handles the commissary supplies and pay for Lampang. The Section Agent Cashier makes monthly flights to pay the men in cash. Commissary flights once per month provides stores for the general mess, augmented by twice weekly mail and logistics flights. POL products are contracted through the sub-area petroleum office (SAPOTHAI), an organization under USCOMUSMACTHAI/JUSMAGTAHI. General stores and supplies are through normal Coast Guard channels. Emergency commercial procurement is available in Bangkok through Section Office.

PROJECTS

Recently completed.—The renovation of the BEQ head and the topping of the galley with terrazzo has just been completed by a local contractor.

Pending.—CCGD14 has just shipped a new power feeder cable to Lampang. This will be used to renew the cable supplying power to the Thai Guard Barracks. A coagulation-filtration system is planned for installation into the existing water system. The materials for this project are presently being staged for installation by July 1971.

The dummy load bank project materials are being received routinely from Base Honolulu and will be installed as soon as they are all received. This project will provide a test system for the caterpillar D-379 power units.

PERSONNEL ROSTER FOR LAMPANG LORAN STATION

Lt. L. G. Bickmore (CO) DEROS: November 71	
ELC3 W. C. Cumming (XO) DEROS: April 72	
A. J. Bilderback, EN1	M. R. Malta, SN
W. J. Blanchard, FA	M. A. Marten, EM3
S. D. Brown, SA	R. M. Otto, DC2
R. V. Calahong, CS1	J. K. Robertson, EN2
C. E. Cauley, HM2	A. F. Simons, ENC
J. A. Dejohn, ET3	C. P. Smith, SNET
R. L. Dingman, CS3	Z. W. Smith, EN3
G. D. Hawkins, SNEW	R. R. Taylor, SNET
R. E. Hicks, JR. SN	M. Thompson, FA
L. D. Hildebrand, FA	D. L. Verbeck, ET3
J. S. Hollingsworth, SNEW	D. C. Vick, SK3
P. R. Jenson, ET3	J. A. Wadsworth, ET3
D. M. Jordan, ET3	B. C. Wetherington, ETC
R. E. Magoon, ET3	M. E. Wright, FN

U.S. COAST GUARD LORAN-"C" TRANSMITTING STATION, CON SON, RVN

LOCATION-DESCRIPTION

CGLORSTA CON SON is paired with the master station at Sattahip to form the Yankee leg of this Loran-C Chain. CON SON was commissioned on 2 September 1966. The station is located on the northern half of CON SON Island in the Isles Ed Poulo Condore which are located about 45 miles from the delta area of mainland South Vietnam. There is a small village called CON SON located on the eastern coast of the Island at the head of Vung Con Son Bay. It is here that the penal establishment is located. There is a small hospital in the village with a doctor in residence. There are approximately 6500 persons on the Island of which about 4000 are prisoners.

There is no major U.S. Force located on the Island although there is a small U.S. Army Decca Station and a Radar Site operated by the Vietnamese with a U.S. Navy advisor. The loran station provides some support to these U.S. Forces through current ISSA Contracts.

PERSONNEL

CON SON has a personnel allowance of two (2) officers and twenty-five (25) enlisted men. Eight indigenous employees have been hired through the penal establishment to assist in station domestics.

FACILITIES

There are four main buildings on the station. Three are of prefabricated steel construction and the fourth is of brick and cement construction. The prefabricated buildings are manufactured by H. H. Robertson & Co., and erected on site by Chicago Bridge and Iron Construction Company. The brick and cement building was built of local materials by R. M. K. Co., using local labor forces.

LOGISTICS

Commissary supplies are procured primarily through the Naval Support Activity, Saigon with lesser amounts sent from Bangkok by the Section Office. General stores and supplies are through normal Coast Guard channels with emergency commercial procurement available in Bangkok through the Section Office. POL products are contracted through the U.S. Army Support Facility located at Long Binh, RVN. Pay support is provided by the U.S. Naval Support Facility, Saigon and the Senior Coast Guard Officer Vietnam (SCGOV).

PROJECTS

Recently completed.—The station has just completed a 6000 foot fuel oil pipeline installation between the storage tanks on the beach and the tanks on the site. This project will eliminate the need to transport the diesel fuel by means of a 350 gallon trailer tank.

Pending.—A dummy load bank project is about 85 percent completed which will provide a test load to be used in conjunction with the caterpillar power plant.

The station is in the process of constructing a coagulation-filtration system to process the station well water supply.

Minor tower maintenance by an in-country contractor is planned in the month of June 1971. This will include preparation and touch-up painting.

PERSONNEL ROSTER CON SON LORAN STATION

Lt. M. K. Bell (CO) DEROS : June 71	
CWO3 R. R. Ricker (XO) DEROS : December 71	
S. D. Bair, ET3	J. R. Hartman, CS1
R. D. Bell, SAEW	G. P. Kolodziej, ET2
K. W. Boylan, ET3	W. G. Kuhn, SK3
K. R. Buck, FA	J. W. Liechti, EN3
M. G. Christianson, HM2	M. W. Martin, SN
P. A. Chulufas, ET3	P. V. Murphy, EN1
D. L. Covey, FN	R. L. Raether, EN2
L. Desy, FN	K. D. Roberson, FA
G. W. Edwards, FA	W. W. Schmidt, ET3
G. R. Fearer, DC1	A. L. Suiter, EM1
W. D. Fivel, ET3	L. C. Thebeau, ET3
J. C. Gardner, SNEW	B. K. Witman, CS3
E. N. Grant, SNEW	J. M. Yerkes, ET3

U.S. COAST GUARD LORAN "C" TRANSMITTING STATION, TAN MY, RVN

LOCATION-DESCRIPTION

CGLORSTA TAN MY is paired with the master station at Sattahip to form the Zulu leg of the chain and is the newest of the stations in Southeast Asia. It was completed and commissioned on 15 August 1969. The site is located about one-half mile from the small fishing village of Tan My, about six miles northeast of Hue and about thirty miles south of the Demilitarized Zone (DMZ) in the Republic of Vietnam.

PERSONNEL

Tan My has a personnel allowance of two (2) officers and twenty-five (25) enlisted men. In addition there is a security force of twenty-five (25) U.S. Air Force personnel. Eight indigenous laborers have been hired locally to assist in station domestics.

FACILITIES

The station consists primarily of fifty-three Porta-Kamp Trailers with several additional buildings. The electronics equipment and power plant are an Air Transportable Loran System (ATLS) developed recently for fast deployment and recovery.

LOGISTICS

POL, Ammunition, Commissary and some general housekeeping supplies are provided by the U.S. Army Support Command in Phu Bai and Danang. Other general stores and supplies are through normal Coast Guard Channels with emergency commercial procurement available in Bangkok through the Section Office. Pay support is provided by the U.S. Naval Support Facility located at Danang.

PROJECTS

Recently completed.—The station has just finished a project to increase the capacity and pressure of the potable water system.

Pending.—Planned for accomplishment during the summer is the complete painting of the station exterior including the station warehouse and elevated water tank. This will improve the overall appearance of the unit considerably.

Installation of new metering panels for the Caterpillar D-353 power units is underway and should be completed soon.

PERSONNEL ROSTER TAN MY LORAN STATION

Lt. J. E. Kenny (CO) DEROS: November 71	
CWO3 A. Smith (XO) DEROS: May 1972	
K. A. Breneman, FA	F. J. Lewczak, DC1
J. L. Broderick, EN1	H. S. Lysy, CS3
R. D. Brogden, SA	K. R. Oliphant, FN
J. K. Burrell, ET3-B6	T. W. Pankosky, SNEW
J. W. Crump Jr, ET3	J. D. Perkins, EN3
P. W. Devore, CS3	R. R. Pierson, SA
M. W. Dubose, ET1-B6	E. Pleasant III, SA
J. E. Edwards, FA	D. A. Pohoda, ET3
M. Garr, CS1	R. V. Pymm, SA
P. C. Gaucher Jr, EM2	D. Rebkovich, ETCS-B6
T. C. Hock, ET3	R. W. Sadler, EN3
D. R. Hoffman, EN3	G. A. Wilhelm, SA
R. R. Inscho Jr, ET2-B6	H. W. Willis Jr, HM1
R. N. Javier, SK1	K. C. Wohlfarth, SNET
M. C. Kubbel, ET3	J. W. Wright, ET2

Section II

UNITED STATES COAST GUARD LORAN STATIONS IN THE FAR EAST (JAPAN AND WESTERN PACIFIC FRONTIER)

The Clark Congressional Delegation spent only a very limiting several days in Japan, when it was extensively briefed on the Loran system in the Western Pacific region.

The Report gives a brief background and historical discussion of the Loran system under consideration. This is followed by a brief run-down on each of the Loran stations in the system located at: Iwo Jima, Marcus Island, Hokkaido, Okinawa, Yap Miyako Jima, Saipan, Fuchu, Kamiseya and MMD Yokahama.

MISSION

To operate and administer the NWPAC Loran-C chain and portions of three Loran-A chains and to perform whatever tasks necessary in support of Loran operation.

To maintain amiable relations with host government, to facilitate the exchange of mutually beneficial information, and to act as the liaison between the USCG and its counterpart, the Japanese Maritime Safety Agency.

LOCATION

Building 651, Fuchu Air Station, Japan. Geographically located about 15 miles west of the center of Tokyo. Fuchu Air Station is headquarters of U.S. Forces Japan and therefore an excellent location for liaison with DOD agencies.

FACILITIES

2,462 square feet of space, building 651, second floor, east wing utilized as administrative offices. Building 663, east wing 1,120 square feet designated as a warehouse. Building 683, southwest wing, both floors, 1,880 square feet utilized as Fuchu Loran-C monitor. Necessary berthing areas, utilities, civilian personnel services, civil engineering support, reimbursable medical and dental services and additional minor support provided under an Interservice Support Agreement at a monthly cost of \$1,158.00 plus reimbursable items. 6100th Air Base Group is the supplying activity.

HISTORICAL DATA AND FUTURE PLANS

Loran Systems made their first appearance in the Far East in company with the invasion forces in the latter portion of World War II. An accurate tactical navigation system, independent of the vagaries of weather was an operational necessity. Accordingly a Coast Guard Loran-A station was established on Kangoku Iwa, an islet 2100 yards west of Iwo Jima in March 1945 approximately one month after the Iwo Jima landings. This station was paired with one on Okinawa in May 1945. When the war ended, a third station was established at

Oshima Island at the entrance to Tokyo Bay. Expansion of the Loran-A system came to a standstill during the period 1946 to 1951. There were however, improvements in the technical aspects of Loran-A transmission. New timing and transmitting equipment were developed. Also of particular importance was the development and marketing of Loran-A receivers for civil aircraft and vessels. Civilian acceptance was immediate. There are now more than 32,000 Loran-A sets in civilian use in Japan alone.

The needs of the Korean conflict dictated an expansion of Loran coverage in the Sea of Japan. This resulted in establishment of Loran-A stations at Miho, Niigate, Nomaike and Matsumae, Japan, and Pusan, Korea, manned by U.S. Coast Guard personnel. A small technical liaison and administrative staff was headquartered in Tokyo and it is this staff that has evolved into the office of Commander, Coast Guard Section, Far East. The status quo was maintained until the early 1960's.

With the development of high-stability Loran-C equipment, the concept of a precision navigation system to blanket the Northwest Pacific became practical. Transmitting stations with power outputs of up to 5 million watts were established in 1963-64 with Iwo Jima acting as master station. Other transmitting stations are located at Tokachibuto, Hokkaido, Japan; Gesashi, Okinawa; Marcus Island, and Yap, Western Caroline Islands with monitor stations as Saipan, Marianas Islands and Fuchu Air Station, Japan. In 1964, the U.S. tactical need for Loran-A in the Japan Sea had vanished but the domestic fishing fleet, airlines and coast wise marine traffic had developed a dependence on reliable Loran-A coverage. Japan was also in the process of establishing a Loran-A chain on her Pacific coast. Japan had developed reliable, low-cost Loran-A receivers and the technical expertise to operate Loran-A systems. Accordingly, all Loran-A stations on Japanese soil which were not co-located with Loran-C were gradually transferred to operation by Japan Maritime Safety Agency and continue to be so operated at this date.

Present status.—U.S. Coast Guard units under the cognizance of Commander, Far East Section are as follows:

1. Iwo Jima—NWPAC Loran-C master and Double Loran-A master.
2. Marcus Island—NWPAC Loran-C slave.
3. Hokkaido—NWPAC Loran-C slave.
4. Okinawa—NWPAC Loran-C slave, triple Loran-A slave.
5. Yap—NWPAC—Loran-C slave.
6. Miyako Jima—Double Loran-A master.
7. Saipan—Loran-C monitor.
8. Fuchu—Loran-C, Omega and Universal time monitor.
9. Kamiseya—Communications site in support of NWPAC Loran-C.
10. MMD Yokohama—Merchant Marine Inspection Detachment.

Present duties.—Commander, Far East Section duties consist of providing engineering, technical, logistic and administrative support to the aforementioned units, operational control of the Loran-A and C systems, *liaison* with GOJ agencies on matters of maritime safety,

new developments in ship design, pollution control, aids to navigation and logistics.

New developments.—Additional new fields occupying Section personnel include:

1. *Clarinet Pilgrim.*—A method of automatically superimposing Fleet Broadcast information on Loran-C transmissions.

2. *Universal time synchronization.*—Loran-C signals synchronized with U.S. Naval Observatory universal time by means of atomic clocks.

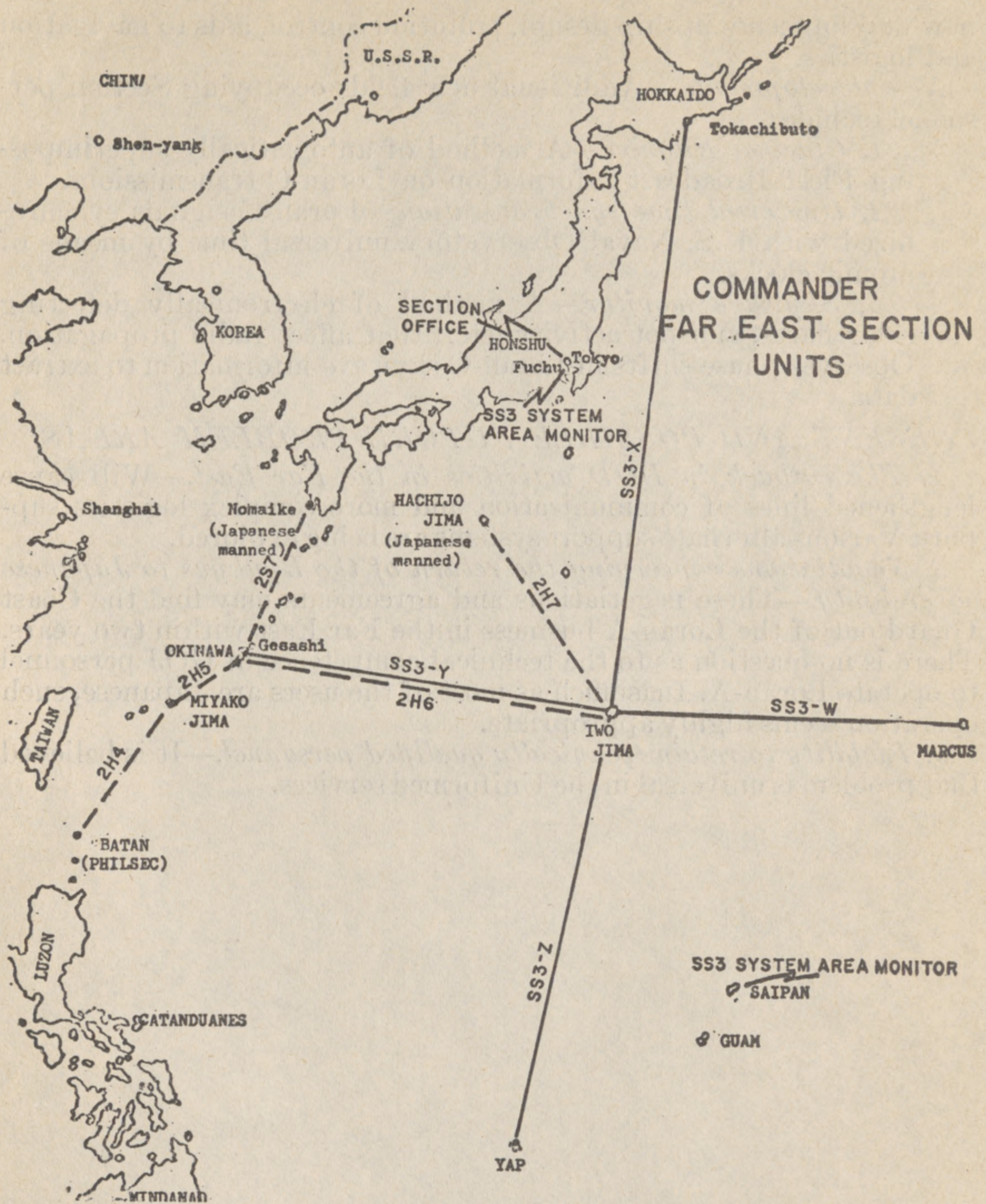
3. *Skywave monitor.*—A method of electronically detecting solar flares, sunspot activity, etc.; that affect radio propagation. Observes phase shifts in Loran-C skywave information to extract data.

PRESENT AND POSSIBLE FUTURE PROBLEM AREAS

1. *The cutback in DOD activities in the Far East.*—Will cause lengthened lines of communication and more complex logistics support. Various alternate support systems are being explored.

2. *Negotiations concerning the return of the Ryukyus to Japanese sovereignty.*—These negotiations and agreements may find the Coast Guard out of the Loran-A business in the Far East within two years. There is no question as to the technical competence of GOJ personnel to operate Loran-A. Inasmuch as most of the users are Japanese, such operation seems highly appropriate.

3. *Inability to retain technically qualified personnel.*—It is believed that problem is universal in the Uniformed services.



IWO JIMA

NWPAC LORAN-C MASTER

General.—Loran-A master on rates 2H6 and 2H7 operate in conjunction with the JMSA slave at Hachijo Jima (2H7) and CGLOR STA Gesashi, Okinawa (2H6). This station has been relocated once and rebuilt three times. The latest rebuilding was in conjunction with the establishment of the NWPAC Loran-C chain in 1963. The 1350 foot Loran-C antenna collapsed in March of 1964 and in doing so, demolished the transmitter building which at that time was located at the base of the antenna. Reconstruction was completed in late 1964 with the new transmitter building located 500 feet from the base of the antenna.

Problems.—Environmental problems plague this unit. Not just normal humidity and salt air problems but also severe sulphur fume problems. Iwo Jima is an island with a high degree of residual volcanic activity. Fumaroles and boiling sulphur pits abound. The air is saturated with sulphur dioxide fumes which on contact with moisture easily form highly corrosive compounds. Silver and copper, both of vital importance in electrical and electronic equipment are extremely susceptible to corrosion damage giving rise to maintenance problems several orders of magnitude greater than those of other stations. Nothing seems immune. Even masonry paint deteriorates at an unbelievable rate making a good general appearance for the station a full time job for several persons.

Environmental problems do not explain all of the difficulties, however. The Section admits to having overstressed Loran-C maintenance to the point of possible degradation of Loran-A. A program is now underway to remedy this deficiency. Section electronics personnel have been aboard Iwo Jima about 40% of the time since 1 September 1970. In addition CCGD14 has been most cooperative in providing technical expertise to help cope with Iwo Jima's problems.

Personnel.—It is gratifying that station morale is high. Personnel problems arise from time to time, i.e. "now-generation" individuals who disagree with society in general and the military in particular, but not to the extent that has been reported by units in CONUS with far greater off-duty and recreational opportunities.

The existing level and number of technical personnel assigned Iwo Jima is considered inadequate. The billet structure for these people has historically been derived on the basis of its function as a Loran A/C station without consideration of its function as a master Loran-C unit, or that it provides universal time. Coupled to these additional functions is the severe corrosive environment at the station which demands more frequent and more emphatic preventative maintenance schedules. It is felt that the addition of two ET (1-ET2 and 1-ET3) and one engineman (1-EN3) billets are required for this station to satisfactorily provide the maintenance standards expected.

Logistics.—Logistic services are provided via contract Air America dedicated flights once each week (Thursday). Infrequently, additional flights are scheduled to accommodate any staging backlog of supplies which occurs. In addition, the aircraft provides Coast Guard and Contract personnel transportation to and from the island. Primary support is from NSD Yokosuka.

Commanding Officer.—Lt. (jg.) J. Baldwin, Reported April 1971.

Engineering Officer.—CWO3 (elc) J. Anson, Reported April 1971.

MARCUS ISLAND

NWPAC LORAN C WHISKEY SLAVE

General.—LORSTA Marcus Island was constructed during the summer and fall of 1963, as the Whiskey slave of the NWPAC Loran-C chain. During reconfiguration for tower maintenance or other long-term incapacity of the Master Station (Iwo Jima), Marcus acts as Master.

Problems.—Marcus was struck by a severe, unseasonal typhoon just after construction was completed, which exposed a number of con-

struction faults, mostly connected with poor workmanship. The buildings leaked badly and gravel stops on roofs which were not properly anchored were destroyed. Some of these faults are still causing problems. Apparently, the steel reinforcing rod used in all poured concrete work at LORSTA Marcus was rusty prior to use, or the salt water concrete was not mixed properly and did not bond to the rod. As a result, the reinforcing rod is rusting and the consequent expansion is breaking the concrete. This has occurred in the swimming pool, the surrounding deck and patio and all exterior stairways.

At the tank farm, a great deal of time and labor could have been saved if the fuel tank anchor bolts had been fabricated from noncorrosive materials. Also, the tank saddles, pipeline flanges, pipeline anchor straps and associated hardware should have been exotic coated prior to original installation to forestall the present problem of almost total disintegration.

Environmental problems at Marcus are not extremely severe but only the usual humidity/salinity problems encountered on tropic Loran Stations.

Personnel.—The primary problem at Marcus is maintaining the morale of assigned personnel. The island is small and geologically and botanically uninteresting. The predominating wildlife is "Rattus Norvegicus" who incidentally is destructive and singularly unsanitary.

Planned athletic programs with enthusiastic command support and total participation are necessary. Nothing prevents brooding over ones unhappy lot more effectively than being thoroughly, healthily tired after a rousing game of waterpolo, volleyball, basketball, etc.

The marine fauna of the waters surrounding Marcus are unique for several reasons. Marcus is a single island, separated by 500 miles from any other land. Certain marine species have evolved that do not occur elsewhere. Unfortunately all bottom feeding creatures in that area except longusta are considered dangerous to eat because of dinoflagellate contamination and because one of the more prolific coral parasitic algae tends to concentrate a powerful neurotoxin in the flesh of fish and shellfish that feed in the vegetation of the reef. Certain predators such as the moray eel and the spotted grouper also tend to retain the poisons. The pelagic fishes are unaffected and edible.

It has been suggested that a mutually beneficial morale building project might result if University of Hawaii and LORSTA Marcus worked together with Marcus providing representative specimens of local marine fauna and the university providing specimen containers, reference material, etc. A station project of education into the local marine biology and oceanography of the local is being encouraged as a means of stimulating individual interest.

Logistics.—The station receives its supplies via Air America contract aircraft flights weekly (Friday). Personnel transport to and from the island is concurrently provided. Primary support is derived from NSD Yokosuka.

Commanding Officer.—Lt. (jg.) R. S. Fish, Reported November 1970.

Engineering Officer.—CWO2 (elc) A. Key, Reported April 1971.

LORSTA HOKKAIDO

NWPAC SS-3 X-RAY SLAVE

General.—This station, located 600 miles North of Tokyo on the Pacific shoreline of Japan's most northern prefecture, is the "cold weather" unit of the chain. It is the X-Ray slave, NWPAC Loran-C system. Construction was completed in 1964. This station has fewer environmental problems than almost any other Fourteenth District unit. High above the sea and about half a mile inland precludes most salt air contamination. The climate is similar to that of Vermont or New Hampshire with comfortable summers and cold but relatively dry winters. Routine maintenance is all that is required. No expensive, hard to maintain, air conditioning systems are necessary for personnel comfort. The one environmental disadvantage of the stations location is the 8 miles of unimproved road which must be travelled for mail pickup, personnel logistics etc.

Logistics.—Due to the closing of Chitose Army Base on 1 January 1971 LORSTA Hokkaido has become a major headache to supply. Previously, nearly every supply and service required to support the station was provided under Inter-Service Support Agreements by Chitose. The present method requires ordering of all supplies from NSD Yokosuka and Navy Exchange, Yokosuka, having them containerized and shipped by Japanese commercial vessel to Kushiro port in Hokkaido, and then trucking the shipment some 65 miles to the station. It is a cumbersome method, and extremely expensive in terms of section man-hours but it does provide support and on-station delivery of supplies. Pay is transmitted by section personnel travelling to Hokkaido for that and other purposes.

Personnel.—The unit is adequately staffed. Four Japanese employees augment the Coast Guard crew. One of these employees is a competent carpenter and is fulfilling the function of station Damage Controlman. This has allowed the section at times to assign an additional DC to Iwo Jima or Marcus Island as needed.

This station has always had more than its share of disciplinary problems. This does not seem to be a result of poor morale, but rather due to the proximity of population centers, i.e, liberty, alcoholic beverages, feminine companionship, etc. with facilities usually not available to "isolated duty". The problem has been aggravated by a lack of effective command control over a period of several years. There have been a succession of Commanding Officers who have devoted time and energy to integration with the local populace at the expense of their position as Commanding Officer and good administrative practice. The only solution appears to be much tighter section control and supervision.

Problems.—In recent months, several minor demonstrations have occurred, sponsored by a left-wing teachers organization from Sapporo. These have been orderly and non-violent and Japanese riot police units have been on hand in case of disorder. As the U.S. presence in Japan diminishes, this issue of U.S. presence should become less effective as a "cause".

In sum this station is well appointed and easy to operate and maintain. Its remoteness from U.S. support facilities incurs some difficulties as does sometime severe winter weather. A high extension rate by as-

signed personnel is indicative of their morale, and the popularity of this assignment.

Commanding Officer: Lt. (jg.) A. Tingquist, Reported April 1971.
Engineering Officer: CWO2(ELC) R. Sponar, Reported April 1971.

LORSTA GESASHI, OKINAWA

NWPAC SS-3 Yankee Slave

General.—Triple Loran-A Slave, rates 2H5, 2H6 and 2H7, paired with Iwo Jima, Miyako Jima and the JMSA Station at Nomaike. This particular station has moved several times. It was first established shortly after the U.S. invasion on a small, offshore island and paired with Iwo Jima as a single slave. After the Japanese surrender the station was moved to Ike Shima where it remained, steadily expanding its functions until construction of the present station at Gesashi village on northern Okinawa in 1963/64. In 1953, the Catanduanes—Batan—Miyako Jima chain was established and a policy decision was made to link this chain with the Japan sea chain which had been constructed in 1951/52 as an ELMO project in support of the Korean conflict. Okinawa then became a slave on two other rates to provide continuous coverage from Matsumae on Hokkaido to Catanduanes, southeast of Manila. Loran-C operation as the SS-3 Yankee slave commenced in 1964.

Gesashi is about 25 miles as the crow flies, from the large U.S. bases in the Naha-Kadena complex but this becomes 75 miles following existing roads. Approximately the last 10 miles of road is unimproved.

Logistics.—Logistics support is readily available by Inter-service Support Agreements with the large DOD installations on Okinawa. The U.S. Army 2nd Logistic command at Naha Port is the largest supply activity west of Honolulu.

Environment.—Environment is not a major problem at Gesashi. Corrosion is somewhat less than would be expected in a semi-tropical location, and the station has been very well maintained since its construction. The ready availability of inexpensive indigenous help has, of course, been a contributing factor. The most hostile environmental aspect is the "Habu", a pit viper closely related to the copperhead. Several have been killed at Gesashi but no crew members have been bitten. The poisonous textile cone shell, stonefish, turkey fish and striped sea snake are common in Okinawa waters.

Personnel.—Staffing is adequate. Morale is not generally a problem at this station. (Indeed, this station has the greatest number of people on extensions) Personnel generally take pride in the fine appearance of the unit, and a well attended sports program is in progress. Good, positive, leadership is evident in the attitude of the personnel attached.

Problems.—When the station was constructed, all vegetation and most of the topsoil was scarfed off in the antenna ground system area. Consequently when the rainy season arrived, large quantities of Coast Guard real estate departed. Deep ravines have been eroded in the area of the Loran-A comb antenna and in the Loran-C transmitting antenna ground system. Sporadic attempts to control the erosion by the use of evergreen seedlings and sand bags met with little success. It has only been during the past year that the use of jute soil saver and pangola plantings have made any measurable inroads into the problem.

The Comb antenna field now has been stabilized and the pangola planted there is beginning to provide a source of cuttings for erosion control in other problem areas. This project must be adequately funded and supported.

Commanding Officer.—Lt. (jg.) T. Cenna, Reported April 1971.

Engineering Officer.—CWO(ELC) L. R. Andrews, Reported July 1970.

LORSTA MIYAKO JIMA

LORAN-A 2H4 AND 2H5 MASTER

General.—Double Loran-A master rates 2H6 and 2H7 paired with Gesashi and Batan. This station was constructed as a mobile unit in 1952 and placed in operation in 1953. It has the dubious distinction of having been devastated by more typhoons than any other unit in WESTPAC, having averaged one typhoon per year since its construction and sustaining major damage on an average of once every three years. The station was rebuilt three times in its first six years of existence but since then has been allowed to sink or swim on its own except for storm damage repairs and a few other essentials.

After 1963 Loran-C seemed to be foremost in the minds of Section personnel, and probably the district as well. For that reason, Miyako Jima has occupied the position of an unpopular stepchild when funds were being allocated.

The station inevitably deteriorated until 1968 when a Damage Controlman was assigned for a year in an attempt to forestall total collapse. The station operated for a considerable period with three ET3's as its total electronic expertise. It is to the credit of these youngsters that the station suffered little or no operational degradation during that period. Preventive maintenance went sadly downhill. It is only in the past twelve months that a concerted effort has been put forth toward bringing the loran equipment back to Coast Guard standards. Miyako Jima has had more engineering inspections and technical assistance visits in the past year than it received in the preceding five.

The last two commanding officers, and especially the one most recently departed, have made great strides toward making Miyako Jima an operationally ready and attractive station. Many building and grounds maintenance projects have been undertaken and completed by the total work force of 12 enlisted and 3 local nationals. Considering station age and available resources, an outstanding refurbishing job has been done.

Personnel.—Morale on this station is high, as it seems to be on all units where personnel must put forth extra effort. Relations with the local populace are good and relations with the other U.S. commands are generally satisfactory.

Logistics.—Logistics has always been a problem. All of the station's needs have generally been available on Okinawa, but freight handling and transportation has been less than adequate. With the recent initiation of a Navy flight every 7 days support has improved and only formalization of new delivery (freight supply collection) points on Okinawa is required. These are the subject of ISSA amendments awaiting signature on Okinawa.

Problem.—The only major problem remaining on this unit is keeping personnel interest up until the ultimate fate of the unit (re Ryukyus reversion) is decided.

Commanding Officer: Lt. (jg.) H. ENGER, Reported April 1971.

Executive Officer: BMC L. WILLIAMS, Reported January 1971.

LORAN MONITOR STATION FUCHU

SYSTEM AREA MONITOR FOR SS3-X AND SS3-Y

General.—The monitor station is located at Fuchu Air Station in building 683, approximately one block from the Section Office. The monitor provides Loran-C and Universal Time monitoring control for the Master, X-Ray and Yankee stations. Designated as a family station, it has a staffing level of six electronics technicians and three seaman watchstanders.

Considered part of the Section Office, the monitor has no designated officer-in-charge although for all practical purposes the assigned senior petty officer functions in this position for operational, administrative and supply requirements.

Problem Area.—The monitor station is currently operating at less than optimum standards due to the severity of local RF interference. At present, the equipment is operating with 8 RF notches, set at different frequencies, in order to reject or reduce the unwanted contamination. In addition, the station is physically located on the floor directly above the Fuchu MARS station. Further problems occur due to its antenna pattern being seriously impaired by the close proximity of several tall radio towers. In short, the station is located in less than an ideal environment. Action is currently in progress to investigate other potential sites for relocation. The most promising site appeared to be Kami Seya where the Section Radio Station is located. Plans were formulated to investigate the Loran-C reception characteristics with one of the Loran-C receivers from the Fuchu monitor. The investigation, which was scheduled for the week of January 10, 1971, took approximately 10 days and consisted of obtaining time difference data for comparison with that from Fuchu. Upon completion, recommendations were made to CCGD14 relative to relocation to Kami Seya, and consolidation of two functions—radio and monitor—into a single unit. This plan went awry due to more severe interference at Kami Seya than had been experienced at Fuchu. Other alternatives are being explored.

COAST GUARD RADIO STATION KAMISEYA

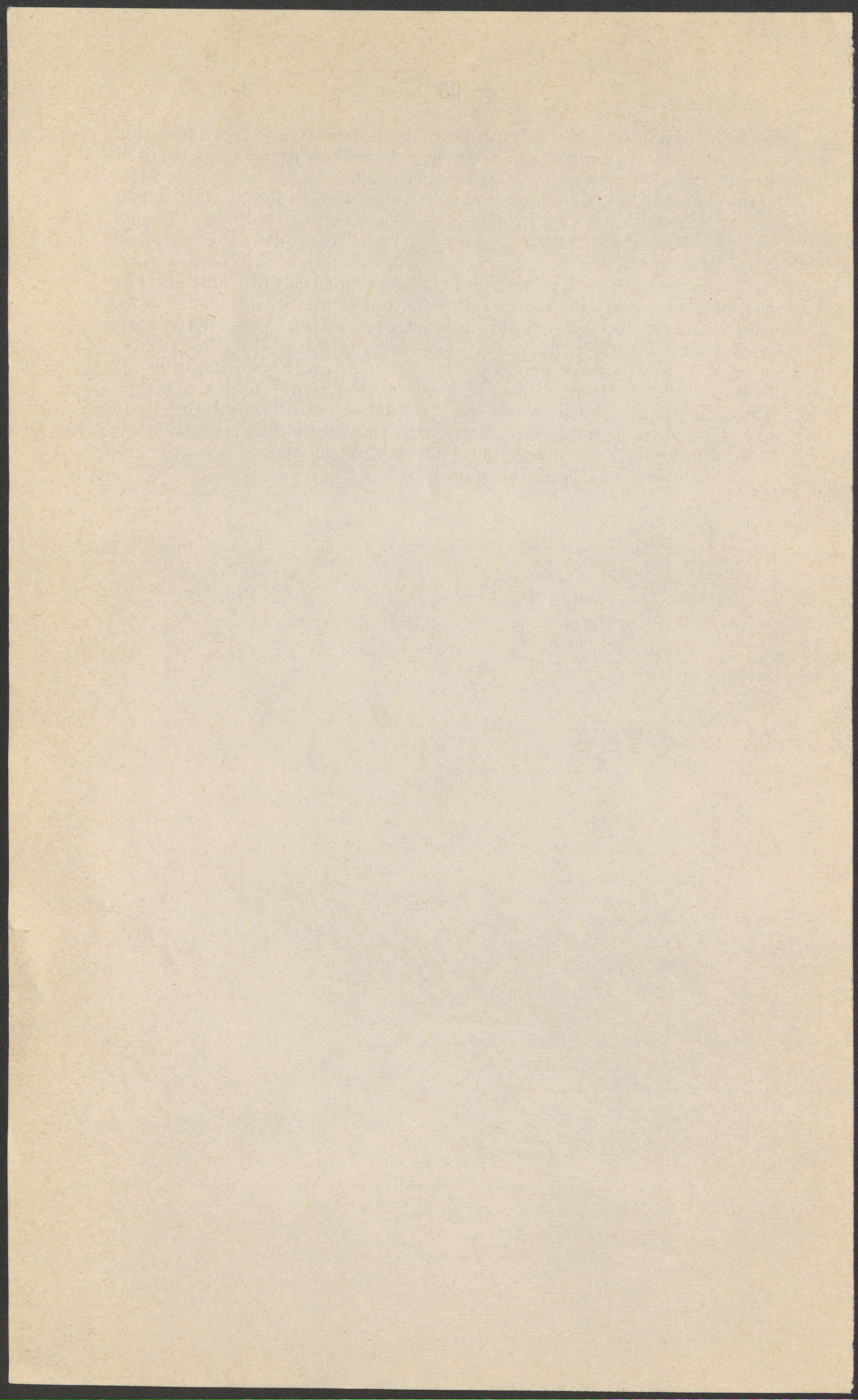
General.—Located at the U.S. Naval Radio Station (R), Kamiseya, approximately one hour's driving time from Fuchu, the Coast Guard Radio Station functions as the Section Commander's communication link to subordinate FESEC units as well as to external commands. The station functions under a designated Officer-in-Charge (RMC) with an assigned complement of six radiomen. The duty tour is non-restricted.

Operation.—Manned 24 hours per day the Radio Station acts as net control for the Section's radio communications. Ideally located at a naval receiving site which has a host-nation agreement prohibiting introduction of noise generating industrial firms in the area the station

consequently enjoys the advantage of being relatively free from this type problem. Agreement with the host naval command has provided the station with free access and use of the Navy's transmitters located at the Totsuka Naval Radio Station transmitting site. In addition to having no transmitter maintenance the Coast Guard Radio Station has the added benefit of utilizing high power transmitting equipment (20 KW).

Problem Areas.—The building being used for the radio station is in need of refurbishment. At present, it presents a picture of exactly what it is, an abandoned Navy building taken over by the Coast Guard with but minimal fund expenditures. Plans for upgrading this location are being held in abeyance pending evaluation of the Fuchu monitor collocation investigation which, if implemented, will require a larger space. Fortunately, the Navy has recently drastically reduced their mission requirements at Kamiseya with the result that relocation on the base and increased space should present no problem.

Officer-in-Charge : L. S. Johnson, RMC.



Section III

PROBLEMS OF CONVERTING SAIGON FROM A MILITARY TO A COMMERCIAL PORT

Among the things that were of greatest interest to the CODEL in Saigon was the development of Saigon's port to become a truly commercial port. This project is of great significance now due to the winding down of the war in Vietnam. Since the Delegation was representing the Merchant Marine and Fisheries Committee, it was especially interested in various commercial aspects of the port such as container operations and whether the LASH concept would be able to operate in Saigon once it was connected with a commercial operation.

In order to better understand the operations of the port of Saigon the CODEL had several lengthy meetings with Mr. John Allen, the Maritime Administration representative in Vietnam, General Watkins and with a number of the steamship company executives who are based in Saigon. The Delegation also spent an afternoon on a tour of the port area with John Allen and the Vietnamese port director. This tour included a land visit to the port to inspect all the wharf and pier facilities, especially the area that has been set aside as the container port space. The Delegation also made a water tour of the port area and inspected that area that will have to be widened and deepened to provide an adequate turn-around basin for the larger commercial ship such as the new fast container ships. The channel is presently 28 feet and it must be dredged to 32 feet as a minimum to be able to handle container and LASH vessels. APL intends converting to 100% container operations. They envision three vessels a month coming in. These vessels would be 660 feet long with a 30 foot draft. States Lines serves Saigon as do Lykes and States Marine with break bulk operations. States Marine and APL would like to have AID and Agriculture cargoes made available.

In May and June, 1971, there were 10 transits a day. At the maximum of traffic into Saigon there were 24 transits a day—12 and 12. There are 22 pilots serving commercial traffic in the Saigon River and the port. The Captain of the Port controls the berthing and movement of vessels in Saigon. The Port Captain and other maritime interests meet every morning and decide which vessels should wait and which vessels should move. At present, the Port of Saigon is divided into halves—one-half for American shipping and one-half for Japanese and European shipping. There is no radiotelephone requirement in the port and there are no marine traffic rules imposed, except that the Port Captain decides who shall move and when.

The development of Saigon as a commercial port may be summarized as follows:

SAIGON COMMERCIAL PORT

By late 1972, American flag transpacific berth line fleets that have historically serviced Saigon will include vessels with lengths to 670

feet, drafts of 30 feet and all container configuration. Some will be in the 590 to 625 FT range with both container and break bulk capability.

In order to accommodate these larger and container mode vessels, the river approaches and the Saigon commercial port will require as a minimum the following improvements:

A. A six kilometer section of the river at the entrance from Vung Tau Bay (Ganh Rai area) be dredged to a 9 meter depth.

B. The area known as "East Bend" be dredged to permit longer vessels making the turn with safety.

C. A 2.5km section of the river channel through the "Coral Bank" area be dredged to a 9 meter depth.

D. Enlarge the turning basin adjacent to pier MM-1 in the commercial port from its present 185 meter capability to 205 meters.

E. Relocate mooring buoys 3-5-7-9-11-13, and 2-4-6-8 from their present location in the congested area of the port to a new uncongested location down river below K-12.

F. Develop an interim container terminal on land adjoining pier K-12 which 7 acre site is presently being used for non-port related activities (open storage etc). This site and plot is presently owned by the Saigon port but under U.S. military control. It should be returned to the Saigon port for their development as a container facility.

G. Strengthen the "Kinh Te Canal Bridge" from its present 25 ton capability to 50 tons to permit heavy container traffic.

H. Restore the MM Piers 1-2-3 to serviceable use (with a 9 meter depth) as an additional general cargo terminal. It has been proposed by the Saigon port to install a new 6 meter wide pier along the face of the existing M-2 and MM-3 which would then provide one good berth for vessels up to 670 feet.

The above improvements will put the Saigon commercial port in condition to accept all presently planned American flag transpacific vessels except the Lash type.

The Saigon port is now in the process of grading and resurfacing all pier aprons, hard stands and roadways in the commercial port K-0 thru K-10 area, and expect to complete this phase by August 31 this year.

They are also dredging the berths in the same area and are approximately 40% completed with final completion anticipated by October 1st. Berths K-0 and half of K-1 now have 9 meter depth as well as berth K-10 and 1/2 of K-9 giving two berths with 9 meters that can each accommodate one vessel of the 670 FT class. The berths in between can only be dredged to 7.5 meters.

The enlargement of the turning basin and the channel dredging is planned for 72.

With the exception of the grading and paving in process (which is the last programmed USAID financed port project) all other planned work is expected to be financed from port revenues and/or financing through agencies such as the Asian Development Bank.

As the commercial port in its present condition is quite acceptable to foreign flag and Vietnamese shipping interests and in fact tends to favor other than American flag, USAID, who has never been noticeably inclined towards American flag shipping, would if queried assign a very low priority to any such program that would primarily benefit American flag interests.

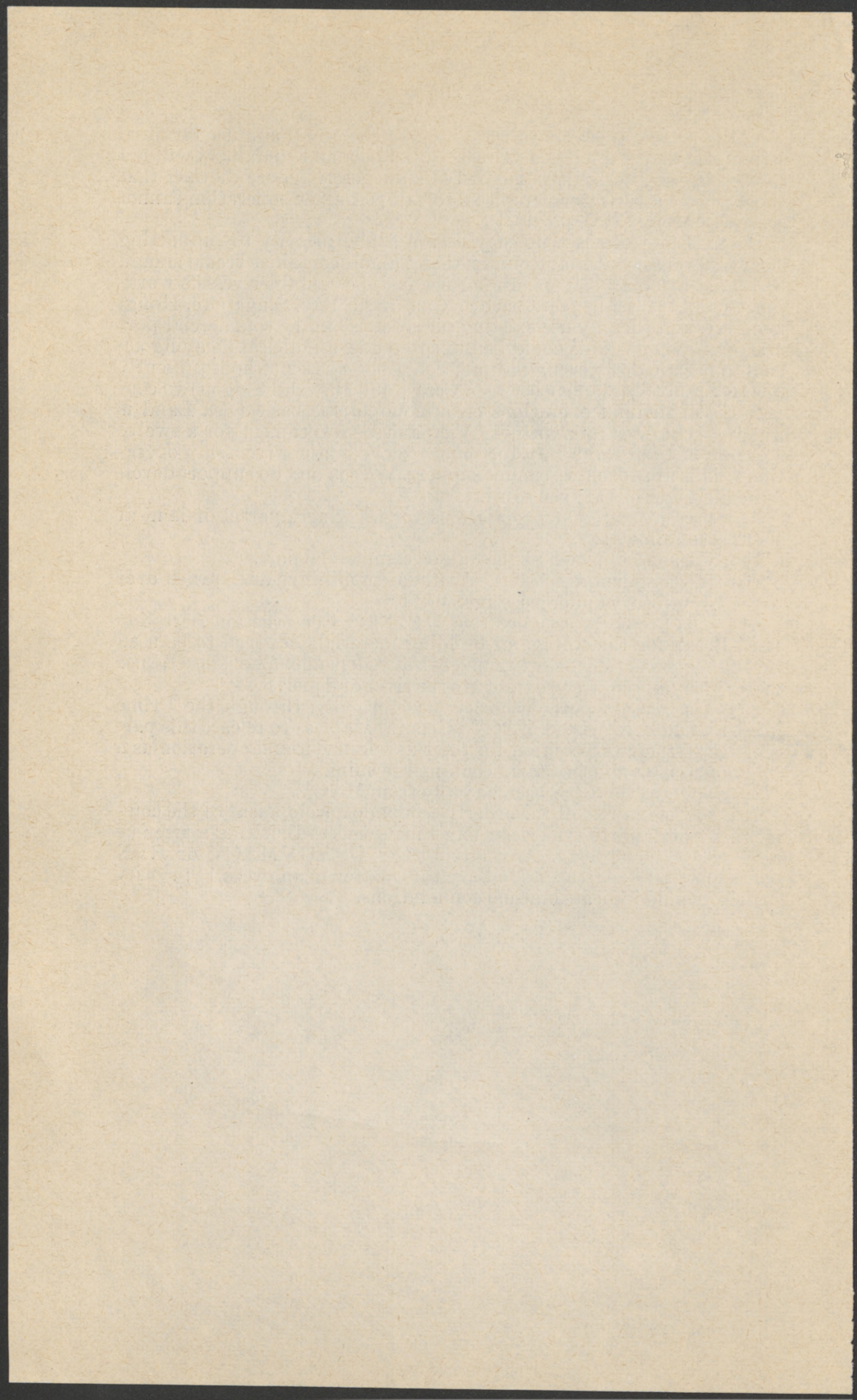
While some opponents to the development of a container terminal will argue that Saigon is a "Break Bulk" port and containers will not lower shipping costs they narrowly or purposely ignore the fact that those lines converting entire fleets to "all container" operation cannot serve a noncompatible port.

USAID and others who may assign a low priority to supporting such a development may counter that Saigon container traffic should be served by small self sustaining feeder type container vessels working from a transship point such as Cam Ranh Bay, Singapore, Hongkong etc. and thereby use existing piers "as is" in the commercial port and/or Newport. This could be interpreted as a political delaying action to permit the existing military container carrier (who is presently operating in this manner between Cam Ranh Bay and Saigon) to convert to commercial operations on a monopolistic basis (Sea Land is reportedly negotiating with the Vietnamese Government for a twelve acre site at Cam Ranh Bay for commercial container transship operation). This approach we cannot support. We can and do support development of a terminal open to all.

The present status of negotiations for the 7 acre parcel of land at K-12 is as follows:

- (a) The land is owned by the Saigon commercial port.
- (b) It was taken over by the Vietnamese military and turned over to the US military under a use agreement.
- (c) It is presently assigned to a U.S. Navy Construction Battalion (Sea-Bees) for the storage of building materials destined to be used for the construction of Vietnamese Navy dependent housing (a use which does not require proximity to the river or a pier.)
- (d) The Saigon port authority, has formally, through the Prime Minister Office, requested MACV (General Maples) to release this parcel back to their jurisdiction for their development and operation as a common usage published tariff container terminal.
- (e) To-date, there has been no reply from MACV.

It is to the interest of the orderly economic development of the commercial port and to American flag liner services that this matter be resolved without delay. Any attempt by USAID/MACV or RVN Governmental departments to bury this matter in an overall "priority system" would indicate unusual connotations.



Section IV

MILITARY SEALIFT COMMAND OPERATIONS IN VIETNAM

Since the House Merchant Marine and Fisheries Committee has a great interest in the general operations of the Military Sealift Command, the CODEL met with the MSC operations people in Saigon on Sunday afternoon. Sunday, of course, is just like any other work day in Vietnam. Just last spring the Merchant Marine and Fisheries Committee held extensive hearings on the proposed merger of MSC and MTMTS under the Department of Defense. Because of our great interest in MSC activities it seemed only logical that the CODEL should meet with the MSC staff in Saigon. One of the aspects of MSC operations in Vietnam which most impressed the Delegation was the extent of MSC tug and barge operations in Vietnam. When one considers the long coastline of Vietnam and the tremendous network of inland waterways, one can understand the efficacy of tug-barge operations in that area. For some reason, the Members are accustomed to thinking of MSC operations in terms of deep-draft ocean-going vessels. In Vietnam, the Navy has been operating a complex and extensive tug-barge operation which can be seen from the reports on MSC operations. An excellent Naval Officer, Captain Glen R. Cheek, conducted the briefing for the Congressional Delegation.

MILITARY SEALIFT COMMAND OFFICE VIETNAM

This office is directly responsible to Commander Military Sealift Command, Far East who is located in Yokohama (enclosure (1)). Units of MSCOVietnam are located in the major ports of Vietnam (enclosure (2) with geographic locations shown in enclosure (3)). Can Tho, although not a deep draft port, has become the major transshipment port for Mekong Delta supplies.

The operational functions of MSC in Vietnam may be broken down into deep draft dry cargo operations, both into and out of the country; intra-RVN operations which include LST, barge and some deep draft cargo ship movements; troopship operations; petroleum supply operations; and special operations.

The level of deep draft operations has decreased over the past few years (enclosure (4)). An increasing percentage of this cargo has been carried in Sealand container ships (enclosure (5)).

Intra-RVN cargo movements have not decreased significantly so far (enclosures (6) and (7)).

Petroleum products are delivered to Cam Ranh Bay and Danang by T-5 tankers from the Arabian Gulf and USNS T-1 and T-2 tankers make further distributions to smaller ports (enclosure (8)).

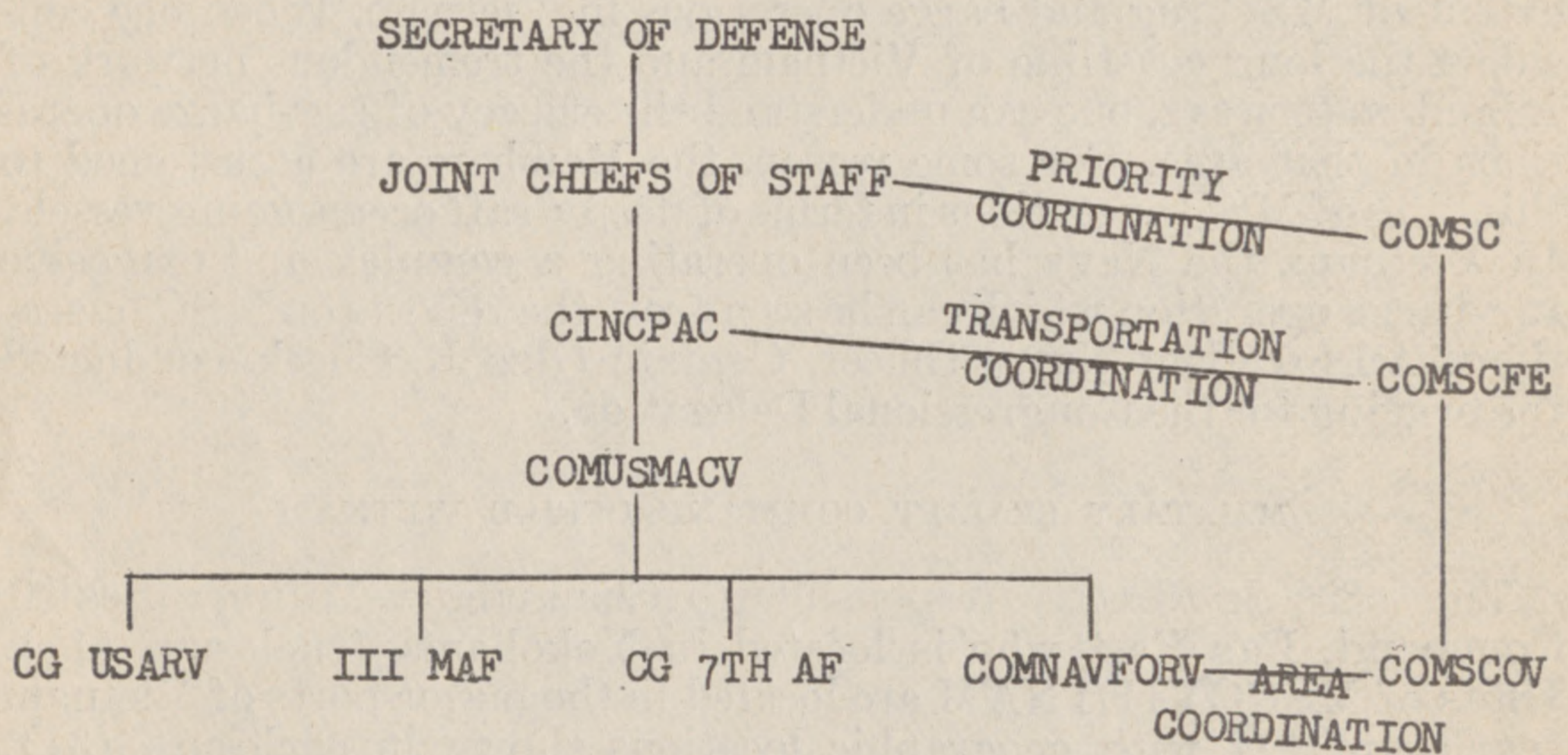
The two USNS troopships in full operational status shuttle Korean replacement troops between Vietnam and Korea.

The USNS *Corpus Christi Bay*, a converted seaplane tender, provides helicopter repair and rework facilities for the U.S. Army. The

ship is presently in overhaul but will resume its station at anchor off Vung Tau in June. In addition to the civil service crew, approximately 300 U.S. Army military personnel are stationed on board.

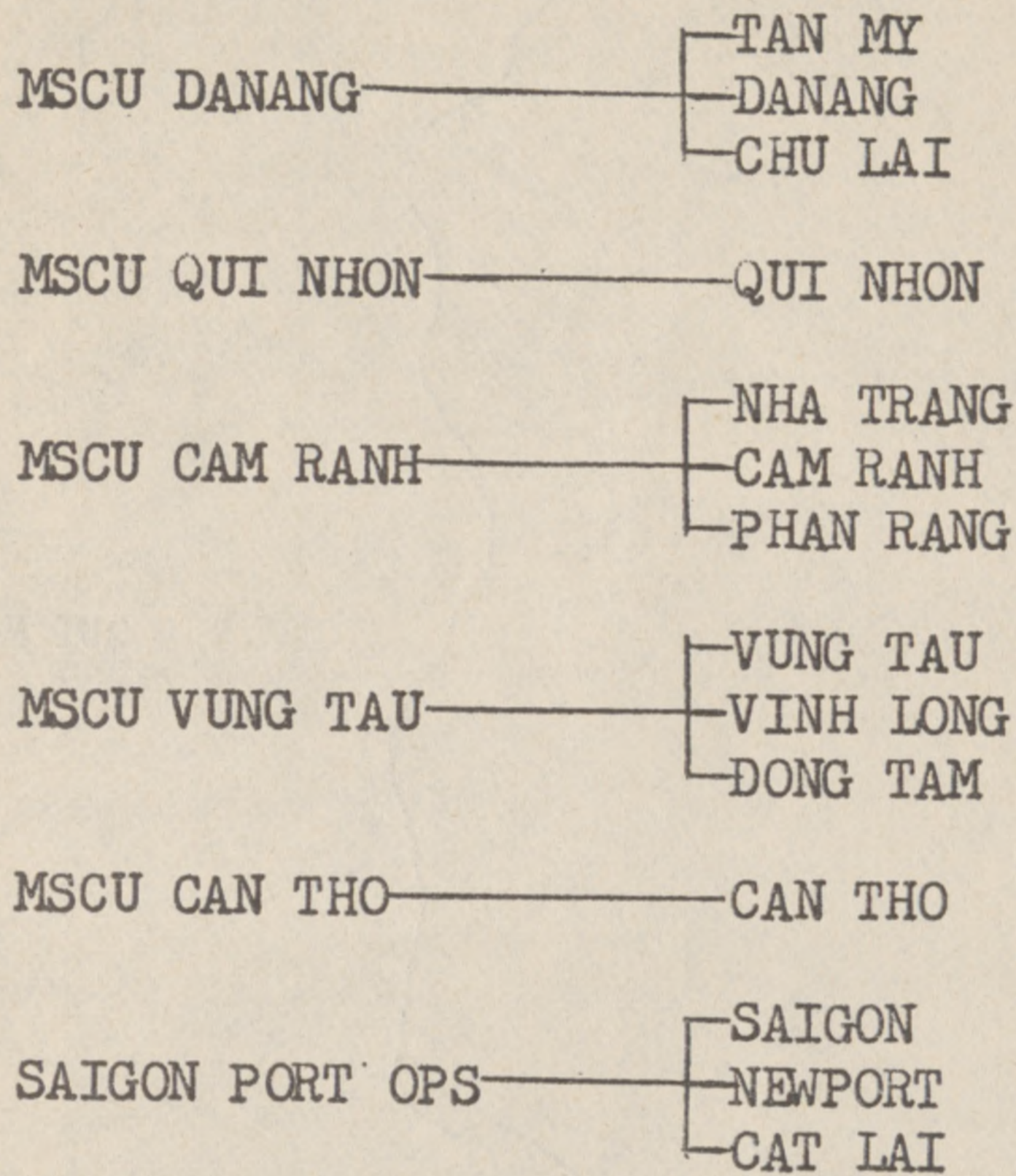
The special operations division evaluates rock discharge sites, sends representatives to each proposed site, provides advice, evaluates water transportation asset requirements for the sites, and manages tug and barge operations (enclosure (9)).

Tug and barge operations currently employ forty five tugs of both ocean-going and river harbor types and 153 barges (enclosure (10)). Their purpose is to support road-building operations in both the Delta and in MR 1 and to supplement the LST's in the common service sealift system for delivery of military cargo. At present approximately 250,000 S/T of rock are delivered each month (enclosure (11)). About 30,000 M/T per month of Free World Forces dry cargo is delivered by barge, primarily to ports in the Delta, and a tow service for other assets is provided which averages about 40,000 S/T per month.

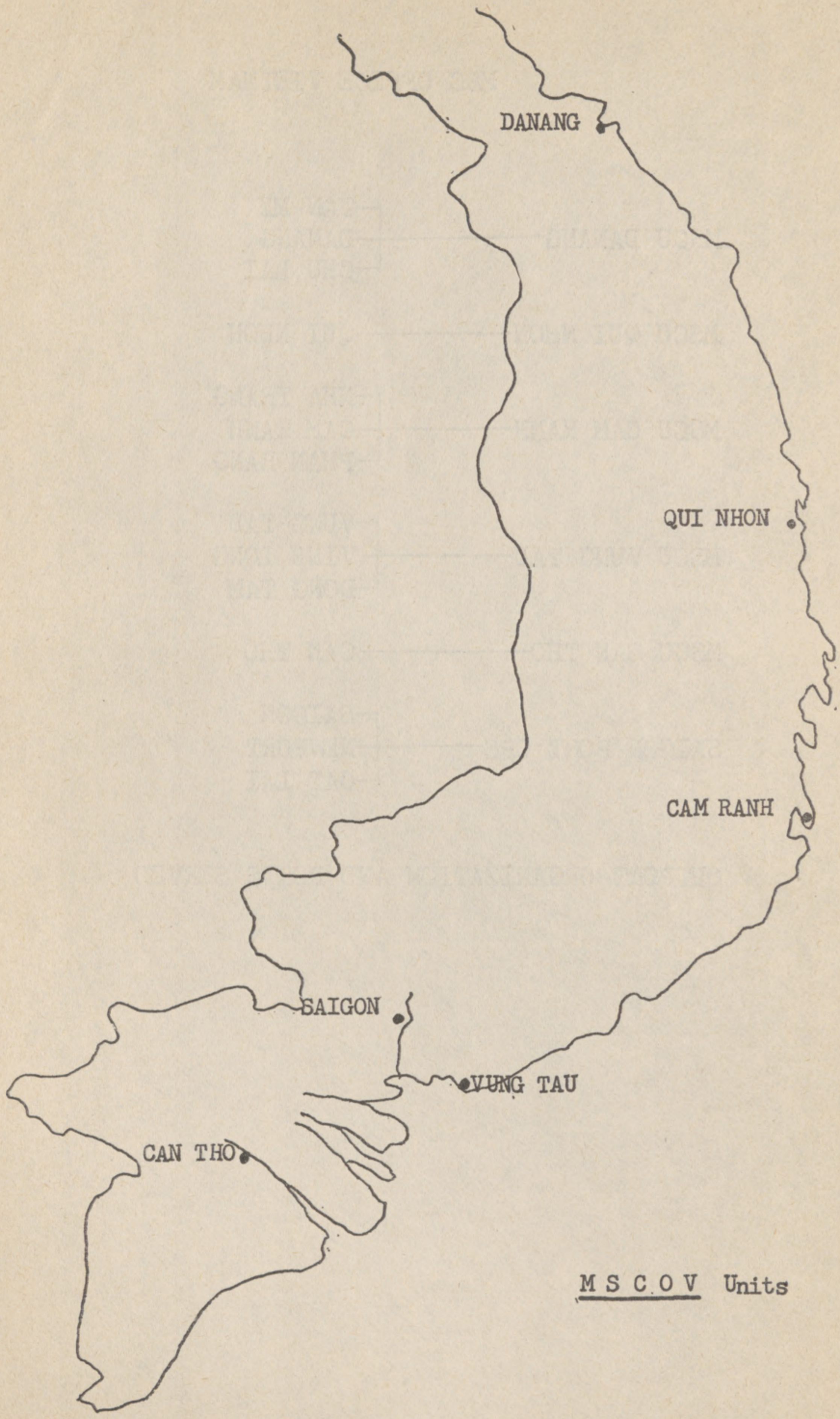


OPERATIONAL CONTROL AND
COORDINATION RELATIONSHIPS

MSC OFFICE VIETNAM



OUTPORT ORGANIZATION AND PORTS SERVED



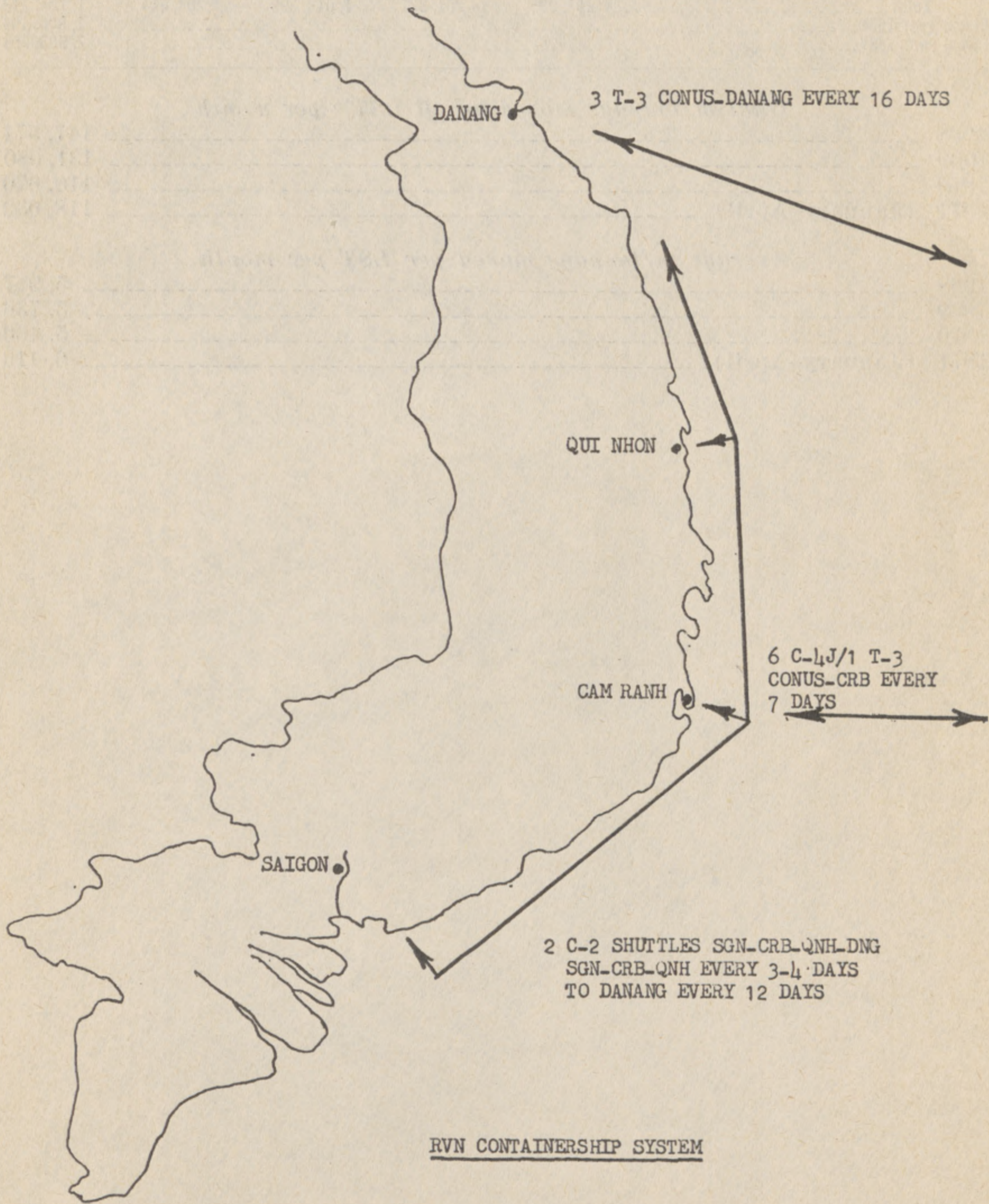
M S C O V Units

Deep draft dry cargo, average number of ships per day in RVN

1968	-----	55
1969	-----	38
1970	-----	27
1971 (January-April)	-----	20

Deep draft average cargo moved per month, M/T

1968	-----	1,354,643
1969	-----	1,089,325
1970	-----	715,780
1971 (January-April)	-----	642,950



INTRA-RVN CARGO, FISCAL YEAR 1971

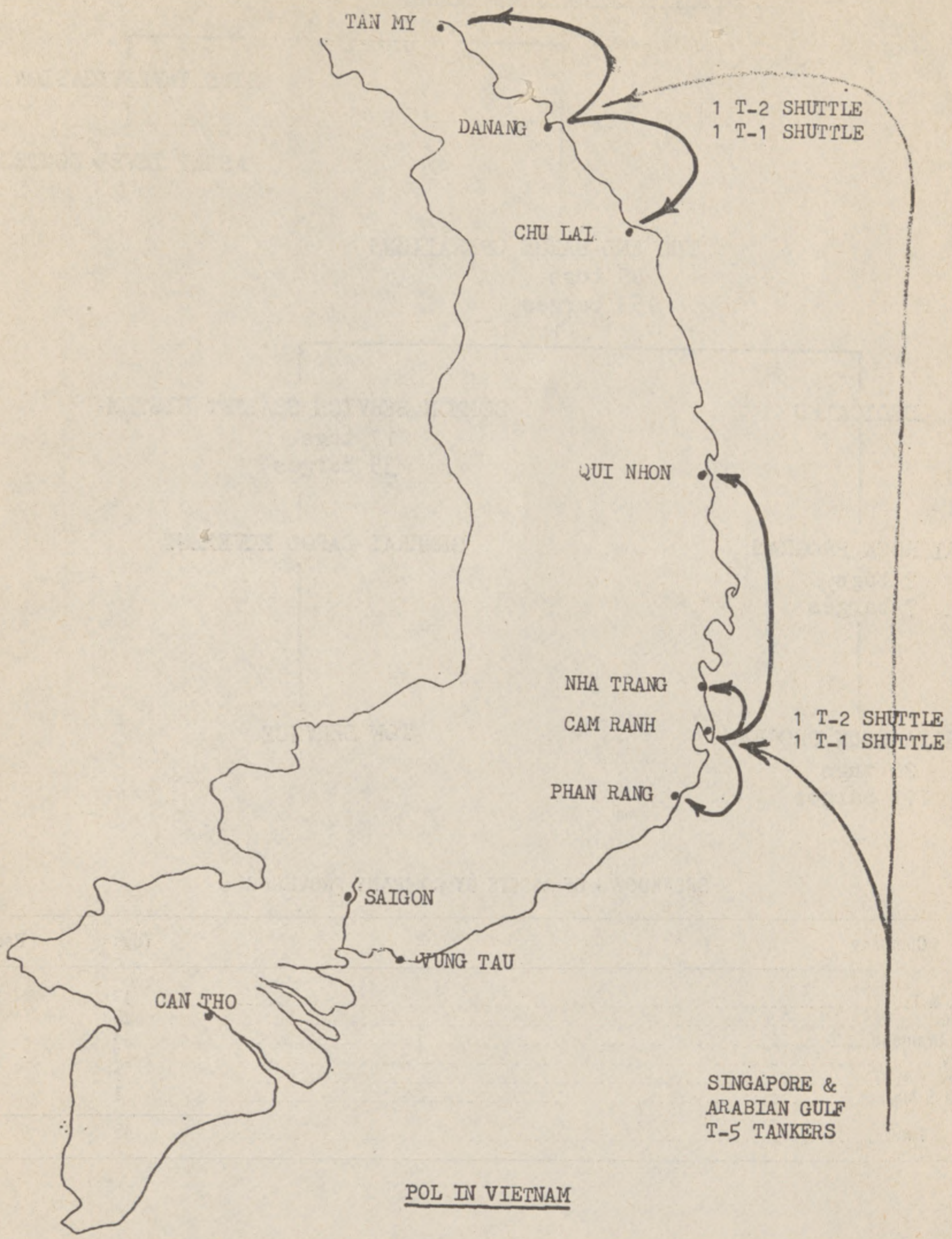
Month and year	Deep draft	Sea land	LST	Barge	Total
July 1970.....	22,223	8,046	89,536	20,853	140,657
August 1970.....	20,646	27,538	96,367	15,693	160,244
September 1970.....	15,682	8,919	92,316	11,264	128,181
October 1970.....	10,870	18,470	93,471	27,458	150,269
November 1970.....	23,235	10,389	81,606	13,848	129,078
December 1970.....	34,444	21,462	92,120	20,098	168,124
January 1971.....	38,311	15,152	97,077	12,978	163,518
February 1971.....	54,517	32,467	111,896	24,513	223,393
March 1971.....	50,391	32,026	130,341	26,503	239,261
April 1971.....	26,717	27,352	128,669	31,436	214,174
Total.....	297,035	201,821	1,013,399	204,644	1,784,213
Fiscal year 1970.....					1,906,104
Fiscal year 1969.....					2,903,263

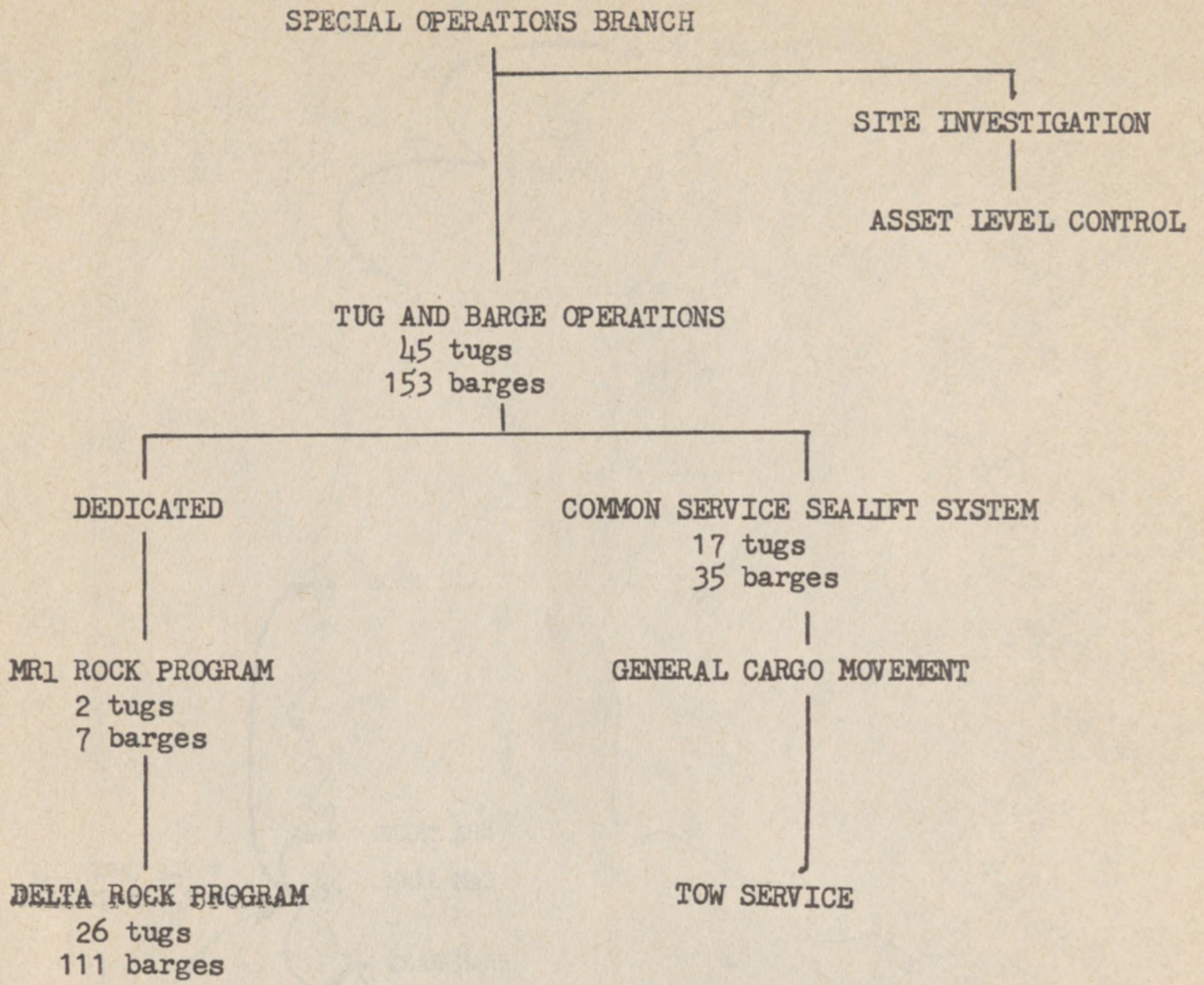
Total m/tonnage moved by all LST's per month

1968.....	147,571
1969.....	131,080
1970.....	110,670
1971 (January-April).....	118,032

Average m/tonnage moved per LST per month

1968.....	5,987
1969.....	5,736
1970.....	5,466
1971 (January-April).....	6,410

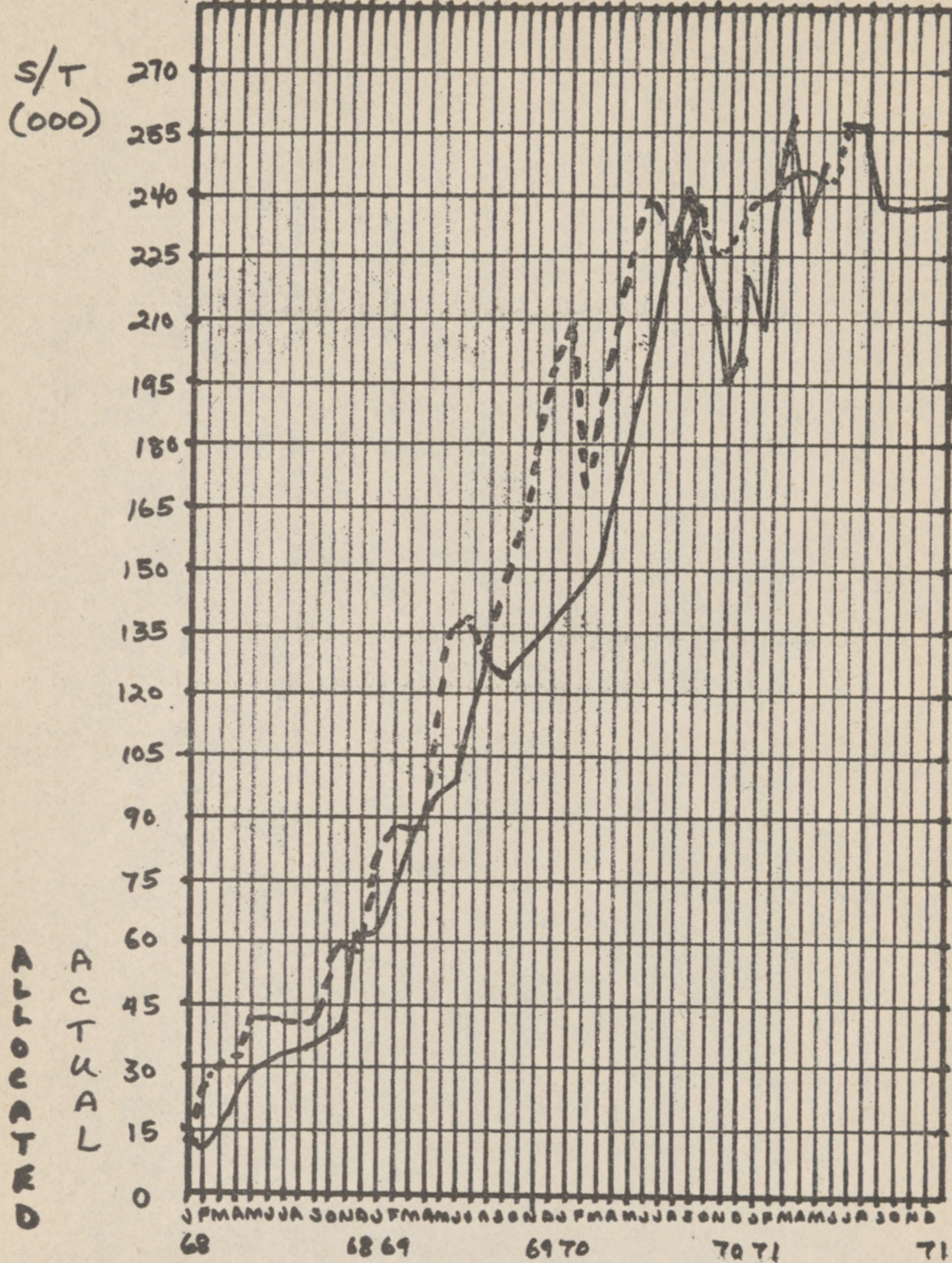




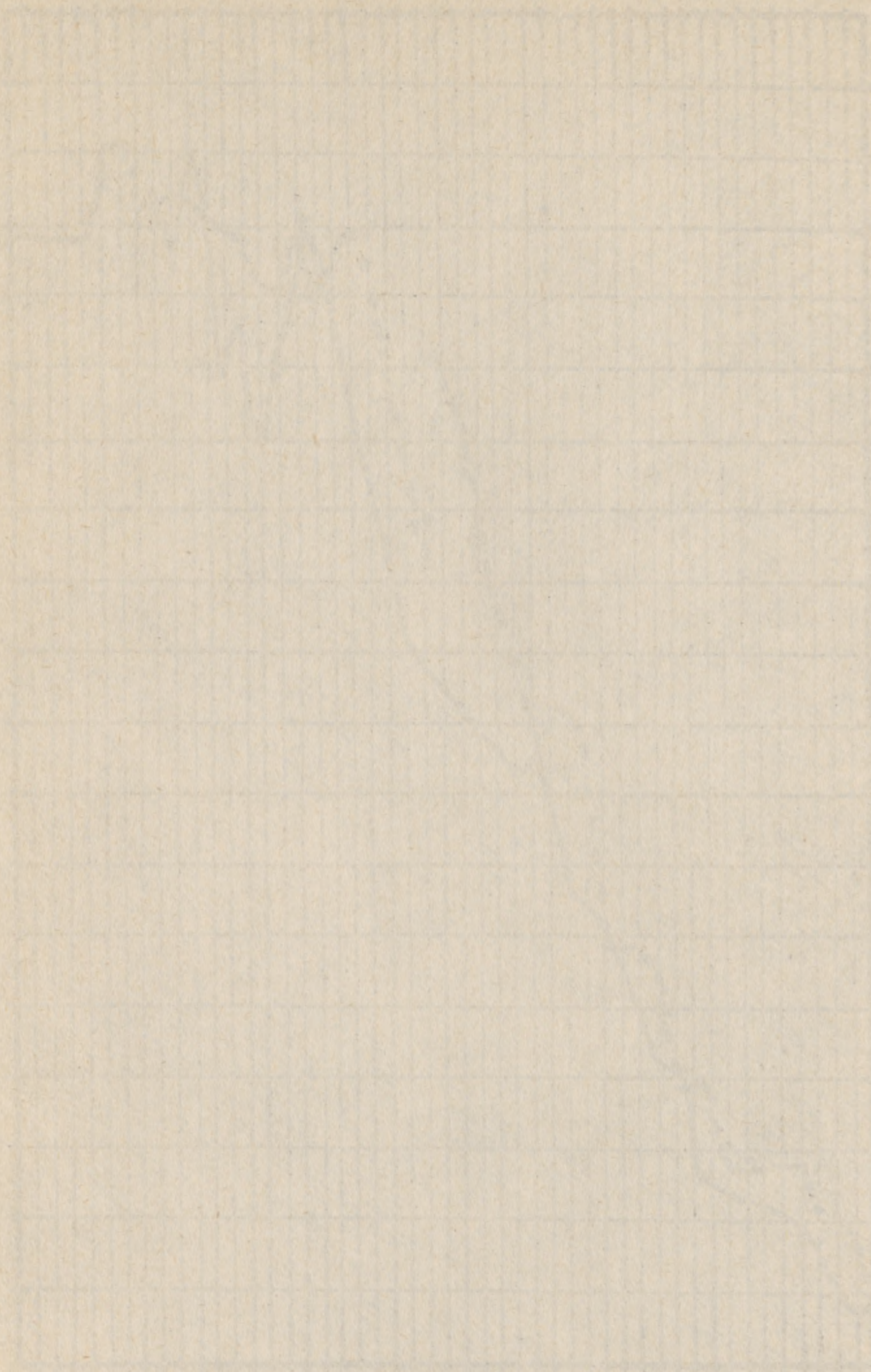
BREAKDOWN OF ASSETS BY COMPANY PROVIDING

Company	Tugs	Barges
A.B. & T.....	17	26
Luzon.....	19	122
Max Diamond.....	4	3
Batty.....	3	0
Liffey.....	1	0
Land & Marine.....	1	2
Total.....	45	153

ROCK DELIVERIES / PROJECTED QUOTAS JAN 68 - DEC 71



ROCK DELIVERIES / MONTHLY REPORT / JANUARY 1951



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THE FOLLOWING INFORMATION IS FOR THE USE OF THE OFFICE OF THE SECRETARY OF THE INTERIOR

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

WASHINGTON, D.C.

1951

Section V

(A) THE MARINE SAFETY AND COMMERCIAL SITUATION IN HONG KONG AND BANGKOK HARBORS

The House Merchant Marine & Fisheries Committee has worked on port and harbor safety legislation for two years and its bill, H.R. 8140 passed the House on October 8, 1971. Similarly, the Merchant Marine Committee has worked on radiotelephone legislation over the last several years and its Bridge-to-Bridge Radiotelephone bill, was signed into law by the President on August 4, 1971 (Public Law 92-63). Since these two pieces of marine safety legislation have occupied the Committee's time and efforts and are so important to marine safety, the Members of the Delegation were especially anxious to find out whether there were mandatory traffic regulations and any bridge-to-bridge radiotelephone requirements in the major Far Eastern ports of Hong Kong and Bangkok.

To this end, the CODEL spoke with Mr. Milburn, Director of the Marine Department, Hong Kong Government, and Captain Lako, the Port Director for Bangkok. Mr. Milburn told the Members that the Marine Department in Hong Kong encourages the use of VHF radiotelephone equipment but does not have a law requiring either its installation or use. Although not requiring it, the Marine Department favors its use whenever possible. The Marine Department seems to peg its requirements in this respect on the international activities of IMCO.

Mr. Milburn said there are no mandatory traffic laws in Hong Kong Harbor but they encourage the use of voluntary tanker lanes. He said that they are working on a new ordinance for traffic separation, traffic control, etc. Mr. Milburn admitted that in its present stage of drafting the ordinance does not say much. He emphasized that they don't exercise control over vessel traffic in Hong Kong Harbor and that they have had few, if any, accidents because of the extremely good visibility in Hong Kong Harbor. Mr. Milburn said that they have not had a serious marine accident in the last four years and that they average 600 deep-draft vessels per month in the Harbor. This does not take into account the many thousands of smaller craft that shoot about the major vessels in the Harbor. Such a high concentration of traffic in this Harbor and such a low accident rate certainly makes one wonder about the necessity of imposing mandatory vessel traffic control.

In answer to a question by Counsel concerning licensing, Mr. Milburn said that the Marine Department inspects and licenses all small craft especially passenger vessels. On these vessels they license both the operator and the engineer. This information was especially interesting in light of the towboat licensing bill, H.R. 6479, which passed the House on April 29, 1971. This bill is still pending before the Senate. The Hong Kong Marine Department is especially concerned about

the quality of the crews on the Liberian and Panamanian-flag vessels which come into its harbor.

Mr. Milburn indicated that the number of ships coming into Hong Kong Harbor is not increasing. The general depth in Hong Kong Harbor is 36 feet, but they have 120 feet of water for tankers out on the outer rim of the Island. They plan on establishing an oil refinery in this area and the water depth assures them of being able to handle even the largest size supertankers.

At the present time, the shipping and cargo handling is almost all breakbulk. However, they have already begun work on a very large container vessel on the Kowloon side. The Hong Kong port interests expect that within the next several years there will be a gigantic move forward in container operations in Hong Kong. Sealand, Inc., for example, is moving its main Far Eastern office from Tokyo down to Hong Kong. At the present time they have three or four persons operating in Hong Kong and they plan on quadrupling this force within the year. Sealand, of course, would be the primary beneficiary of the new container terminal in the harbor. The Delegation took a complete water tour of the harbor to inspect such areas as the proposed new container facility. The increased container operations and facilities should give the container operators such as Sealand a tremendous advantage over their present breakbulk competitors in the region. The Delegation was given a very optimistic report by the Marine authorities in Hong Kong concerning container operations. They assert that container operations are tailor-made for an area such as Hong Kong which has a highly skilled indigenous industrial complex which is located all within a very few miles of the Hong Kong port area. The marine interests claim that container operations will be perfect for the type of industrial and commercial climate which exists in Hong Kong.

It is less clear how well Pacific Far East Lines LASH concept will work in the Hong Kong area. There is no question that PFEL intends Hong Kong as one of its major ports of call for its LASH vessels. The marine interests in Hong Kong were not so sanguine nor optimistic as to the future of the LASH concept in Hong Kong. They did not seem to think that Hong Kong offered the topographic or geographic situation best suited for the LASH concept. Also, they did not seem to think that there were any facilities in Hong Kong Harbor to handle the LASH barges. It would appear certain that the lighterage interests in Hong Kong would be adamantly opposed to both containerization and the LASH concept since these two revolutionary methods of seaborne cargo handling would all but eliminate the lighterage business which has flourished for centuries in the Hong Kong area.

It will be interesting to see the outcome of containerization and the LASH system in Hong Kong since these two systems will clash head on in this area in an operational confrontation.

Set out hereinafter is a brief description of the functions and operations of the Marine Department in Hong Kong and the problems underlying port legislation in this harbor area.

The Committee is asked to consider the need to enact specific legislation regulating the control and administration of the ports and waters of Hong Kong. One of the functions of the Director of Marine is to

control and manage the ports and waters of Hong Kong through legislation and to provide for the safe arrival, navigation, berthing (other than at private wharves), and subsequent departure of all types of vessels. The present legislation through which these functions are carried out is contained in the Merchant Shipping Ordinance 1953, the regulations thereunder and under various other heads. It has long been considered that the present state of legislation is unsatisfactory and inadequate, and that the inclusion of legislation concerning matters of local port administration in the Merchant Shipping Ordinance is unsatisfactory and outmoded. It is therefore considered desirable that specific legislation dealing solely with port administration and regulation of the waters of the Colony should be enacted.

2. The principal matters with which the Director of Marine is concerned in regulating the waters of the Colony are:—

- (a) The safety of marine traffic.
- (b) The provision of navigational aids and the marking of channels.
- (c) The establishment and operation of buoy moorings.
- (d) The control of small craft of which there are over 20 thousand licensed, and many thousand unlicensed and pleasure craft.
- (e) Minor ports and typhoon shelters.
- (f) Preservation and development of port facilities and services including piers, slipways, godowns, etc.
- (g) Typhoon precautionary measures and protection.
- (h) Various incidental activities including laid-up shipping, ship-breaking, wrecks, dangerous goods, pilotage, reclamations, dredging, harbour pollution, log storage, public cargo working facilities, etc.

3. The above are some of the matters which concern the Director of Marine in the administration of the ports and waters of the Colony. The problems which arise are to a large extent peculiar to Hong Kong and the constant changes in circumstances which occur here. Many are rarely found elsewhere. They are matters essentially connected with harbour control outside the larger field of merchant shipping. Yet the only legislation dealing with these matters is that contained in the Merchant Shipping Ordinance which, except for a few inadequate provisions, does not touch on these matters. To a large extent the problems that do arise are the result of outmoded legislation which fails to take regard of the peculiar circumstances which exist in Hong Kong and the absence of specific legislation regulating the port administration which, it is considered, is necessary if the Director of Marine is to fulfill his functions in that regard.

4. At present, as pointed out above, port legislation is either embodied in the Merchant Shipping Ordinance or scattered about in various other Ordinances and regulations which fail to give the Director adequate powers as a result of which he is unable to meet the problems which arise.

Doubts as to jurisdiction and powers.—There are certain areas in which doubts arise concerning the jurisdiction of the Director of Marine and where port services are not being applied in the best interests of the community. Examples of this are at public cargo working areas where the lack of any form of co-ordinated control leads to congestion and traffic problems; at piers which are leased to private concerns for defined purposes and which are misused; at small shipyards where the sites have been acquired under favourable terms

and the conditions of sale are not being observed in the usage; at public piers where congestion and obstruction is very common. The Port Executive Committee considers that legislation should be enacted regulating cargo working. Such legislation should provide for the demarcation of certain areas as port areas and the definition of the responsibilities and jurisdiction of the Director of Marine within such areas.

5. As pointed out above it is considered that most of the problems which arise in port administration are the result of the present out-moded legislation and the absence of specific legislation providing for port administration. The Crown Solicitor has comments: "Completely fresh and separate legislation is necessary to enable the Director of Marine to exercise adequate control over the port. The legislation should be specifically port legislation and not under the Merchant Shipping Ordinance. There is ample precedent for such legislation in the United Kingdom and other Colonies, and I am astounded that Hong Kong, one of the most important ports in the world, has gone so long without this type of legislation".

If the present problems are to be solved and efficient port administration achieved it is considered that two things are necessary—

(a) the enactment of a Ports Ordinance and subsidiary legislation for the regulation of the ports and waters of Hong Kong; and

(b) the provision of adequate procedure for speeding up the making and execution of administrative decisions.

(B) THE MARINE SAFETY AND COMMERCIAL SITUATION IN HONG KONG AND BANGKOK HARBORS

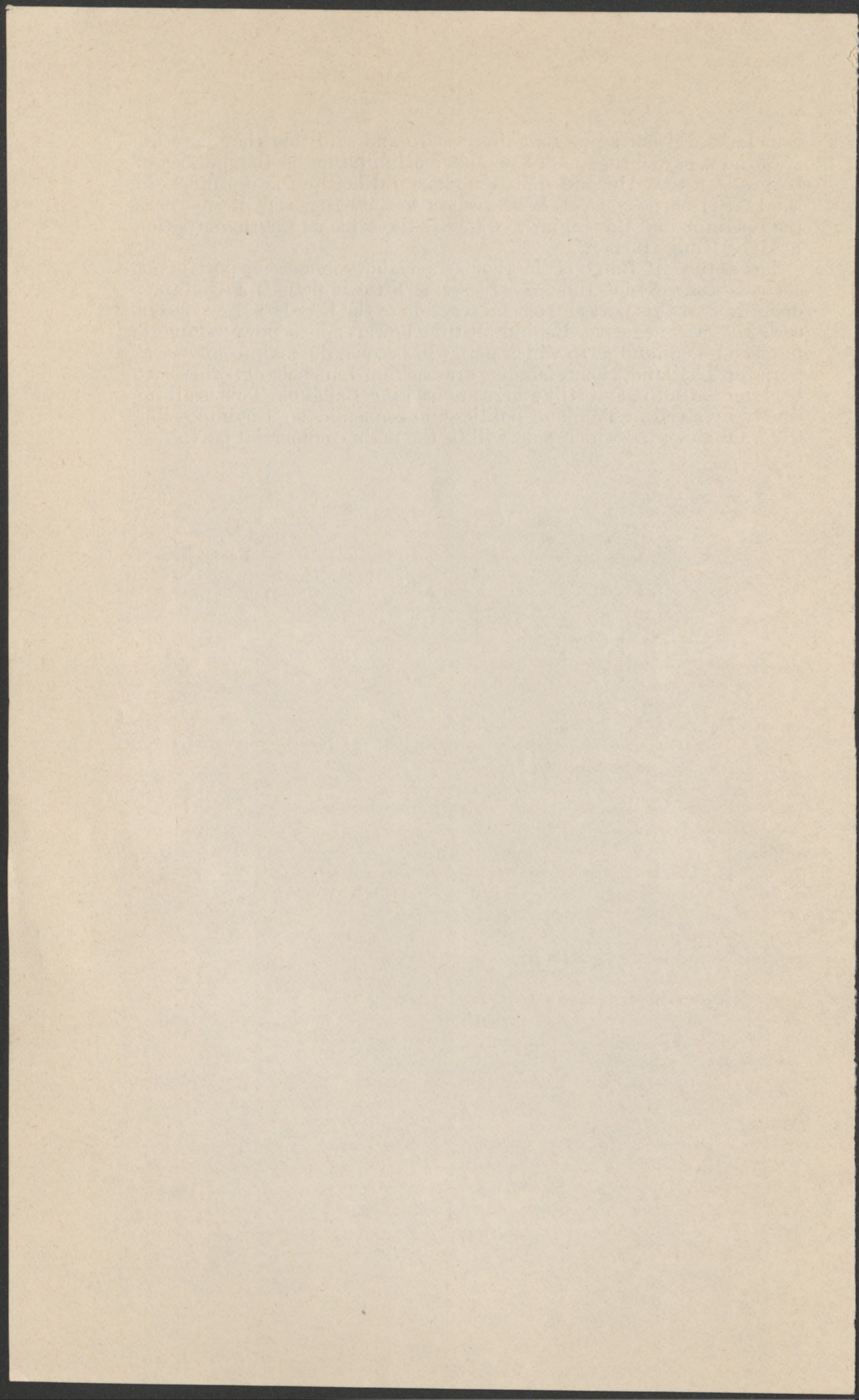
The Members of the Delegation met with Captain Lako, the Department Director of Operations for the Port of Bangkok to discuss various aspects of the Port's operations. Captain Lako indicated that Bangkok averages 10 deep-draft vessels per day at its wharves. The Port of Bangkok, like the Port of Saigon, is a river port. The Bangkok Port channel has a draft of 28 feet and provides turn-around space for vessels 565 feet long or less. This comparatively shallow draft would not permit large container ships or large LASH and seabee vessels to use the port. In addition, Captain Lako said that there are no container operations to speak of because of customs problems which are in addition to the draft limitations.

Captain Lako indicated that they had no radiotelephone requirement or no mandatory vessel traffic rules or laws. He said that their primary concern was to operate the terminal and they did not concern themselves to any great extent with navigation.

When asked about the future of LASH vessels and barges being used in Bangkok, Captain Lako was something less than optimistic. He said that he would not visualize the LASH vessel coming to the Port of Bangkok because of draft and terminal limitations. He also said that they would not let the LASH-barge tie-up along the harbor facilities of the river. Counsel asked about the possibility of the mother ship anchoring out in the Gulf of Siam and the barges then being towed up the river. It seemed to the Delegation that the waterway system of Thailand was ideally suited to the LASH-barge concept. Cap-

tain Lako did not agree that this was so and said that they only use 2,000 horsepower tugs and, thus, have a limitation on the number of barges in a tow. He said that this alone did negate the usefulness of the LASH-barge concept. With respect to these tugs they license both the operator and the engineer which is the same as the tug situation in Hong Kong Harbor.

The future of Bangkok Harbor as a viable commercial port is not clear at the present time. There seems little impetus for container operations at this port and official reaction to the LASH-barge concept certainly was negative. Behind all this, however, is a power struggle in official Thailand as to which port will become the main commercial port for Thailand. Some factions are backing Lanchebang, others are backing Sattahip, and still others are backing Bangkok. This is all intimately involved in Thailand politics and economics so it is impossible to tell at this time which port will be the main commercial port.



Section VI

COAST GUARD FACILITIES IN HAWAII

The 14th Coast Guard District has its headquarters in Honolulu, Hawaii and covers more square miles than the whole of the continental United States and includes in its activities operations from Thailand and Vietnam in Southeast Asia to the northern, central, and western Pacific. The 14th Coast Guard District is responsible for coordinating all search and rescue in the central Pacific subregion, an area covering 12.5 million square miles. This subregion is divided into four SAR sectors: Honolulu, Wake, Guam, and Midway. Because of the importance of the 14th District and the scope of its jurisdiction and activities, the Congressional Delegation spent several days inspecting the facilities in the Hawaiian area. When the Delegation was flying from Kona Island to Oahu, the C-130 was called upon to participate in the rescue of a marine pilot off Harbor Point. After the marine aircraft was ditched the Coast Guard rescued the pilot, but the radioman was lost. This gave the Members of the Delegation an opportunity to view first hand the Coast Guard at work in its search and rescue operations for which it has become justly famous.

The CODEL inspected the Coast Guard air station at Barber's Point. The Coast Guard history of air activity in this area dates back to 1949 and the primary missions of the air station are to provide search and rescue service throughout the central Pacific maritime area and to provide tactical support to Coast Guard units in the central and western Pacific. To fulfill these missions the Barber's Point Air Station operates three HC-130B longrange aircraft and two HH-52A amphibious helicopters.

The Fourteenth District operates a total of 925 hydrographic aids to navigation, 34% of which are operated for the U.S. armed forces. Aids other than those in Vietnam are tended by four 180 foot buoy tenders stationed in Honolulu and Guam. There are 19 Loran-A stations operating in the 14th District which also has three Loran-C chains providing navigational service for the Hawaiian Islands, Northwest Pacific, and Vietnam/Thailand areas. The 14th District also operates three navigational radio beacons in the Hawaiian Islands and it operates a special calibration radio beacon at Diamond Head in Oahu. The Members of the Delegation rode on the 378 foot high endurance cutter MELLON and in an 82 foot patrol boat. They visited the base at Sand Island and the Loran Station at Upolo Point on Kona Island. The Delegation also inspected the radio beacon at Makapou Point on Oahu.

Engineering in the 14th District is unique due to the remote geographic location of many facilities and their inaccessability. The Engineering Division in the 14th District provides technical and financial assistance for the construction, maintenance and repairs to 14

ships, 41 shore stations, 265 unmanned shore aids to navigation and 416 floating aids to navigation.

The 14th District has a rather extensive port security and waterway detail which is composed of four explosive loading detachments which are assigned to the First Logistical Command of the Army. These detachments comprise explosive handling experts and port security advisory personnel with the task of insuring that the several procedures are followed, improving the handling and storage of explosive material, improvements upon port perimeter security, and boat harbor patrols.

The Captain of the Port, as with other Coast Guard districts, has a number of responsibilities concerning the port of Honolulu and he is located in the Aloha Towers. The 14th District has a rather complex law enforcement and intelligence section which deals in such matters as narcotics traffic. There is also a recreational boating safety branch in Honolulu together with a Coast Guard auxiliary unit and a reserve unit. Housing has long been a problem in the 14th District and the Delegation visited Kiá-i-Kia-Hale, which is the main Coast Guard housing project.

With respect to commercial operations in the Port of Honolulu, the CODEL spent a morning touring the Matson container facilities which are contiguous to the harbor entrance. Matson, of course, has long been the main steamship operator in the trade between Hawaii and the United States. Matson is almost 100% a container operator in this trade now. Matson together with Sealand were the pioneer steamship operators in the container trades and Matson uses a non-standard 24 foot box. SeaTrain Lines, Inc. has come into the Hawaiian trade in the last three or four years and has captured approximately $\frac{1}{3}$ of this trade. Also, U.S. Lines stops at Hawaii on its route from the East Coast to the West Coast to the Far East.

The Port of Honolulu does not have any radiotelephone requirement nor does it have any mandatory traffic control regulations. It has also been virtually free of collisions or other marine incidents. The reasons for this are that it is a simple harbor with clear access and egress and excellent visibility. The harbor is practically never plagued with such navigational hazards as fog which are found in such important ports as New Orleans and New York.

Section VII

HUMANITARIAN NAVAL PROGRAMS IN SOUTH VIETNAM

The newspapers in the United States have created an image of the U.S. fighting man in South Vietnam as engaging in excesses of brutality, turning increasingly to narcotics, and fostering a general picture of loss of moral values and military disorganization and chaos. Very little is ever printed or stated in the news media with respect to the good things which have been done by our fighting men in South Vietnam. One example of this is "Operation Helping Hand" conceived, organized and established by the U.S. Navy men in South Vietnam. Operation Helping Hand is a multifaceted effort designed to raise the standard of living and make life for the Vietnamese Navy man and his family a little brighter. The program consists of improving housing conditions, providing a balanced diet and creating a rehabilitation center for disabled Navy veterans. In a little over a year the Vietnamese Navy has grown from 17,000 to more than 39,000 men, but family housing has not kept pace. To accommodate this growth an additional 14,000 new housing units are needed. Also, most existing housing is in need on renovation. These needs are being met through Operation Helping Hand. In addition, an animal husbandry project has been initiated through which pork and chicken is being made available in the daily diet of the Vietnamese serviceman. The original pilot project began at Cat Lai Naval Base. Since then 40 more of the Vietnamese Navy's 54 bases which include 67 different units have been given the initial issuance of chicken and pigs.

Ex-farm boys and graduates of agriculture schools now serving as Naval officers in Vietnam have helped the Vietnamese Navy men care for their livestock so that the stock of pigs and chickens is increasing dramatically. This program has been expanded on a limited scale to provide goats, ducks and rabbits because of the high protein content of their meat and the relative ease of caring for them. As of last June, about 34,000 chickens, 275 hogs, 580 ducks, 150 rabbits and 3 goats have been distributed to Navy units throughout the Republic of Vietnam.

The first Vietnamese Navy vocational rehabilitation housing center will soon be built by Operation Helping Hand. The center will consist of a hamlet which will provide housing and a means of livelihood for 500 disabled veterans and their families. Vietnamese Navy veterans will learn useful trades at the center such as carpentry, auto mechanics, plumbing, electricity, welding and refrigeration. Most of Operation Helping Hand has been the result to date of contributions by U.S. Navy men of their time, talents and money. The program will cost \$3 million more than has been allocated by the U.S. and Vietnam governments. A nonprofit foundation has been set up by a group of interested business and professional men in Saigon to accept donations and administer funds for the operation. Their address is: Operation Helping Hand, Box OHH, F.P.O. San Francisco, California 96626.

Section VII

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Section VIII

DRUG PROBLEM IN VIETNAM AND THE APPARENT SUCCESS OF VIETNAMIZATION

When the CODEL was in South Vietnam the newspapers were saying that 30 to 40% of the G.I.'s in South Vietnam were addicted to hard drugs, i.e., using heroin. Our investigation, although circumscribed in many ways, revealed that not more than 4% of the troops in Vietnam were heroin users. Recently, the U.S. Pacific military command reported that the U.S. military's drug screening program in South Vietnam turned up 5,374 drug users since it was launched some six months ago. This is 3.7% of the 147,028 personnel reassigned from Vietnam between June 18 and November 17, 1971.

Although it is premature to predict the success of the Vietnamization program there are unmistakable signs of success. Also, the facts are irrefutable that the U.S. military is "standing down" in Vietnam. To those of us who have visited Vietnam yearly for the last five or six years the signs of progress are unmistakable. One sees the bridges rebuilt and intact, not knocked sideways as they were in years past. There are miles and miles of blacktop highways unminable by the remnant Viet Cong which radiate into the countryside and swarm with Hondas. In the fields, many of the water buffalo are gone and Japanese tractors are now pulling the plows. Village roofs are no longer thatched or burned out but are bright with new galvanized iron and many houses that previously had tin roofs now have tile. Paddies are trim and neatly dammed and market boats make their way up the canals and rivers bringing produce to Saigon. In the area of Saigon merchant ships lie at anchor in the river, certainly showing much less fear of mines, guerrilla swimmers or rocket fire.

Today the U.S. Army as a fighting force in Vietnam is merely a token force, 15% of our previous fighting power is all that is left. Of the peak U.S. combat strength in 1968 some 85% of the U.S. land combat forces have departed the country. These are facts not moralizations or speculations, just as the ARVN progress, the Viet Cong terror, and the North Vietnamese Army losses are facts.

From the beginning, the U.S. objective in South Vietnam has been to bring political stability, economic viability and a degree of security from terror so that the people of the Republic of Vietnam would be able to stand on their own feet and chart their own course. Despite all that is said in the media, the net result of Vietnamization is deemed promising enough by our officials in Saigon for us to withdraw. The South Vietnamese are indeed getting better at self-defense and self-government and, therefore, need us less. If Vietnamization proceeds at the present rate, and the circumstances warrant continuing at the present or at an accelerated rate of withdrawal, it appeared fairly certain to the Members of the Delegation that the U.S. presence would be minimal in Southeast Asia by the end of June, 1972.

THE HISTORY OF THE VETERINARY MEDICAL COLLEGE OF
VETERINARY MEDICINE

The history of the Veterinary Medical College of
 the University of Pennsylvania is a story of
 growth and progress. It began in 1827 when
 the first class of students entered the
 College of Veterinary Medicine. Since that
 time, the College has grown from a small
 school to a large and respected institution.
 The College has always been known for its
 high standards of education and its
 commitment to the welfare of animals.
 Over the years, the College has expanded
 its curriculum to include a wide range of
 subjects, from basic sciences to advanced
 clinical studies. It has also developed
 strong ties with the veterinary profession,
 ensuring that its graduates are well-prepared
 to meet the needs of their future clients.
 Today, the Veterinary Medical College of
 the University of Pennsylvania stands as a
 premier institution in the field of veterinary
 medicine, producing graduates who are
 leaders in their respective fields.

