RADIOTELEPHONES ON CERTAIN CARGO VESSELS IN HAWAIIAN WATERS

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE HOUSE OF REPRESENTATIVES

EIGHTY-EIGHTH CONGRESS

SECOND SESSION

ON

H.R. 8508, H.R. 8542, H.R. 8591, H.R. 8602, H.R. 8779

BILLS TO AMEND SECTION 356 OF THE COMMUNICATIONS ACT OF 1934, TO PERMIT CARGO SHIPS ON VOYAGES BETWEEN HAWAIIAN PORTS TO CARRY RADIOTELEPHONE IN LIEU OF RADIOTELEGRAPH INSTALLATIONS

FEBRUARY 19, MARCH 19, 1964

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CONTENTS

RADIOTELEPHONES ON CERTAIN CARGO VESSELS IN HAWAIIAN WATERS

WEDNESDAY, FEBRUARY 19, 1964

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COMMUNICATIONS AND POWER
OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 1333, Longworth House Office Building, Hon. Walter Rogers (chairman of the subcommittee) presiding.

Mr. ROGERS of Texas. The Subcommittee on Communications and Power will come to order for the consideration of pending business.

This morning the subcommittee is meeting for the consideration of several bills that have been introduced to accomplish the same purpose. One of those was H.R. 8508 introduced by myself; H.R. 8542 introduced by Mr. Curtin, of Pennsylvania; H.R. 8591 by Mr. Jarman, of Oklahoma; H.R. 8602 by Mr. Friedel, of Maryland; and H.R. 8779 by Mr. O'Brien, of New York.

The bills are identical and without objection will be included along with the agency reports in the hearing record at this point.

(The bills and agency reports follow:)

[H. R. 8508, H.R. 8542, H.R. 8591, H.R. 8602, H.R. 8779, 88th Cong., 1st sess.]

A BILL To amend section 356 of the Communications Act of 1934, to permit cargo ships on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 356 of the Communications Act of 1934, is amended to read as follows:

"SEC. 356. Cargo ships of less than one thousand six hundred gross tons and cargo ships, regardless of tonnage, which in the course of a voyage between Hawaiian ports do not go more than fifty nautical miles from the nearest land may, in lieu of the radiotelegraph installation prescribed by section 355, carry a radiotelephone installation meeting the following requirements:

"(a) The ship's radiotelephone installation shall be in the upper part of the ship and, unless situated on the bridge, there shall be efficient communication with the bridge.

"(b) The radiotelephone installation shall be capable of transmitting and receiving on the frequencies and with types of emissions designated by the Commission pursuant to law for the purpose of distress and safety of navigation.

"(c) The transmitter shall be capable of transmitting clearly perceptible signals from ship to ship during daytime, under normal conditions and circumstances, over a minimum normal range of one hundred and fifty nautical miles.

"(d) There shall be available at all times a source of energy sufficient to operate the installation over the normal range required by paragraph (c). If batteries are provided they shall have sufficient capacity to operate the transmitter and receiver for at least six hours continuously under normal working conditions. In new installations an emergency source of energy shall be provided in the upper part of the ship unless the main source of energy is so situated."

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., February 28, 1964.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request for the views of the Bureau of the Budget on H.R. 8508, a bill to amend section 356 of the Communications Act of 1934, to permit cargo ships on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations.

The Federal Communications Commission, in its testimony before the Subcommittee on Communications and Power of your committee, points out that there has been no study of the adequacy of radiotelephony for the safety of vessels engaged in coastwise voyages nor of the interrelationship of radiocommunications on such vessels and those on international voyages, which carry radiotelegraph, for safety at sea in general. The Commission also notes the absence of an evaluation of the need for treating coastal shipping in Hawaiian waters differently from shipping in other coastal areas and therefore suggests that if the policy requiring radiotelegraph installations on cargo ships over 1,600 tons is to be changed, its scope should cover shipping in all U.S. coastal waters. The Commission believes further that any action in this broader area should be undertaken only after a complete study of the matter.

In the light of the above considerations, the Bureau of the Budget is unable to recommend enactment of this legislation.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

GENERAL COUNSEL OF THE DEPARTMENT OF COMMERCE,
Washington, D.C., February 18, 1964.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

DEAR MR. CHAIRMAN: This letter is in further reply to your request for the views of this Department with respect to H.R. 8508, a bill to amend section 356 of the Communications Act of 1934 to permit cargo ships on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations.

Section 356 of the Communications Act of 1934 (hereinafter referred to as the "act") (47 U.S.C. 354a) presently provides that all cargo vessels of less than 1,600 gross tons may, in lieu of the radiotelegraph installation required by section 355 (47 U.S.C. 354) of the act, carry a radiotelephone installation meeting certain enumerated specifications contained in section 356. The proposed legislation would allow the same option for all cargo vessels, regardless of their tonnage, which in the course of a voyage between Hawaiian ports do not go more than 50 nautical miles from the nearest land.

Inasmuch as the subject matter is within the jurisdiction of the Federal Communications Commission and the Treasury Department (the U.S. Coast Guard), we would leave to those agencies the recommendation as to whether the bill should be enacted.

The Bureau of the Budget has advised there would be no objection to the submission of this report from the standpoint of the administration's program.

Sincerely,

LAWRENCE JONES,
Acting General Counsel.

DEPARTMENT OF THE NAVY,
OFFICE OF THE SECRETARY,
OFFICE OF LEGISLATIVE AFFAIRS,
Washington, D.C., February 18, 1964.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives,
Washington, D.C.

MY DEAR MR. CHAIRMAN: Your request for comment on H.R. 8508, a bill to amend section 356 of the Communications Act of 1934, to permit cargo ships on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations, has been assigned to this Department by the Secretary of Defense for the preparation of a report thereon expressing the views of the Department of Defense.

The bill would permit cargo ships of less than 1,600 gross tons and all other cargo ships proceedings between Hawaiian ports to carry radiotelephone, meeting standards of usability stated in the bill, in lieu of radiotelegraph.

The Department of the Navy, on behalf of the Department of Defense, defers to other more interested agencies.

This report has been coordinated within the Department of Defense in accordance with procedures prescribed by the Secretary of Defense.

The Bureau of the Budget advises that, from the standpoint of the administration's program, there is no objection to the presentation of this proposal for the consideration of the Congress.

For the Secretary of the Navy:
Sincerely yours,

C. R. KEAR, Jr.,
Captain, U.S. Navy, Deputy Chief.

THE GENERAL COUNSEL OF THE TREASURY,
Washington, D.C., February 19, 1964.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Reference is made to your request for the comments of this Department on H.R. 8508, to amend section 356 of the Communications Act of 1934, to permit cargo ships on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations.

Under section 356 of the Communications Act of 1934 (47 U.S.C. 354a), cargo ships of under 1,600 gross tons may carry a radiotelephone installation meeting certain requirements in lieu of the radiotelegraph installation prescribed by section 355 of the Communications Act (47 U.S.C. 354). The proposed bill would provide this same option for all cargo ships which operate between ports in the Hawaiian Islands and do not go more than 50 miles from land during their voyage.

Since the substitution of radiotelephone for radiotelegraph equipment on the specified vessels would have no appreciable adverse effect on marine safety, this Department would have no objection to enactment of the proposed bill. We are not aware, however, of any factors which require operations between Hawaiian ports to be treated differently from operations between other coastwise ports where vessels stay within the same range of land. As to this and other aspects, therefore, we defer to the views of the Federal Communications Commission.

The Department has been advised by the Bureau of the budget that there is no objection from the standpoint of the administration's program to the submission of this report to your committee.

Sincerely yours,

G. D'ANDELOT BELIN, *General Counsel.*

Mr. ROGERS of Texas. I do not want to take a great deal of time to elaborate on the provisions of the bills. Suffice it to say that the bills deal with the general problem of safety at sea and the particular problem of whether certain cargo ships traveling between Hawaiian ports shall be authorized to have on board radiotelephone installations in lieu of radiotelegraph installations.

The legislation is a result of a proceeding conducted by the Federal Communications Commission pursuant to section 352(b) of the Communications Act of 1934. This section authorizes the Commission to waive the requirement of radiotelegraph installations under certain circumstances.

The Commission held that the circumstances did not warrant a waiver and that the matter was largely a question of congressional policy.

The witnesses who will appear on behalf of the Commission and the interested parties undoubtedly will present for the record a detailed history of the background of this legislation, and therefore I shall call to the witness stand—before we do that, let me first call to the witness stand in keeping with the traditions of the subcommittee, the Members of Congress interested. I believe Mr. Friedel of Maryland, the author of one of the bills, will be recognized first.

Mr. Friedel?

STATEMENT OF HON. SAMUEL N. FRIEDEL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Mr. FRIEDEL. Mr. Chairman and members of the committee, I am glad to have an opportunity to appear before your subcommittee this morning to say a few words in support of my bill, H.R. 8602, and a companion bill, H.R. 8508, to amend the Federal Communications Act.

As this law is presently written, it reflects the judgment of the Congress some 25 years ago in favor of radiotelegraph as a means of communication in emergencies for ships on coastwise voyages as well as those on international voyages. My bill will change that judgment with respect to coastwise voyages in the Hawaiian Islands. It provides that cargo vessels in excess of 1,600 tons may have radiotelephones aboard instead of radiotelegraph when they are on voyages between the Hawaiian ports which do not take the ships more than 50 miles from land.

The development of radiotelephones during and since World War II, clearly makes this a better means of communication than radiotelegraph in an emergency when there is no question that radiotelephone contact can be made because it allows communication by voice.

In Hawaiian waters, radiotelephone contact on a 24-hour basis is assured because of Coast Guard and commercial installations spread out over the islands.

From the standpoint of safety, there is no doubt that radiotelephone communication is more efficient than radiotelegraph if ships are within 50 miles of land.

It is my understanding that the Federal Communications Commission has no objection to revising the present law as provided in my bill and I trust this subcommittee will take favorable action on it. This is simply a question of bringing an old law up to date to meet the requirements of modern vessels.

Mr. ROGERS of Texas. Thank you, Mr. Friedel. Mr. Moss, do you have any questions?

Mr. MOSS. No questions, Mr. Chairman.

Mr. ROGERS of Texas. Mr. Broyhill?

Mr. BROYHILL of North Carolina. No questions.

Mr. ROGERS of Texas. Mr. Kornegay?

Mr. KORNEGAY. No questions, Mr. Chairman.

Mr. ROGERS of Texas. Thank you, Mr. Friedel, for your statement.

Mr. FRIEDEL. It is brief. I understand it will be elaborated on by other witnesses because I have to run to another committee. Thank you very much.

Mr. ROGERS of Texas. Thank you very much for your statement. The Chair will now recognize Mr. Jarman.

STATEMENT OF HON. JOHN JARMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. JARMAN. Mr. Chairman, as you have indicated, I introduced an identical bill to H.R. 8508, and I want to thank the chairman and the subcommittee for giving early consideration to these bills.

Mr. Chairman, the Communications Act of 1934 requires cargo vessels over 1,600 tons to have radiotelegraph aboard for communications. H.R. 8508, now pending in the House of Representatives, would amend the Communications Act to permit the use of radiotelephone instead of radiotelegraph aboard such vessels when they are on voyages between Hawaiian ports that do not take the ships more than 50 miles from land.

I support this amendment because I am satisfied that radiotelephone is better than radiotelegraph for communications purposes in Hawaiian waters.

More than 25 years have elapsed since the Communications Act provisions were enacted. In this time, radiotelephone has become almost the exclusive means of communication ship to shore and between ships in Hawaiian waters. Moreover, the Coast Guard and the Hawaiian Telephone Co., maintain facilities which assure contact by radiotelephone on the distress frequency anywhere in Hawaiian waters on a 24-hour-a-day basis.

Experience over the years has established the fact that, where contact is assured, radiotelephone is better than radiotelegraph as a communications system for safety purposes aboard ship because it saves time. That is why it should be sanctioned for use on all cargo vessels in Hawaiian waters on voyages between Hawaiian ports. H.R. 8508 will do this.

Thank you.

Mr. ROGERS of Texas. Thank you, Mr. Jarman.

Mr. Moss, any questions?

Mr. MOSS. No questions.

Mr. ROGERS of Texas. Mr. Broyhill?

Mr. BROYHILL of North Carolina. No questions.

Mr. ROGERS of Texas. Mr. Kornegay?

Mr. KORNEGAY. No questions.

Mr. ROGERS of Texas. Mr. Jarman, one question. Have you given any thought to the extension of this exemption—and I know you have given quite a lot of thought to this—of trips to other areas, say along the west coast, rather than confining it to Hawaiian waters?

Mr. JARMAN. The background I have, Mr. Chairman, is mainly in terms of the need in the Hawaiian area but I would think certainly that it would follow that ships operating within the indicated area from

shores in other waters would logically be able to use the radiotelephone more effectively.

Mr. ROGERS of Texas. Thank you.

Mr. KORNEGAY. Mr. Chairman, let me ask a question since you gave me the opportunity a minute ago. That is, Mr. Jarman, whether or not the ship would be more than 50 nautical miles from the nearest land at any time in cruising in and around the Hawaiian Islands.

Mr. JARMAN. Distance from any one of the islands?

Mr. KORNEGAY. Yes. In other words, going from the Island of Hawaii to the Island of Oahu.

Mr. JARMAN. The island chain, of course, is much longer than 50 miles, but a ship would be within 50 miles of one of the islands.

Mr. KORNEGAY. Of one of the islands at any point in the islands.

Mr. JARMAN. That is my understanding.

Mr. KORNEGAY. In other words, then, throughout the whole State of Hawaii and the surrounding waters, the telephone would be used rather than the telegraph.

Mr. JARMAN. Yes. That is my understanding.

Mr. KORNEGAY. Thank you.

Mr. ROGERS of Texas. Thank you.

Mr. JARMAN. Thank you, Mr. Chairman.

Mr. ROGERS of Texas. The next witness is our colleague on the full committee, the Honorable Willard S. Curtin. Mr. Curtin, we will be glad to hear you at this time.

STATEMENT OF HON. WILLARD S. CURTIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. CURTIN. Mr. Chairman and members of the subcommittee, I appear before you today in support of H.R. 8542, as well as the four bills introduced by my colleagues on this same subject and presently pending before this subcommittee. I feel that the legislation encompassed in these bills is certainly worthy of very prompt and affirmative action.

As you know, H.R. 8542 will amend the Communications Act of 1934 to permit all cargo vessels, on a voyage between Hawaiian ports on which the ships do not go more than 50 miles from land, to carry radiotelephone aboard instead of radiotelegraph to use as a safety communications system.

Since the adoption of the safety-at-sea provisions of the Communications Act more than 25 years ago, when radiotelephone was in its infancy, we have had time to learn that radiotelephone is better than radiotelegraph for safety communications in circumstances where contact by radiotelephone is assured, because voice communication saves time and allows a better control of the situation. In 1954 United States and Canada adopted radiotelephone as the safety communications system on the Great Lakes, and this system has proved to be successful. The communications system used in the air is by radiotelephone.

In Hawaiian waters, where the radiotelephone frequencies are monitored 24 hours a day by the Coast Guard and the telephone company and where radiotelephone has almost completely replaced radiotelegraph for normal communication between ships and ship to shore, it is time we recognized the fact in the law that radiotelephone makes

the better safety system in these waters, and that is what the amendment will do.

There would seem to be no reason why this safety measure could not be used now for ships in Hawaiian waters. In the event that a need should exist for such service in other coastal waters, it would seem to me that this would be a matter for legislation to be considered at that time. At present, however, I would respectfully request favorable action on this legislation at this time.

Thank you very much for your attention.

Mr. ROGERS of Texas. Are there any questions? If not, we appreciate your appearance and testimony, Mr. Curtin.

Mr. CURTIN. Thank you, Mr. Chairman.

Mr. ROGERS of Texas. Our next witness is the Honorable Robert T. Bartley, Commissioner, Federal Communications Commission. Commissioner Bartley, it is nice to have you before the subcommittee.

Mr. BARTLEY. Thank you, Mr. Chairman. I have with me today members of the staff. I will give the names of the staff members to the reporter. If I need any background, I will call on them.

Mr. ROGERS of Texas. Fine.

STATEMENT OF ROBERT T. BARTLEY, COMMISSIONER, FEDERAL COMMUNICATIONS COMMISSION; ACCOMPANIED BY GERARD M. CAHILL, ASSOCIATE GENERAL COUNSEL; IRVING BROWNSTEIN, ASSISTANT CHIEF, SAFETY AND SPECIAL RADIO SERVICES BUREAU; EVERETT HENRY, CHIEF, MARINE DIVISION; HAROLD WOODYARD, CHIEF, SAFETY FACILITIES BRANCH, MARINE DIVISION; AND JOHN D. HARDY, ATTORNEY, GENERAL COUNSEL'S OFFICE

Mr. BARTLEY. Mr. Cahill, Mr. Brownstein, Mr. Henry, Mr. Woodyard, and Mr. Hardy.

I have a prepared statement, Mr. Chairman, if you will permit me to read it.

Mr. ROGERS of Texas. You may proceed, Mr. Bartley.

Mr. BARTLEY. The Commission has asked me to present its statement and to testify for it on identical bills H.R. 8508, 8542, 8591, 8602, and 8779 introduced by Congressmen Walter Rogers, Curtin, Jarman, Friedel, and O'Brien of New York. These bills would amend section 356 of the Communications Act of 1934, as amended, to permit cargo ships, regardless of tonnage, on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations.

Title III, part II, of the Communications Act (secs. 351 and 355) provides, among other things, that any U.S. cargo ship over 500 gross tons, which is navigated in the open sea outside of a harbor or port, must be equipped with an efficient radio installation operated by a qualified operator or operators. In addition, that part (sec. 356) also provides that cargo ships of less than 1,600 gross tons may, in lieu of a radiotelegraph installation, carry a radiotelephone installation.

The Commission now has the statutory authority under section 352(b)(2) to grant such an exemption to any cargo ship over 1,600

gross tons which in the course of its voyage does not go more than 150 nautical miles from the nearest land, provided the Commission considers such a radio installation unreasonable or unnecessary for the safety of life and property purposes. It appears, therefore, that the principal effect of these bills would be categorically to exempt from the radiotelegraph requirements of sections 351 and 355 all cargo vessels which ply the waters between the Hawaiian ports and do not go more than 50 nautical miles from the nearest island. They woud be required, however, to be equipped with radiotelephone installations.

As recently as June 1963, the Commission considered the very problem with which these bills are concerned. We are submitting for the record copies of our report and order and our memorandum opinion and order in this proceeding.

(The documents referred to follow:)

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

FCC 63-211
31298

IN THE MATTER OF APPLICATION FOR EXEMPTION FROM THE RADIOTELEGRAPH PROVISIONS OF TITLE III, PART II OF THE COMMUNICATIONS ACT OF 1934, AS AMENDED, FILED IN BEHALF OF A PROPOSED UNITED STATES CARGO VESSEL WHEN NAVIGATED IN THE OPEN SEA

REPORT AND ORDER

By the Commission:

1. The Commission is in receipt of an application (File No. X-722) filed by Matson Navigation Company, 215 Market Street, San Francisco 5, California, for exemption from the radiotelegraph requirements of Title III, Part II of the Communications Act of 1934, as amended, in behalf of a proposed United States cargo vessel to be operated in the Hawaiian interisland service.

2. The application states that the proposed cargo vessel will be of approximately 2900 gross tons, and will be navigated during all seasons of the year between Hilo, Hawaii and Kahului, Maui, a route distance of 123 miles; between Kahului and Honolulu, Oahu, a route distance of 92 miles; and between Honolulu and Hanamaulu, Kauai, a route distance of 95 miles. On these voyages, the vessel will be navigated in the open sea at a maximum distance of 35 miles from nearest land.

3. Title III, Part II of the Communications Act of 1934, as amended, requires that cargo ships of 1,600 gross tons and upward navigated in the open sea shall be equipped with a radiotelegraph installation in charge of a qualified radiotelegraph operator. In lieu of the required radiotelegraph installation, applicant proposes to equip the vessel with two radiotelephone installations, one of which will be maintained as a standby for emergency use. Each of these installations would comply with the Commission's rules applicable to radiotelephone installations required to be provided on United States cargo vessels of 500 to 1,600 gross tons subject to the radiotelephone provisions of Title III, Part II of the Communications Act.

4. As reasons for exemption from radiotelegraph provisions, applicant states that (1) the U.S. Coast Guard maintains a highly organized air and sea search and rescue service in the Hawaiian Islands and has at its disposal many high speed craft, (2) the speed of the proposed cargo vessel will be only 11 knots, and this factor would limit the vessel's ability to act efficiently in going to the aid of a remote vessel in distress, and (3) it will be possible for the proposed vessel to communicate with land by radiotelephone at any point on its route.

5. Section 352(b)(2) of the Communications Act of 1934 provides that the Commission may, if it considers that the route or the conditions of the voyage or other circumstances are such as to render a radio installation unreasonable or unnecessary for the purposes of Title III, Part II of said Act, exempt cargo ships from the provisions of Title III, Part II when such ships are navigated

not more than 150 nautical miles from the nearest land. Inasmuch as, according to applicant, the proposed vessel will be navigated not more than 35 miles from the nearest land on the above-described voyages, the vessel comes within the class of vessels which may, insofar as distance from the nearest land is concerned, be considered for exemption.

6. In the absence of exceptional circumstances, radiotelegraphy is the required mode of maritime safety communication for cargo vessels of 1,600 gross tons and upwards while such vessels are navigated in the open sea. Applicant has made no showing that it would be impracticable for the proposed vessel to comply with the compulsory radiotelegraph requirements of Title III, Part II of the Communications Act. The proposed vessel would be regularly operated in waters that are adjacent to the normal ship routes plied by radiotelegraph equipped ships. Therefore the proposed vessel should, in accordance with the purposes of Title III, Part II of the Act, be in a position to communicate directly with such radiotelegraph equipped ships for the purpose of summoning aid from or furnishing aid to them. The provision on board the proposed vessel of a radiotelephone installation as the sole means of safety communication would not, in the light of the character of its voyages and the routes involved, be an acceptable substitute for the radiotelegraph installation required by law.

7. In view of the foregoing, it is concluded that the circumstances of operation of the proposed vessel do not warrant a finding by the Commission that the route or conditions of the voyages or other circumstances are such as to render a radiotelegraph installation aboard the proposed vessel unreasonable or unnecessary while it is navigated on the above-described voyages.

8. Accordingly, It Is Ordered, That the application for exemption filed in behalf of the proposed vessel is hereby Denied.

FEDERAL COMMUNICATIONS COMMISSION,
BEN F. WAPLE, *Acting Secretary.*

Adopted: March 6, 1963.
Released: March 8, 1963.

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

FCC 63-519
35894

IN THE MATTER OF REQUEST FOR RECONSIDERATION OF PREVIOUS DENIAL OF EXEMPTION FROM THE RADIOTELEGRAPH PROVISIONS OF TITLE III, PART II OF THE COMMUNICATIONS ACT OF 1934, AS AMENDED, FILED OF BEHALF OF A PROPOSED UNITED STATES CARGO SHIP OF APPROXIMATELY 2,900 GROSS TONS NAVIGATED IN THE OPEN SEA.

MEMORANDUM OPINION AND ORDER

By the Commission:

1. The Commission has before it for consideration a petition for reconsideration filed April 5, 1963, by Matson Navigation Company (Matson), 215 Market Street, San Francisco 5, California.

2. By Report and Order released March 8, 1963, (FCC 63-211), the Commission denied an application for exemption from the radiotelegraph requirements of Tite III, Part II of the Communications Act of 1934, as amended, filed by Matson in behalf of a United States cargo vessel proposed to be constructed for operation in the Hawaiian interisland service. Title III (Part II of the Communications Act requires cargo ships of 1,600 gross tons and over navigated in the open sea to be equipped with a radiotelegraph installation in the charge of a qualified radiotelegraph operator. The Commission concluded that the circumstances of operation of the proposed vessel, as set forth in the request for exemption, did not warrant a finding by the Commission that the proposed route or conditions of the voyages or other circumstances are such as to render a radiotelegraph installation aboard the proposed vessel unreasonable or unnecessary while it is navigated on the proposed voyages.

3. Matson seeks reconsideration of the above-mentioned Report and Order and requests that its application for exemption be granted, or in the alternative, requests the Commission to reopen the proceeding looking toward that end if the Commission wishes to be further advised in the matter. In support of its petition, Matson states it now supplies a cargo container service between Los

Angeles and San Francisco and Honolulu and it now proposes to extend this service to three additional islands in Hawaii. The extension in service is proposed to be furnished by an experimental, automated, self-propelled container vessel. Matson further states a unique opportunity presents itself for the development and construction of an efficient ocean carrier of advanced design which can be completely operated by a total crew of four men. Such a vehicle, it is stated, would not only transport containers at low cost, but would permit detailed evaluation of the many new automation concepts which may later be employed in the larger ships of the Matson fleet. It is alleged the entire maritime industry could benefit from the development of this vessel since the techniques are not necessarily peculiar to Matson operations. The project, Matson states, is supported by the Federal Maritime Administration.

4. The United States Coast Guard, in a letter dated February 8, 1963, advised Matson that the minimum crew requirements would be the following licensed officers: one master, one chief mate, two third mates, one chief engineer and one third assistant engineer. The Coast Guard has previously advised Matson that the determination with respect to a full-time Radio Officer would have to be made by this Commission.

5. Matson submits that the route of the proposed experimental vessel, the conditions of its voyage, and other circumstances attending the project are such as to render a radiotelegraph installation unreasonable and unnecessary. In support of this contention, Matson states the self-propelled automated vessel is proposed to replace a contemplated tug and towed barge operation over the same route. The automated vessel, it is stated, would carry at least the radio equipment required to be aboard a tug in the type of operation which the barge is designed to replace. The proposed vessel would be equipped with two radiotelephone units for communications with shore stations and vessels equipped with similar equipment; one radio receiver continuously monitoring 2182 kc/s while the vessel is at sea; and one autoalarm continuously monitoring 500 kc/s while the vessel is at sea.

6. Matson states that the vessel would maintain contact with one of the coast radiotelephone stations at all points of its route. While at sea, 2182 kc/s, the radiotelephone distress frequency, would be monitored continuously by a radio receiver and 500 kc/s, the radiotelegraph distress frequency, would be monitored by an autoalarm receiver. It is stated this would permit the relay of any distress calls intercepted to land radiotelephone stations, thus alerting the sea-air rescue service. It is further stated that within the limit of its capacity to do so the vessel will render aid, communicating directly by radiotelephone or via shore stations when necessary.

7. Matson states the proposed vessel will be at sea only 56.6 hours per week and if the vessel is equipped for radiotelegraphy, the operator would be required to be on watch only 20.5 hours per week.

8. Reference is made by Matson to the Commission's Order dated April 1, 1963, (FCC 63-308), which granted exemption to the passenger vessel *Taku* wherein the Commission said the *Taku* will, at any point on its route, be within reliable radiotelephone communication range of one or more United States Coast Guard radiotelephone stations which maintain continuous watch on 2182 kc/s and within range of similarly equipped ships, public coast stations and other government coast stations. Matson also refers to the Commission's Order denying the application for exemption of the vessel *Raymond J. Bushey* (23 RR 580, 582) wherein the Commission relied, Matson states, in large part upon the fact that the vessel could not maintain reliable continuous radiotelephone communication with coast stations.

9. Matson states that in the *Raymond J. Bushey* case the Commission indicated that design and function limitations of a vessel were highly relevant to the issue of exemption. In this connection, Matson states the proposed self-propelled vessel for which it seeks exemption will be of revolutionary design for a special experimental purpose, namely, to combine and to automate the functions now performed by a tug and towed container barge. The vessel is designed to be operated by four men, although initially the Coast Guard will require a crew of six, and the speed is eleven knots. Within the limits of its special design and purpose, Matson states, the proposed vessel will be able to make its fullest practicable contribution to the safety system in the waters around Hawaii by the use of radiotelephone equipment.

10. Matson attempts to show that the conditions of the voyage and other circumstances attending the proposed vessel are such as to render a radiotelegraph

installation unreasonable and unnecessary by equating the proposed vessel to a tug and a vessel in tow. It is to be noted that neither a tug under 500 gross tons nor a vessel in tow are required to be fitted with a radio installation. But such an argument, with equal logic, could be applied to many oceangoing vessels now fitted with radiotelegraph installations. Recognition of such contention would be contrary to the clear congressional intent of Title III, Part II of the Communications Act of 1934, as amended, that cargo ships of over 1600 gross tons navigated in the open sea, whether on coastwise or international voyages, should be equipped for participation in the radiotelegraph safety system and constitute a pool of mutual assistance whose effectiveness would be in direct ratio to the number of vessels participating therein.

11. In the absence of a qualified radiotelegraph operator, provision of a radiotelegraph auto alarm would appear to be of little value and, in some instances could conceivably be undesirable. This is because an unskilled operator could not distinguish between the auto alarm's response to a bona fide auto alarm signal and the actuation of the auto alarm due to equipment failure, maladjustment or a simulated auto alarm signal. A false response of the auto alarm and a subsequent notification to a coast station obviously could lead to an unwarranted and undesirable mobilization of search and rescue forces.

12. Matson's observations concerning the manual watch by a radiotelegraph operator assume that only the minimum watch required by the rules would be maintained, i.e., for at least one-third of each day or portion of each day that the vessel is navigated in the open sea. A single weekly voyage is composed of a number of segments, portions of which fall on each day of the week. On four days of each week the vessel is at sea for periods in excess of 8 hours. It would appear that, at the master's discretion, a watch by operator could be maintained 44 of the 56.6 hours the vessel is scheduled to be at sea without exceeding a watch of 8 hours in the aggregate on any one day. In any event, a qualified operator would be available to deal with any radiotelegraph distress call, either upon being alerted by the auto alarm while off watch or received aurally while on watch.

13. Matson makes reference to the exemption granted the vessel *Taku* and the fact that its proposed vessel, like the *Taku*, will be able to maintain contact with coast stations at all points on its route. Assuming the latter to be true, Matson fails to take notice of the differences in the voyages of the two vessels. The *Taku* is navigated solely on inland waters at a maximum distance of six miles from the nearest land while the proposed vessel would be navigated in the open sea and would at times be approximately 35 miles from the nearest land. The voyages of the two vessels are so significantly different that the similarities of the two cases are not meaningful.

14. Finally, Matson refers to the matter of exemption of the vessel *Raymond J. Bushey*, and infers that its proposed vessel, unlike the *Bushey*, would be of such a design that its participation in the radiotelegraph safety system would be of minimal value. In the *Bushey* case, the Commission said:

"A review of the legislative history in connection with the radiotelegraph provisions of Title III, Part II of the Communications Act of 1934 shows clear Congressional intent that ships of over 1600 gross tons navigating in the open sea, whether on coastwise voyages or on international voyages, should constitute a pool of mutual assistance whose effectiveness would be in direct ratio to the number of vessels participating therein. It was evident, however, that minimum uniformity in the radio equipment of these vessels was necessary if the plan of mutual assistance was to be carried into force.

"Title III, Part II of the Communications Act expressly recognizes this principle of minimum equipment uniformity and specifies that vessels of 1,600 gross tons and over must be uniformly equipped for participation in a radiotelegraph safety system. The Commission has consistently applied this principle of minimum uniformity to all ships which are subject to the radiotelegraph safety system. Each such ship which is regularly navigated in the open sea is compelled to meet these requirements so long as circumstances indicate that its permanent participation in summoning or rendering assistance would be of substantial value to the system and so long as inherent size, space, or design limitations did not render its participation peculiarly impracticable or impossible. The necessity for a principle of equal treatment for all such ships similarly situated is obvious in the absence of any method of determining in advance which ship in the system might at any given instant be required to give or receive assistance."

This language applies equally well to Matson's proposed vessel. The fact that the proposed vessel is of a "revolutionary design for a special experimental purpose" does not appear to limit its usefulness as an element in the radiotelegraph safety system. Despite the alleged limitations of a small crew and a speed of eleven knots, Matson has not made a convincing showing that the proposed vessel is of such a design that an exemption from the radiotelegraph requirements is warranted.

15. Matson contends that its experimentation in automation should not be burdened by a requirement for installing and manning a radiotelegraph installation. The economic considerations are ever present, and the conditions in the instant case are no more persuasive than in previous cases where exemptions have been denied.

16. Accordingly, it is concluded that Matson has failed to show that the proposed vessel could not effectively participate in the established pool for the mutual safety of radiotelegraph equipped ships or that there are exceptional circumstances involved herein which would warrant a departure from the Commission's policy of adherence to the proven radiotelegraph safety system for cargo vessels over 1,600 gross tons navigated in the open seas.

17. It appears that applicant's case for exemption relates in large measure to economic factors such as the expense of employing a qualified radiotelegraph operator, and is in reality a case for radiotelephony and against radiotelegraphy for the coastwise maritime radio safety system. If the Commission were to grant the exemption, the action would have to be based upon a finding for a radiotelephone safety system and against a radiotelegraph safety system. Such a finding, applied on a general basis, would be tantamount to an administrative reversal by the Commission of the legislative judgment expressed in Title III, Part II, vis., that in the absence of exceptional circumstances radiotelegraphy is the preferred and required mode of maritime safety communication for vessels of over 1,600 gross tons.

18. In view of the foregoing, it is ordered, That the Petition for Reconsideration filed by Matson Navigation Company is denied.

FEDERAL COMMUNICATIONS COMMISSION,
BEN F. WAPLE, *Acting Secretary.*

Adopted: June 5, 1963.
Released: June 11, 1963.

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C.

FCC 64-21
45239

IN THE MATTER OF APPLICATION FOR EXCEPTION FROM THE RADIOTELEGRAPH PROVISIONS OF TITLE III, PART II OF THE COMMUNICATIONS ACT OF 1934, AS AMENDED, FILED ON BEHALF OF THE UNITED STATES CARGO SHIP ALASKA SPRUCE, 2447 GROSS TONS

Appearances

William F. Ragan, on behalf of J. J. Tennant Company; *Maurice J. De Pont*, on behalf of the Chief, Safety and Special Radio Services Bureau, Federal Communications Commission; *Louis Steinberg*, on behalf of the American Radio Association.

(Docket No. 15182)

DECISION

By a Panel of the Commission:[1] Commissioners Hyde (Panel Chairman), Cox and Loevinger.

Preliminary Statement

1. This matter comes before the Commission on a petition for rehearing submitted by the applicant, J. J. Tennant Company, following the Commission's denial[2] of petitioner's application for exemption of the petitioner's ship, *Alaska*

[1] 47 USC 5(d)(1).
[2] Memorandum Opinion and Order, June 5, 1963 (FCC 63-521).

Spruce from the radiotelegraph requirements of 47 USC 351. The background of the matter is fully set forth in the cited Memorandum Opinion and Order and need not, therefore, be repeated. Briefly stated, *Alaska Spruce* is required by law to carry certain radiotelegraph equipment and operators while navigating in the open sea. Petitioner had represented that, its traffic being Pacific coastwise and not more than 20 miles from land, requiring the prescribed equipment and operators was unreasonable or unnecessary and it was therefore entitled to exemption under 47 USC 351(b).

2. The Commission designated the matter for oral argument before a panel of Commissioners.[3] Oral argument was held on November 7, 1963, before Commissioners Hyde (Panel Chairman), Cox and Loevinger. Appearances were filed and oral argument made by J. J. Tennant Company, Chief, Safety and Special Radio Services Bureau, and the American Radio Association. Supplementary briefs were filed by American Radio Association and J. J. Tennant Company.

DISCUSSION

3. We have carefully reviewed the matters of record in this proceeding and are of the opinion that the relief requested should be denied. The statute manifests the intention of Congress that virtually all ships, such as petitioner's, of the tonnage and voyage pattern should carry such radiotelegraph equipment and operators, subject to exemption upon a proper showing. It is therefore clear that the burden of justifying an exemption is on petitioner.

4. Petitioner's reasons are, in our opinion, entirely economic. He has claimed that his competitors do not, because of the type of seagoing equipment they use, have to carry such radiotelegraph apparatus or operators and hence their expenses are less, or, reciprocally that his are greater. But we do not believe that Congress, when it used the word "unreasonable" in the statute, was referring to economic burden or competitive advantage. On the contrary, all shipping could operate more cheaply with none of the many types of safety devices now used, but to state such a proposition as justification for eliminating their use is to refute it.

5. Petitioner claims that his radiotelephone equipment is more useful in the circumstances under which he operates. If this be so, it is in his interest to carry and operate the same voluntarily,[4] but such use of radiotelephony cannot justify an exemption from the mandatory use of radiotelegraphy required by the statute. It was suggested in oral argument that radiotelephony has made great strides since the adoption of the pertinent portions of the statute and the mandate must be reconstrued in this light. If this be so (and we refrain from an opinion), Congress may wish to re-examine the statute. But the change sought, if it be on the basis of technical advances in radiotelephony, is of the broad scope which should be by legislation—not on a case-by-case series of exemptions.

6. Our allowances of previous exemptions were referred to in oral argument (Tr. 18, *et seq*). Such exemptions have been granted to vessels which performed very limited open sea voyages (New York City garbage-dumping scow), were ill-adapted to rescue work (semi-permanently moored oil well drilling ships), or which could not reasonably carry the necessary radiotelegraph equipment (Great Lakes tanker with limited fair-weather operation in the Atlantic). Were we to adopt petitioner's reasoning, apart from arguments concerning his economic burden, we should find it difficult, if not impossible, to avoid granting such exemptions to all coastwise shipping, a virtual nullification of the statute *pro tanto*. We believe that if such a change is to be made, it should be by legislation—not our exemption process. Petitioner has failed to justify his request for an exemption.

Accordingly, it is ordered, This 14th day of January, 1964, That (a) Motions to Correct Transcript[5] filed by the parties herein Are Granted; and (b) That the Petition for Rehearing of J. J. Tennant Company, Is Denied.

FEDERAL COMMUNICATIONS COMMISSION.
BEN F. WAPLE, *Secretary*.

Released: January 14, 1964.

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[3] Order, October 3, 1963, FCC 63-892, 28 FR 10934.
[4] *The T. J. Hooper* (C.C.A.-2d; 1932), 60 F. 2d 737.
[5] Motions to Correct Transcript have been filed by the Chief, Safety and Special Radio Services Bureau, J. J. Tennant Company, and the American Radio Association.

Mr. BARTLEY. Matson Navigation Co. filed for an exemption under section 352(b)(2) of the Communications Act from the radiotelegraph requirements of title III, part II of the Communications Act, in behalf of a proposed U.S. cargo vessel to be operated in the Hawaiian interisland service.

The Commission denied the application for exemption by report and order adopted March 6, 1963 (FCC 63-211). Thereafter, on June 5, 1963, it denied a petition for reconsideration of that report and order (FCC 63-519) and in so doing said:

> Such a finding (for a radiotelephone safety system and against a radiotelegraph safety system) applied on a general basis, would be tantamount to an administrative reversal by the Commission of the legislative judgment expressed in title III, part II, viz., that in the absence of exceptional circumstances radiotelegraphy is the preferred and required mode of maritime safety communication for vessels of over 1,600 gross tons.

In 1936 the United States ratified the 1929 Safety of Life at Sea Convention, which established minimum standards for vessels on international voyages. Part II, title III of the Communications Act was first enacted in 1937 (Public Law 97, 75th Cong., 1st sess., 50 Stat. 192). The dominant congressional purpose behind this legislation was to promote to the highest level the safety of life and property on the high seas by enforcing certain requirements as to radio apparatus and radio operators. The effect of this legislation was to apply the same standards to all U.S. vessels over 1,600 gross tons with no distinction being made between coastwise and international voyages. (S. Rept. 196, 75th Cong., 1st sess., p. 2; H. Rept. 686, 75th Cong., 1st sess., pp. 2-3.)

The main reason for congressional refusal to make a distinction between cargo vessels making coastwise voyages and international voyages was that radio telegraph would be necessary not only to enable the particular vessel to obtain assistance in case of emergency, but also to receive distress messages from, and to render assistance to, other vessels which carry radiotelegraph (see H. Rept. 686, 75th Cong., supra).

This principle that all vessels over 1,600 gross tons should be uniformly equipped for participation in a radiotelegraph safety system has been generally applied by the Commission. As we said in the memorandum opinion and order released July 27, 1962, in the *Bushey* case:

> * * * Each such ship which is regularly navigated in the open sea is compelled to meet these requirements so long as circumstances indicate that its permanent participation in summoning or rendering assistance would be of substantial value to the system and so long as inherent size, space, or design limitations did not render its participation peculiarly impracticable or impossible. The necessity for a principle of equal treatment for all such ships similarly situated is obvious in the absence of any method of determining in advance which ship in the system might at any given instant be required to give or receive assistance (FCC 62-821).

It may be that developments in radiotelephone equipment and use techniques have altered safety communication requirements since adoption of title III, part II of the Communications Act.

Radiotelephony is now recognized by the International Convention for the Safety of Life at Sea as an appropriate safety communication system for cargo ships of 500 to 1,600 gross tons when navigated on international voyages, and by title III, part II of the Communi-

cations Act for such ships when navigated in the open sea. Even greater recognition is accorded to maritime telephony by Canada, which requires cargo ships of 500 to 5,000 gross tons to be fitted with two 3-megacycle radiotelephone installations, capable of at least 50 watts antenna power, when such ships are navigated on any voyage, other than an international voyage, on the seacoasts of Canada. Cargo ships of 5,000 gross tons and upwards navigated on any voyage of not more than 200 nautical miles from one place to another place on the seacoasts of Canada may elect to install either radiotelephone equipment or radiotelegraph equipment. Canadian rules appear to indicate also that despite the requirements of the Safety of Life at Sea Convention, cargo ships of 1,600 to 5,000 gross tons engaged on international voyages are also given this option, provided they do not go more than 100 miles from the nearest land.

While it may be that the strides made by radiotelephony warrant reconsideration of communication safety requirements, particularly with respect to ships operating near the coast, such a basic change, we feel, should be by legislation rather than effectuated through administrative exemption to a clearly established congressional policy (In the Matter of *Alaska Spruce*, Docket No. 15182, 36 FCC, pp. 62–63).

In any event, the Commission recommends against the approach of these bills, limited as they are to ships operating in Hawaiian waters, in the absence of an evaluation of the existence, extent, and significance of any differences between that area and other coastal areas. And if the policy is to be generally changed, its scope should include a consideration of operations in all our coastal waters and an inquiry as to the adequacy of radiotelephony for the safety of vessels engaged in coastwise voyages as well as the interrelationship, if any, of radiocommunications on such vessels and those on international voyages, which carry radiotelegraph, for safety at sea in general.

Any action in this broader area should be undertaken only after a complete study of the matter, and the Commission recommends that final action on H.R. 8508 and similar bills be withheld pending the outcome of such an overall study. If the Congress feels it is warranted, the Commission would be happy to cooperate fully in any congressional study of the matter, or to undertake such a study solely or in conjunction with other appropriate Government agencies.

In the meantime, however, only those vessels which are able to make a proper showing under the provisions of section 352(b) of the act, would be exempted from the requirement of carrying radiotelegraph equipment and radiotelegraph operators and, as has been previously indicated, such exemptions are granted only under exceptional circumstances.

The Budget Bureau advises, Mr. Chairman, that from the standpoint of the administration's program, there is no objection to the submission of this statement.

Mr. ROGERS of Texas. Thank you, Commissioner Bartley, for a concise and excellent statement.

Mr. Moss, do you have any questions?

Mr. Moss. Not at the moment, Mr. Chairman.

Mr. ROGERS of Texas. Mr. Cunningham?

Mr. CUNNINGHAM. No, sir.

Mr. ROGERS of Texas. Mr. Kornegay?

Mr. KORNEGAY. No. Just thank you, Mr. Bartley, for a paper that certainly enlightens me on the subject matter.

Mr. ROGERS of Texas. Mr. Broyhill?

Mr. BROYHILL of North Carolina. No questions, sir.

Mr. ROGERS of Texas. Mr. Bartley, in your studies, in your opinion, on this particular question, which is the safest, the radiotelegraph, or the radiotelephone?

Mr. BARTLEY. I don't think there is one answer to that question. Ships coming in, international ships coming into an area are required to have radiotelegraph, and even on coastwise voyages where the ship, the particular ship involved, say, it is a telephone-equipped ship, it may be perfectly safe from its standpoint, if it can get into communication with the foreign ship. This may be done as they propose here in Hawaii, what we call a crossover method, whereby the ship that has radiotelegraph only could undoubtedly get in touch with the Coast Guard, and the Coast Guard would then get in touch with the other ship, but it wouldn't be a direct communication with that ship. So there is an element of additional risk, but how substantial it is I don't know.

I think generally speaking, you will find that most accidents occur reasonably close, within a few miles of shore, so that from that standpoint it may be that there is an edge on that side for radiotelegraph.

On the other hand, the radiotelephone gives you much better command of the situation. If you have telephone on the bridge, you have got a master who can talk directly with another master and get out of situations. Maybe both are better than one.

Mr. ROGERS of Texas. Well, at that point, are many of the ships equipped with both?

Mr. BARTLEY. Yes, sir. I would say—well, I don't know about "many." But a great number are, yes, sir. All the ships, for example, that ply the Great Lakes coming from foreign ports have telegraph and, when they get to Montreal, if they don't have telephone, they must put it on in order to navigate the Great Lakes. They have had very good success there.

There is one other little matter that needs to be studied here, and this is one that comes up in all international conventions with respect to radiotelephone, and it is called the language barrier. Telegraph, of course, is an international language, and your code tells you what is being said, but in voice communication, we even have a little difficulty between the Yankees and Southerners sometimes.

Mr. ROGERS of Texas. Yes. More besides voice.

Mr. Commissioner, have you granted exemptions in other cases?

Mr. BARTLEY. There have been very, very few exemptions and those only in what we call protected waters. I believe, Mr. Woodyard, isn't that——

Mr. WOODYARD. Only in protected waters on regular voyages. We have granted, none on regular continuous coastwise voyages outside, but we have in two instances granted them for part of the year for a few trips on the east coast where the vessels were especially designed to go through the New York barge canal, and it was very difficult to install telegraph, practically impossible.

Mr. BARTLY. There have been very, very few exemptions.

Mr. ROGERS of Texas. Well, now, in granting those exemptions, what elements are necessary insofar as the Commission is concerned in order to justify an exemption?

Mr. BARTLEY. We have granted none which go into the open sea, except in the case of a garbage dump barge in New York City, which we felt was of no value to other ships at all in case of their distress—any other—Mr. Woodyard?

Mr. WOODYARD. The two that I spoke of, one of which went along the east coast between New York and Philadelphia once a year. It ordinarily would run through the New York State barge canal, and then it made a trip down to Philadelphia about once a year. This had no superstructure at all, and it was built this way in order to get through the canal. It couldn't put on masts or have any radio station in the upper part of the ship.

The other was a similar ship that ran on the east coast for part of the year, a few trips. There were also design problems there.

Also those ships didn't run regularly. If the weather was bad they stayed in, and they stayed in close to shore. They were flat-like barges.

Mr. ROGERS of Texas. Is that the only exemptions that have been allowed in the last 10 years, we will say?

Mr. WOODYARD. That is since 1938. One of those was in 1938 and the other one was several years ago. None are in effect now outside of the ships that go just in and out of the harbor like this garbage dump vessel that Commissioner Bartley was talking about. It just goes out a little beyond the lightship for an hour or so and then comes back into New York harbor.

Mr. ROGERS of Texas. There is something in my mind about some difficulties that arose with regard to the *Thresher* submarine incident that brought into conflict the situation here on radiotelephone and telegraph. Are you familiar with that, Mr. Commissioner?

Mr. BARTLEY. I am not familiar with it, Mr. Chairman. And I doubt if we are—the Coast Guard I think could probably give you more information on that than we can.

Mr. ROGERS of Texas. Now, suppose this measure was adopted. Would that relieve the present ships using radiotelegraph of carrying an extra man, a telegraph operator?

Mr. BARTLEY. They have to have a qualified operator, but they are not the same—the qualifications are not the same for radio telegraph and radio telephone operator.

Mr. ROGERS of Texas. One has to be a telegraph operator. The other one might have to be an interpreter.

Mr. BARTLEY. It helps. Actually he can, I believe, serve in two capacities. I don't think that the radiotelephone operator license necessarily has to be exclusive, the job has to be exclusive to that. I think he can be——

Mr. ROGERS of Texas. One man can be both.

Mr. BARTLEY. Or another member of the crew.

Mr. ROGERS of Texas. But in other words, this legislation wouldn't put radiotelegraphers out of a job unless they happened to have their activities confined solely to knowledge of telegraphy.

Mr. BARTLEY. Well, I think that would depend on what the contracts are. I don't know.

Mr. ROGERS of Texas. Now, let me ask this, Mr. Bartley. Do you have any idea about the cost of telephone as opposed to telegraph?

Mr. BARTLEY. They are pretty much equivalent, I would say, equipmentwise. Telegraph is higher by a factor of 2 or 3. Something like that.

Mr. WOODYARD. That is right.

Mr. BARTLEY. I don't think that——

Mr. WOODYARD. Just roughly the order would be perhaps $10,000 against $1,500 or something like that, or $1,000. That is, telegraph would be the higher.

Mr. ROGERS of Texas. Telegraph would be the higher.

Mr. WOODYARD. Yes. In the order of 10 to 1 almost.

Mr. ROGERS of Texas. Now, the thing that I had in mind, if you required them to carry both, you wouldn't have a double cost there.

Mr. BARTLEY. Well, as he said, the telephone equipment is less. I think primarily it is—the big cost is in personnel.

Mr. ROGERS of Texas. Yes. Now, is part of the telegraph equipment used in the telephone? Part?

Mr. BARTLEY. No.

Mr. ROGERS of Texas. Two separate and distinct operations?

Mr. BARTLEY. That is right.

Mr. ROGERS of Texas. Thank you very much, Mr. Commissioner.

Any other members have any questions? Thank you, Mr. Commissioner.

Mr. BARTLEY. Thank you. I think if I may be excused, we have got a Commission meeting going on, and some of the people I might leave here to bring me up to date.

Mr. ROGERS of Texas. Yes. We thank you for your testimony.

Our next witness will be Mr. James Brown and Capt. R. J. McKenzie, operations superintendent of the Marine Division of Matson Navigation Co.

Captain McKenzie, you and Mr. Brown may come forward.

Did you both have separate statements?

Captain MCKENZIE. Yes, we do.

Mr. ROGERS of Texas. Suppose you give yours first, then, and Mr. Brown can just pull a chair up there where it will be convenient.

STATEMENT OF CAPT. R. J. McKENZIE, OPERATIONS SUPERINTENDENT, MARINE DIVISION, MATSON NAVIGATION CO.; ACCOMPANIED BY JAMES BROWN; HENRY G. FISCHER, ATTORNEY FOR MATSON NAVIGATION CO.; AND P. J. PESSEL, VICE PRESIDENT, MATSON LINES

Captain MCKENZIE. Thank you, Mr. Chairman.

I am Capt. R. J. McKenzie, marine operations superintendent, Matson Navigation Co., 79 South Nimitz Highway, Honolulu, Hawaii. I have been in the employ of Matson Navigation Co. for the past 25 years, serving as a deck officer and master of various ships until I came ashore to my present position of marine operations superintendent in the Hawaiian Islands 7 years ago. I appreciate the opportunity you have given me to testify here today.

The Communications Act of 1934 now prescribes radiotelegraph as the safety communications system aboard cargo vessels in excess of

1,600 tons. H.R. 8508 would amend the Communications Act to permit the use of a radiotelephone safety communications system on voyages of such vessels between Hawaiian ports where the ships do not go more than 50 miles from land. I am here to recommend the adoption of the bill because a radiotelephone safety communications system today is better in Hawaii than a radiotelegraph system. Furthermore, the considerations favoring the passage of the bill have a precedent in the agreement between United States and Canada which in 1954 adopted radiotelephone as the safety communications system for ships on the Great Lakes.

Where contact is assured, radiotelephone is better for safety communications purposes than radiotelegraph because it permits direct voice communication among vessels and land stations, and this saves precious time. It is, of course, this advantage of radiotelephone which makes it the universal safety communications system of commercial and military air transportation where safety is as deep a concern as it is at sea. A dramatic example of this peculiar advantage of radiotelephone appeared in the story of the submarine *Thresher* disaster in the Washington Evening Star of May 16, 1963, from which I quote:

> Shortly before 11 a.m. (Lieutenant Commander) Hecker handed a radiogram to a messenger to take to the radio shack. This message, which set the public part of the *Thresher* drama in motion, read: "Unable to communicate with *Thresher* since 9:17 a.m. (e.s.t.) Have been calling by UQC voice and CW QRS CW every minute, explosive signals every 10 minutes with no success. Last transmission recorded was garbled. Indicated *Thresher* was approaching test depth. My present position 41–43N 64–57W. Conducting expanding search."
>
> *Skylark's* radioman sat down at his trusty Morse transmitting bug and started sending dot-dash signals to shore in the best early 20th century fashion. Atmospheric conditions gave sender and transmitter trouble, and the communications center at the New London submarine base had to break in several times to request repetitions.
>
> Had *Skylark* possessed ship-shore telephone facilities, she could have conversed with the shore directly through the Boston marine operator, as newsmen aboard a destroyer in the area did 2 days later, moving thousands of words of copy by voice. *Skylark's* dit-da-dit transmission mode consumed 1 hour 58 minutes in sending Hecker's first brief message to New London.

When Congress, more than 25 years ago, chose radiotelegraph as the safety communications system for ships on voyages between American ports, it was not because it denied the advantage of voice communication. The choice was dictated by the fact that there was no reasonable assurance at the time that contact could be made by radiotelephone in a safety situation. Radiotelephone equipment was still in a developmental state and few stations existed which could monitor a distress frequency for radiotelephone; indeed, a radio telephone distress frequency did not even exist then.

In Hawaiian waters today, 25 years later, the situation is very different. Radiotelephone contact for safety purposes in Hawaii is assured on a continuous 24-hour-a-day basis by reason of the stations in the area monitoring the distress and ship-to-shore frequencies, and in addition, by reason of the complex of vessels almost exclusively using radiotelephone for communication in Hawaiian waters. Because such cantact is now so reliable and because radiotelephone makes a better safety communications system when this is so, a radiotelephone safety system should be adopted for all cargo vessels in Hawaiian waters as it was for the Great Lakes in 1954.

To demonstrate the reliability of radiotelephone contact for safety purposes in Hawaiian waters, I would like the record to show the extent to which the radiotelephone distress frequency, 2182 kilocycles, is monitored there. I have a letter on the matter from Rear Admiral Knapp, commander of the 14th Coast Guard District, which I would like to read:

DECEMBER 19, 1963.

MATSON NAVIGATION CO.,
Honolulu, Hawaii
(Attention: Capt. R. J. McKenzie, marine operations superintendent).

DEAR SIR: In reply to your letter of December 11, I am very happy to supply whatever useful information that can be provided by my staff. The Coast Guard has four 95-foot patrol boats in the Hawaiian area that are equipped with radiotelephone.

The equipment used on these boats are 75-watt transmitter-receiver units of the type URC–34. By proper frequency utilization, and occasionally relaying traffic through another unit, satisfactory communication is achieved with these vessels.

The Coast Guard has receivers and stand a continuous guard on 2182 at the following locations within the Hawaiian Islands:

Primary Radio Station (NMO), Wahiawa—Remote receiver at Makapuu.
Loran Station Hawaii (NR05), Upolu Point.
Loran Station Kauai (NR02), Kauai.
Loran Station Molokai (NM07), Molokai.
Loran Station French Frigate Shoals (NR04).

Coast Guard floating units when within 100 miles of land are also required to stand a continuous guard on 2182 kilocycles when underway.

I sincerely hope the information supplied herein will be beneficial to you in selecting the proper radio equipment for your operation.

Sincerely yours,

C. C. KNAPP,
Rear Admiral, U.S. Coast Guard,
Commander, 14th Coast Guard District.

If you will refer to the maps I had prepared for the purpose, you will note that station NMO is on the island Oahu, NRO–5 is on the island of Hawaii, NRO–2 is on the island of Kauai and NMO–7 is on the island of Molokai. NRO–4 if off the map to the northwest, French Frigate Shoals.

The Coast Guard, then, has fixed stations spreading the entire width of the Hawaiian Islands standing continuous watch and a number of cutters and lighthouse tenders standing watch when underway within 100 miles from land.

Next, I have a letter on the subject from Mr. John J. Jaquette, executive vice president of the Hawaiian Telephone Co., which I hope you will permit me to read:

DECEMBER 13, 1963.

R. J. MCKENZIE,
Marine Operations Superintendent,
Matson Navigation Co.,
Honolulu, Hawaii.

DEAR MR. MCKENZIE: The coastal marine radiotelephone service operated by Hawaiian Telephone Co. is offered to any properly licensed ship anywhere in Hawaiian waters on a 24-hour basis. Transmitters and receivers are maintained on both the distress and ship-to-shore channels.

A project is now in progress to improve this service by adding two receiving locations to the present one and by relocating transmitters to more favorable locations. This project includes the installation of improved antennas and automatic indication of received calls at the telephone switchboard in place of aural monitoring for detection of calls. A construction permit (file No. 1850–M–P–93) has been issued by the Federal Communications Commission and we expect to complete work on this project within 6 months.

Yours truly,

JOHN J. JAQUETTE.

The Hawaiian Telephone Co. maintains station KBP at Hanauma Bay, and station KQM at Kahuku, on the island of Oahu. By July 1, the telephone company is scheduled to put into operation new transmitting stations at Barber's Point, Oahu and Kahuku, Oahu, to replace the present stations. They will operate at the power of 1,000 watts during the day 700 watts at night. New receivers will be placed into service at Kahuku, Oahu, and Kaneilio Point, Oahu, to supplement the existing receivers at Koka Head. On the maps I have had prepared, map A presents the radiotelephone network in Hawaii as it is now; map B presents it as it will be after the Hawaiian Telephone Co. makes its scheduled changes.

On this question of the reliability of radiotelephone contact, I can state finally of my own personal knowledge that in the past 15 years radiotelephone has nearly completely replaced radiotelegraph for marine communication in Hawaiian waters. What this means is that contact on marine frequencies other than the distress frequency is reasonably assured with the complex of vessels underway in the area. In that connection, I would like to put into the record the text of a letter I received last week from Mr. George E. Goss, president of the Hawaii Council of Boat Associations:

FEBRUARY 14, 1964.

Capt. R. J. MCKENZIE,
Marine Operations Superintendent,
Matson Navigation Co., Honolulu, Hawaii.

DEAR CAPTAIN MCKENZIE: The Hawaii Council of Boat Associations has noted with much interest the announced improvement in the commercial radiotelephone network that Hawaiian Telephone Co. plans to put in effect on June 30, 1964. Most of the small pleasure craft operate low-power transmitters from 24 to 38 watts, so the new receiving and transmitting stations will make it much easier for them to communicate with KBP. The commercial fishing boats operate sets up to 103 watts. The new locations should effectively cover all areas where the boats operate and make for a very efficient system.

Since our organization in 1958 we have had no complaints from any of our members reporting incidents wherein their boatowners have been unable to communicate with the U.S. Coast Guard on 2,182 kilocycles when it was necessary. The efficient Coast Guard network coupled with the commercial network have helped make boating in Hawaii one of the safest areas in the United States.

A statewide inventory of small craft taken in 1961 disclosed that craft were moored in harbors throughout the State as follows:

Commercial fishing craft: Kauai, 34; Maui, 18; Hawaii, 152; Molokai, 51; Lanai, 1.

Recreational craft: Kauai, 100; Maui, 62; Hawaii, 215; Oahu, 2,675.

Yours very truly,

HAWAII COUNCIL OF BOAT ASSOCIATIONS,
GEO. E. GOSS, *President.*

There are three tug and barge companies operating within the Hawaiian Islands, Hawaiian Tug & Barge, Isleways, and Pacific Inland Navigation Co. Isleways operate mainly to the island of Lanai, however, they do call at all the other islands. Hawaiian Tug & Barge have regular scheduled calls at all major island ports with the exception of Lanai. Pacific Inland Navigation operate the 3,800 h.p. tug *Winquatt* which tows the Matson interisland barge *Islander* to Hawaii, Kauai, Maui, and Oahu. Isleways operate two ATA-type, 1,800 h.p. tugs, the *Ono* and *Ahi.* Hawaiian Tug & Barge have eight seagoing tugs which range from 1,000 to 2,400 h.p.

So with Coast Guard stations and the Hawaiian Telephone Co. stations maintaining a 24-hour radiotelephone watch and with radiotelephone being the almost exclusive means of marine communication

in Hawaiian waters, I think it is clear that radiotelephone is better than radiotelegraph as a safety communications system for all cargo vessels moving between Hawaiian ports.

Thank you.

Again, thank you, Mr. Chairman, for letting me appear before you.

Mr. ROGERS of Texas. Thank you.

I presume that you desire these maps to be included as part of your statement.

Captain MCKENZIE. I do, sir.

Mr. ROGERS of Texas. Without objection, that and the other documents attached to the statement will be included.

(The documents referred to follow.)

Mr. ROGERS of Texas. Are there any questions, Mr. Moss?

Mr. Moss. Yes, Mr. Chairman.

Captain McKenzie, what is the additional cost to Matson if they are required to operate a new hull as a self-propelled unit using radiotelegraph rather than radiotelephone?

Captain MCKENZIE. I would have to get those figures, how much it would be, but perhaps Mr. Brown could answer that. I haven't got that figure. You are talking about money, actual money?

Mr. Moss. That is right.

Captain MCKENZIE. No, I wouldn't have that figure.

Mr. Moss. Could you supply it for the record?

Mr. BROWN. You are looking, sir, for the cost of radiotelephone versus radiotelegraph, our feeling what the difference would be.

The cost will be, of course, two part. The initial equipment, say, 10 to 1, the previous figure given by the Federal Communications Commission for the basic equipment, plus the space on the vessel to house it which is in the same proportion, greater space required for radiotelegraph over radiotelephone, and the manning. I would say an intial cost of approximately $20,000 more for radiotelegraph, on basic initial cost. Operating cost would be another $10,000 to $15,000 per year.

Mr. Moss. That is all at the moment, Mr. Chairman.

Mr. ROGERS of Texas. Mr. Cunningham?

Mr. CUNNINGHAM. No questions.

Mr. ROGERS of Texas. Mr. Kornegay?

Mr. KORNEGAY. How many ships does Matson have plying the waters in and around Hawaii?

Captain MCKENZIE. We have 16 right now.

Mr. KORNEGAY. Do you operate on a regular schedule and call at the major ports of the islands?

Captain MCKENZIE. We have 16 vessels calling at the Hawaiian Islands. Not all of them go to the other islands. We do have one barge called *The Islander* which we hope to power and run between the islands on its own power. We are only here—the only vessel that is really affected by this H.R. 8505 is one of the——

Mr. KORNEGAY. That is what I want to find out. Only one.

Captain MCKENZIE. Only one vessel.

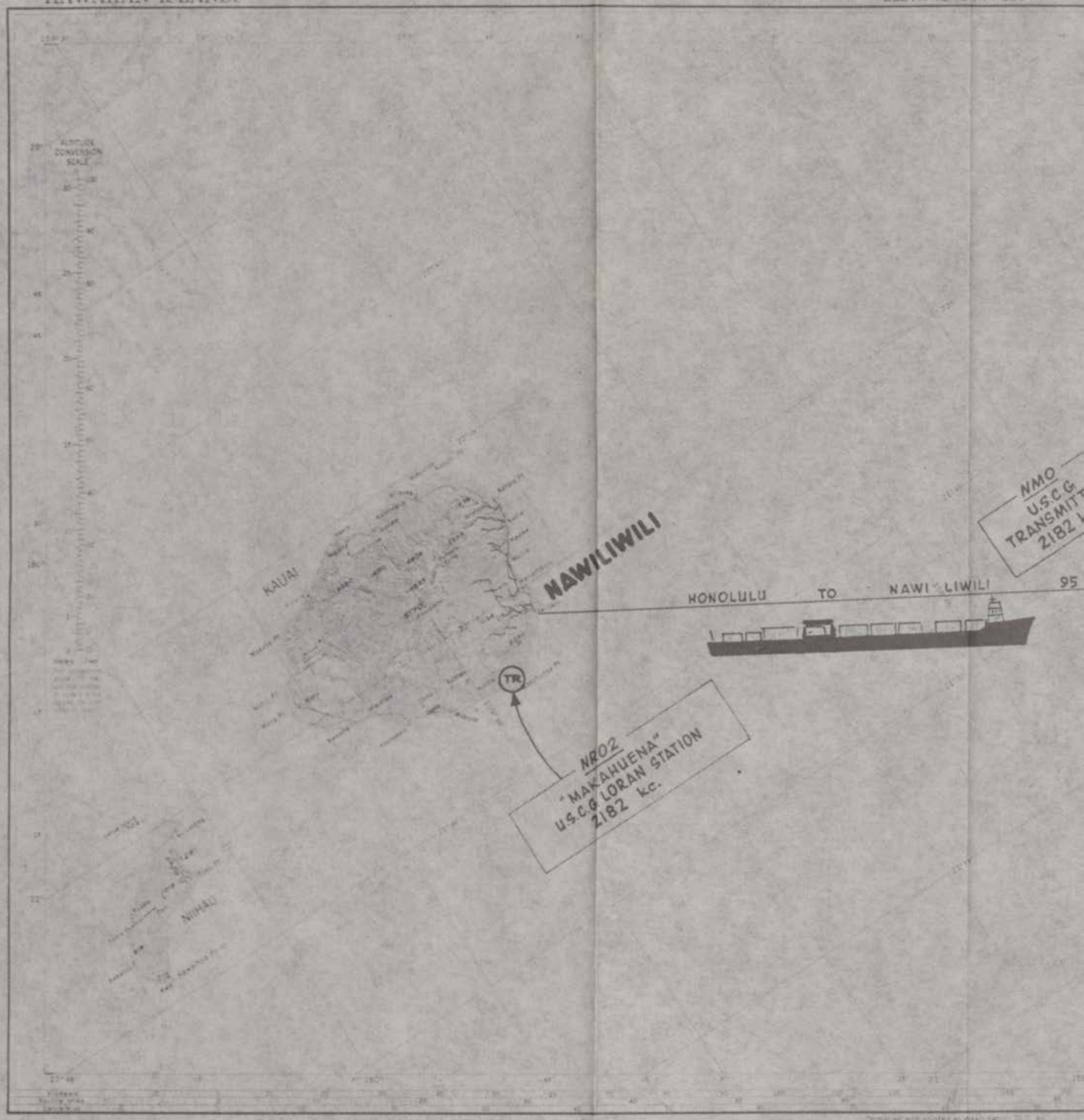
Mr. KORNEGAY. That is in excess of 1,600 tons.

Captain MCKENZIE. That is right.

Mr. KORNEGAY. All of your vessels, the other 15, are less than 1,600 tons; is that right?

HAWAIIAN ISLANDS

ELEVATIONS IN FEET



32-442 O - 64 (Face p. 22) No. 1

SECTIONAL AERONAUTICA

• LEGEND •

(R) RECEIVER

(T) TRANSMITTER

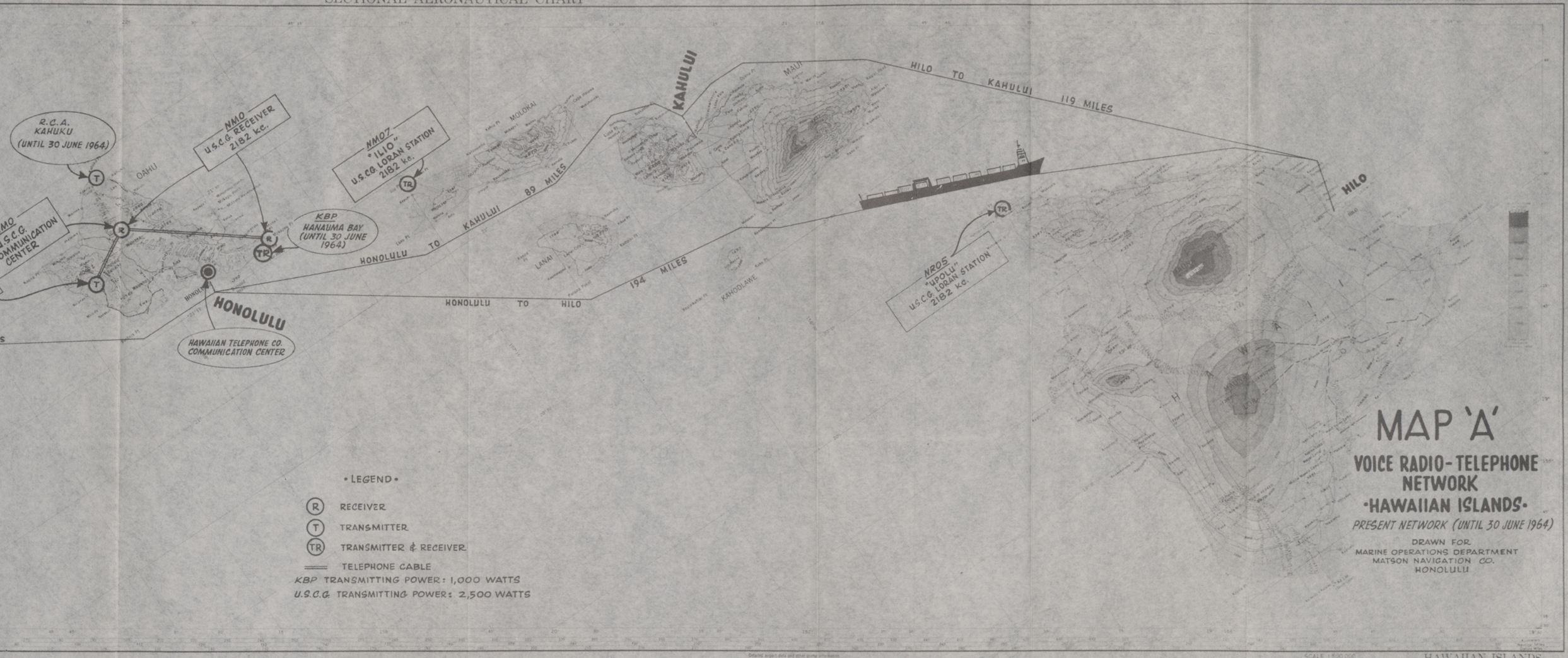
(TR) TRANSMITTER & RECEIVER

═══ TELEPHONE CABLE

KBP TRANSMITTING POWER: 1,000 WATT

U.S.C.G. TRANSMITTING POWER: 2,500 WA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY



• LEGEND •

- (R) RECEIVER
- (T) TRANSMITTER
- (TR) TRANSMITTER & RECEIVER
- TELEPHONE CABLE

KBP TRANSMITTING POWER: 1,000 WATTS

U.S.C.G. TRANSMITTING POWER: 2,500 WATTS

MAP 'A'

VOICE RADIO-TELEPHONE NETWORK

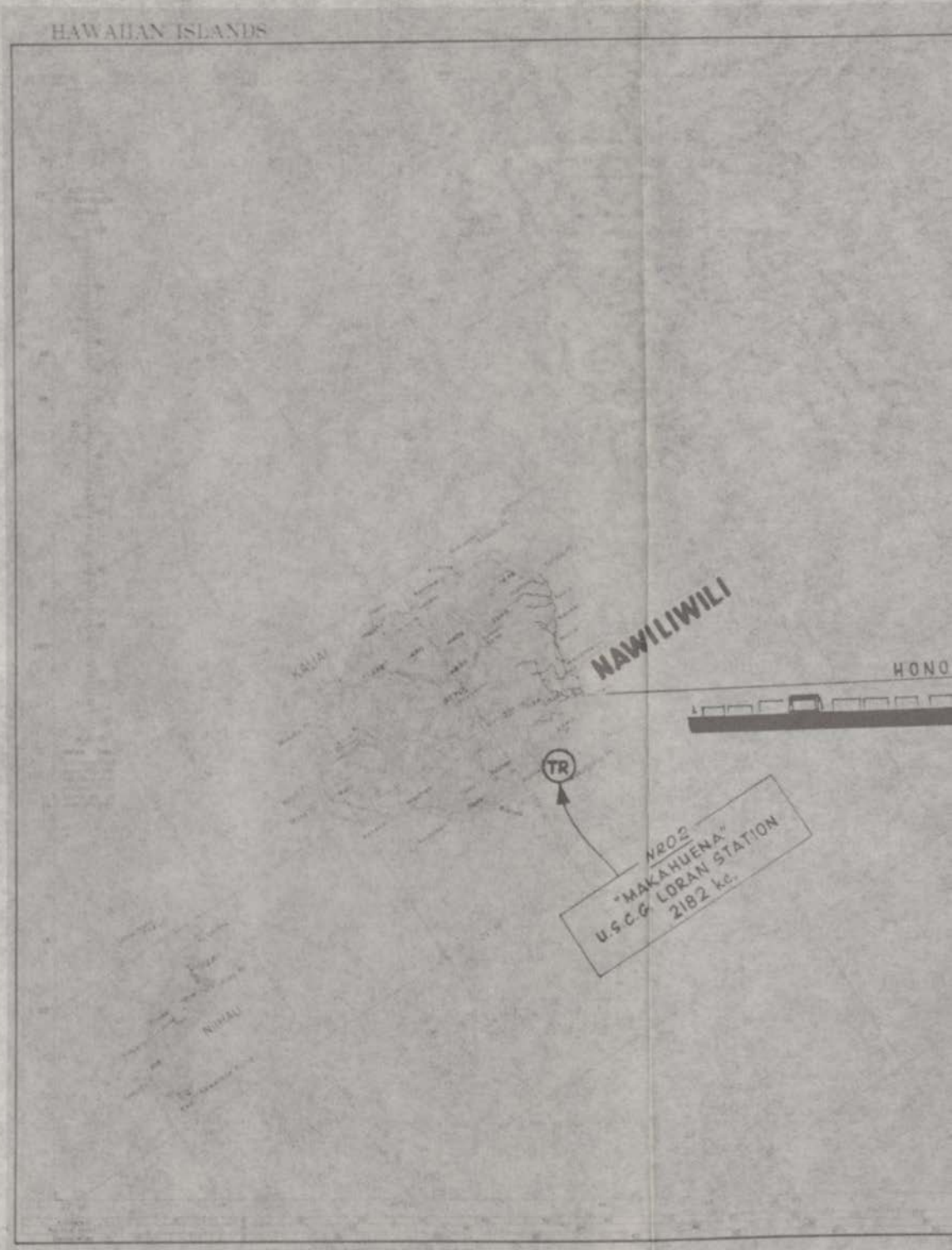
•HAWAIIAN ISLANDS•

PRESENT NETWORK (UNTIL 30 JUNE 1964)

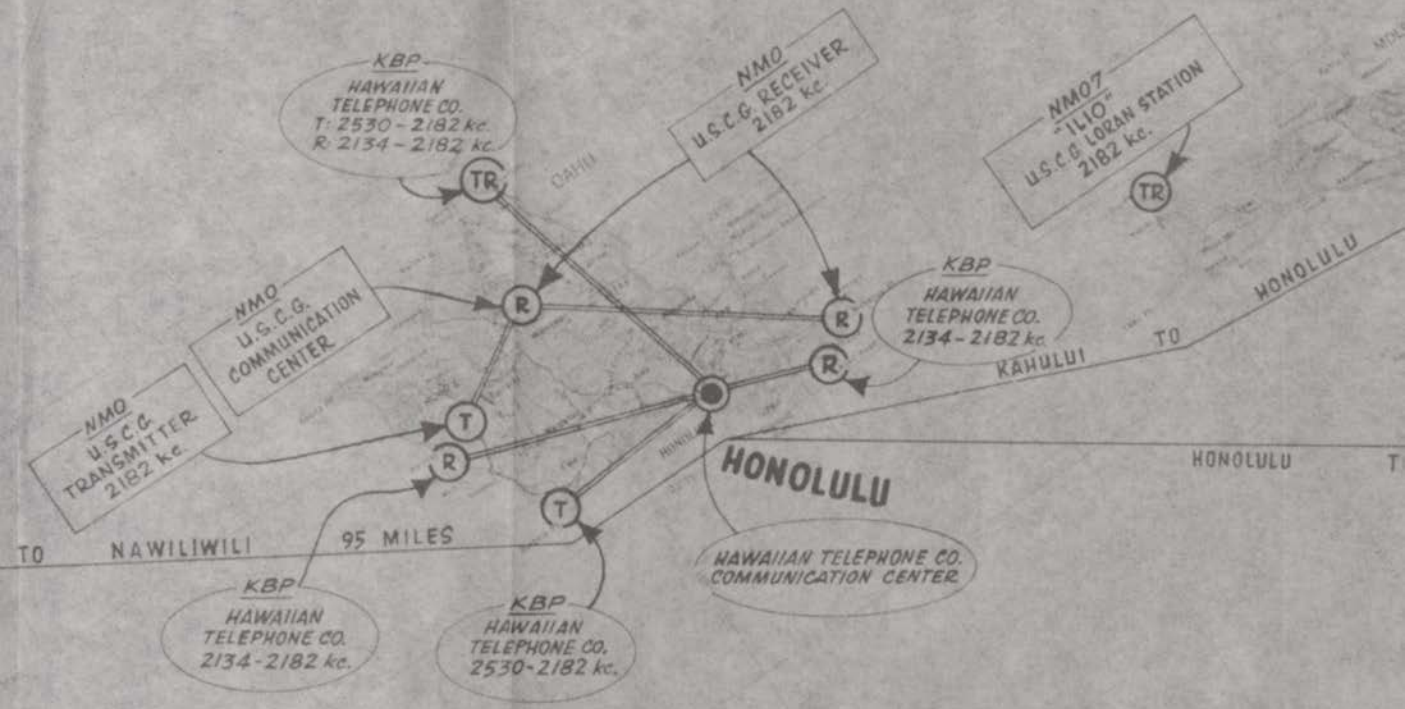
DRAWN FOR
MARINE OPERATIONS DEPARTMENT
MATSON NAVIGATION CO.
HONOLULU

Detailed airport data and other useful information are printed on the back of this chart.

SCALE 1:500,000



32-442 O - 64 (Face p. 22) No. 2



LEGEND

(R) RECEIVER

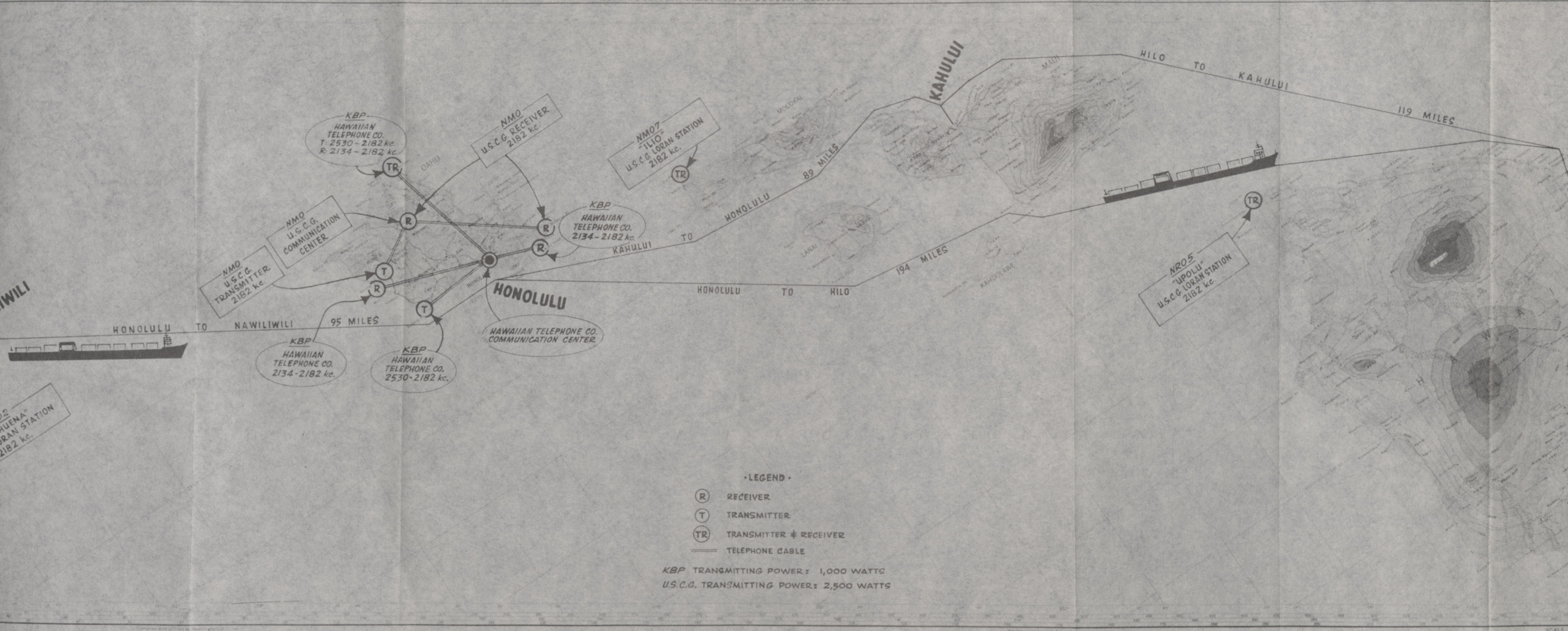
(T) TRANSMITTER

(TR) TRANSMITTER

TELEPHONE CA

KBP TRANSMITTING POW

U.S.C.G. TRANSMITTING PO



·LEGEND·

(R) RECEIVER

(T) TRANSMITTER

(TR) TRANSMITTER & RECEIVER

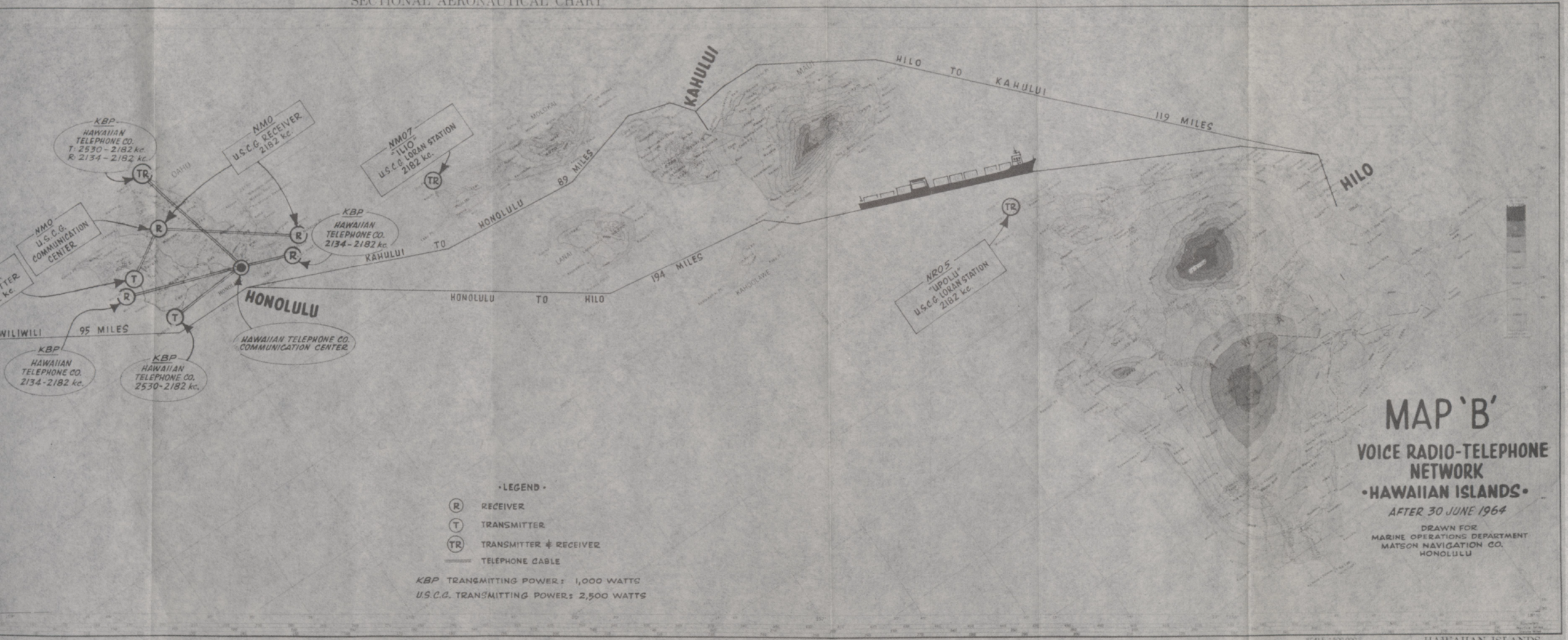
TELEPHONE CABLE

KBP TRANSMITTING POWER: 1,000 WATTS

U.S.C.G. TRANSMITTING POWER: 2,500 WATTS

Detailed airport data and other useful information are printed on the back of this chart.

SCALE



MAP 'B'

VOICE RADIO-TELEPHONE NETWORK

·HAWAIIAN ISLANDS·

AFTER 30 JUNE 1964

DRAWN FOR
MARINE OPERATIONS DEPARTMENT
MATSON NAVIGATION CO.
HONOLULU

Detailed airport data and other useful information are printed on the back of this chart.

SCALE 1:500,000

HAWAIIAN ISLANDS

Captain McKENZIE. All our vessels are running in international waters and to the west coast and to the east coast.

Mr. KORNEGAY. I was thinking about smaller vessels. You don't have any smaller ones operating?

Captain McKENZIE. No. We don't have any smaller vessels. All we have is this barge, that is all, but there are barge lines, as I said in my statement, running interisland. Their tonnages are around about a thousand tons.

Mr. KORNEGAY. Thank you very much, Mr. Chairman.

Mr. ROGERS of Texas. Mr. Broyhill?

Mr. BROYHILL of North Carolina. I am not sure I understand this. Only one vessel would be affected by this proposed legislation; is that correct?

Captain McKENZIE. That is the way it appears.

Mr. BROYHILL of North Carolina. This vessel is already in operation in the Hawaiian waters. Is that right?

Captain McKENZIE. That is right.

Mr. BROYHILL of North Carolina. And it is already equipped with radiotelegraph equipment.

Captain McKENZIE. No. This vessel is actually a barge.

Mr. BROYHILL of North Carolina. It is a barge.

Captain McKENZIE. Now it is a barge.

Mr. BROYHILL of North Carolina. It is already equipped with radiotelegraph?

Captain McKENZIE. No. It hasn't been installed.

Mr. BROYHILL of North Carolina. It has not?

Captain McKENZIE. No. You see, we are towing it with a tug, 3,800-horsepower tug.

Mr. BROYHILL of North Carolina. No other questions.

Mr. ROGERS of Texas. Captain, now, what size is this barge? What tonnage?

Captain McKENZIE. The barge is 300 feet long.

Mr. ROGERS of Texas. What tonnage would it be with regard to the 1,600?

Captain McKENZIE. Right now is is 3,400, of course. If we put an engine in it, it will go up to about 5,000.

Mr. ROGERS of Texas. But as I understand it, as a barge it is not affected by the present law because it is not self-propelled.

Captain McKENZIE. That is right.

Mr. ROGERS of Texas. So you wouldn't have any difficulty. So this is actually a new venture that you are all moving into.

Captain McKENZIE. That is correct.

Mr. ROGERS of Texas. And actually it involves cargo, does it not?

Captain McKENZIE. Yes, it does.

Mr. ROGERS of Texas. You are not interested in the passenger situation here because the ships that you use or the vessels that you use for passenger traffic between those islands are the same ships that travel from Los Angeles and San Francisco to the Hawaiian Islands.

Captain McKENZIE. That is correct.

Mr. ROGERS of Texas. Do you intend to enlarge this operation to move into a new area and try to explore the situation here that may have an impact, either good or bad, on traffic of this kind?

Captain McKENZIE. No. We are just—we have only got these major ports on each island, and that is all we are going to go to.

Mr. ROGERS of Texas. And it isn't your intention to enlarge—I mean, put on more barges like this. Convert more.

Captain MCKENZIE. Well, this naturally will increase business to the outer islands.

Mr. ROGERS of Texas. Sure. I understand that.

Captain MCKENZIE. And we might see fit a year from now to build another vessel.

Mr. ROGERS of Texas. Well, the question was prompted by the information I got out of—I believe it was the motion for reconsideration in which it was pointed out that this could—if it was expanded out—probably revolutionize, well, intercoastal trade in some areas. Is that right?

Captain MCKENZIE. It could be in containers going from this—going from this small vessel on to the larger vessel which we are doing right now, and then the large vessel carries it to the west coast. We haven't gotten into the east coast yet, but we just don't have enough containers to step into that end of it.

Mr. ROGERS of Texas. But you do hope to move forward in this.

Captain MCKENZIE. We are moving.

Mr. ROGERS of Texas. Making progress.

Captain MCKENZIE. We are making such strides in this it is unbelievable, and it is saving the people in the islands a considerable amount of money in shipping costs.

Mr. ROGERS of Texas. Well, now, Captain, let me ask you this question. In the Great Lakes situation, as I understood Commissioner Bartley, a ship coming into the Great Lakes trade, if it is a foreign ship equipped only with radiotelegraph, then it must have radiotelephone because in order to operate in the Great Lakes, you must have radiotelephone.

Captain MCKENZIE. That is right.

Mr. ROGERS of Texas. Do you also have to have radiotelegraph or just radiotelephone?

Captain MCKENZIE. No. They don't need radiotelegraph in the Great Lakes at all. It is the radiotelephone that is required now.

Mr. ROGERS of Texas. Do you know whether or not this transition or this installation of this equipment is done very many times? Many or most foreign ships come in there and have that installed to go into the Great Lakes?

Captain MCKENZIE. I am not familiar on that but just what Mr. Bartley said there, if the vessel comes in and doesn't have the radiotelephone, they have got to put it on, and I imagine that knowing they were going to go to the area of the Great Lakes and were going to have to put one on, they will probably do it in their own country. It would be considerably cheaper.

Mr. ROGERS of Texas. Well, now, what about your language barrier in the Hawaiian Islands? Do you anticipate any trouble with language barrier there?

Captain MCKENZIE. Well, the foreign ships, we have very few. They are just calling to Honolulu. Actually on the interisland trade, it is just local ships, but we do have some occasional foreign ship that—most of them, I would say practically every ship has this telephone if they are on that run because this is the only way of real good communicating.

Mr. ROGERS of Texas. Sure. Well, now, Captain, is it your feeling that—well, of course, you are interested in the Matson Lines and their activities, probably the primary reason that this was confined to the Hawaiian Islands, but insofar as this so-called language barrier is concerned, you would have none in the Hawaiian Islands that you know of at all.

Captain MCKENZIE. None at all.

Mr. ROGERS of Texas. Could you say that the reason that this could not be extended to all coastal areas just by one fell swoop would probably be the language barrier, a matter that should be studied?

Captain MCKENZIE. Well, yes. Maybe it should be looked into. I guess this is what the FCC will do.

Mr. ROGERS of Texas. Now, the reason I ask that question is that there have been some statements by the departments downtown to the effect that so far as they know, the radiotelephone is safe all right but they raise some issue as to why this is being confined to the Hawaiian Islands and not extended to other coastal areas.

Captain MCKENZIE. We just don't have the foreign ships operating around the Hawaiian Islands area like you do on the Pacific coast or the Atlantic coast.

Mr. ROGERS of Texas. How many countries are participants to that or signatories to that convention, do you know?

Captain MCKENZIE. I could ask—Fischer?

Mr. FISCHER. I don't know offhand but just about all the shipping countries of the world are signatories here.

Mr. ROGERS of Texas. But the extension of this particular situation to all coastal areas would actually require a new meeting to draft new terms or new conventions, wouldn't it?

Captain MCKENZIE. Yes; it would.

Mr. ROGERS of Texas. In order to meet the language barrier.

Thank you very much, Captain.

Are there any other questions now of Captain McKenzie, and then we will go to Mr. James Brown. Mr. Brown, I see you have a statement.

Mr. BROWN. Thank you.

I am James A. Brown, project engineer, Engineering Development Department, Matson Navigation Co., 215 Market Street, San Francisco, Calif. Thank you for the opportunity to make this statement.

Matson Navigation Co., a nonsubsidized steamship company whose operations are centered in Hawaii, supports H.R. 8508 which would permit the use of radiotelephone instead of radiotelegraph as a safety communications system on board a ship in the course of a voyage between Hawaiian ports when the voyage does not take the ship more than 50 miles from land. We support it first, because radiotelephone makes a better safety communications system in Hawaiian waters and second, because it will foster the development of an experimental semiautomated vessel of great importance to Matson, and to Hawaiian shipping. Capt. R. J. McKenzie, marine operations superintendent of Matson Navigation Co. in Hawaii, has already discussed why it is that radiotelephone is a better safety communications system in Hawaiian waters. I would like to take a few minutes to discuss the development of the experimental vessel and its relationship to H.R. 8508.

Six years ago, Matson inaugurated a cargo container service between the Pacific coast and Honolulu, as part of a program to mod-

ernize its fleet. This service involves the prepacking of cargo into containers of a standard size, in order to facilitate loading and unloading of the ships. Matson recognized what President Kennedy noted in his message to Congress on transportation policy in 1962 when he urged—

> that sound development in technology and automation be applied to merchant shipping as rapidly as possible, fully recognizing and providing for the job equities involved, as a major program of enhancing the competitive capability of our merchant marine.

I am glad to say that the efficiency of the Pacific coast-Honolulu cargo container service has far exceeded the original expectations.

This success led naturally to consideration of ways of extending the benefits of this kind of service to the other islands in Hawaii. At first, an interisland container barge service was contemplated, that is to say, a tug towing a barge specially built to pick up and deliver the cargo containers. At this point, the Engineering Development Department of Matson advanced the suggestion that this new interisland service offered a unique opportunity to substitute for the tug and towed barge an experimental vessel operating with the most advanced kinds of techniques and equipment, designed to make it self-sufficient in the handling of the cargo containers and in berthing, and to make the running of the vessel as automatic as possible. This vessel, 300 feet long, 5,000 tons, self-propelled at a speed of 11 knots, was scheduled to operate throughout the Hawaiian Islands on the routes set out in the maps Captain McKenzie has submitted for the record of this hearing, except for the route shown on the maps directly from Honolulu to Hilo.

Of particular relevance here, the vessel was designed to carry the following equipment:

(*a*) Two radiotelephone units for communication with shore stations and vessels equipped with similar equipment.

(*b*) One radio receiver continuously monitoring 2182 kilocycles, the radiotelephone distress frequency while the vessel is at sea.

(*c*) One radio direction finder for determining the vessel's position or obtaining a bearing on another vessel's location.

(*d*) One loran a/c for determining the vessel's position.

(*e*) One radar for position location (when near land) or other vessel tracking.

(*f*) One signal searchlight for signaling other vessels.

The hull of that vessel has been built and it is now in operation on the interisland container service, but it is being uesd as a barge, towed by a tug, until all the necessary arrangements can be made to operate it as it was designed. If and when proper arrangements are made, it will take another 6 months to install the equipment to undertake the experimentation in automation we hoped for.

One of the things we are waiting for is to use radiotelephone equipment for safety communications purposes. Under the present Communications Act, so long as this vessel is towed as a barge by a tug, radiotelephone is a sanctioned safety communications system. But if we make the vessel self-propelled, then radiotelegraph must be put aboard with the special radio officer to man it.

When we asked the Federal Communications Commission to help us with this problem, the Commission in effect told us that our case could not invoke the exercise of its exemptive power because determination whether radiotelephone today is better than radiotelegraph

in Hawaiian waters is for the Congress; likewise, the extent to which automation should be fostered in safety communications at sea.

The passage of H.R. 8508 will bring us one step nearer the realization of the experimental semiautomated cargo container vessel which may teach us a great deal of value to Hawaii and the American merchant marine.

Thank you.

Mr. ROGERS of Texas. Thank you, Mr. Brown.

Mr. Moss, do you have any questions?

Mr. Moss. No questions, Mr. Chairman.

Mr. ROGERS of Texas. Mr. Cunningham?

Mr. CUNNINGHAM. No questions.

Mr. ROGERS of Texas. Mr. Kornegay?

Mr. KORNEGAY. No questions, Mr. Chairman.

Mr. ROGERS of Texas. Mr. Broyhill?

Mr. BROYHILL of North Carolina. Mr. Chairman, I would like to ask a question. Could either Mr. Brown or Captain McKenzie give us an estimation of how many other vessels would be affected by this proposed legislation.

Captain MCKENZIE. Just one vessel at the moment. And probably——

Mr. BROYHILL of North Carolina. I am not talking about as far as Matson is concerned. Any other vessels at all, interstate, that will be affected?

Captain MCKENZIE. No; we haven't run vessels interstate for years.

Mr. BROYHILL of North Carolina. Of this size.

Captain MCKENZIE. Of that size. They are not economically feasible.

Captain MCKENZIE. Of that size. They are not economically feasible.

Mr. ROGERS of Texas. Is that all you have, Mr. Broyhill?

Mr. BROYHILL of North Carolina. Yes.

Mr. ROGERS of Texas. Mr. Brown, let me ask you this question. What is your reason or what is the purpose of changing to a self-propelled vehicle rather than the barge? What benefits are gained?

Mr. BROWN. Mr. Chairman, there are many benefits gained both to the people of Hawaii, to Matson and the whole merchant marine. We can operate a more efficient system with the self-propelled vessel, and can maintain schedules. We can operate it more economically and thus keep rates down for the people in the islands.

Previously cargo that went to the outer islands, until we put the barge in service, was general break-bulk cargo. We have now extended the container service to the outer islands.

Mr. ROGERS of Texas. Do you generate more speed in handling of cargo with this?

Mr. BROWN. Yes; we do, very much.

Mr. ROGERS of Texas. With it being self-propelled?

Mr. BROWN. Being self-propelled, we can generate more speed and maintain schedules. With the tug it is very difficult to maintain schedules.

Mr. ROGERS of Texas. Now, this cargo operation that you speak of, is that sort of like piggybacking in the railroad industry?

Mr. BROWN. It is similar in many ways to piggybacking, sir.

Mr. ROGERS of Texas. You just take sort of a carload in operation insofar as one container is concerned.

Mr. BROWN. That is right.

Mr. ROGERS of Texas. Now, I noticed in the bill as drawn and the statement you made or Captain McKenzie made about one vessel, line 7 says "In the course of a voyage,"—that is line 7, page 1—"In the course of a voyage between Hawaiian ports."

Now, would you all have any objection if that language was changed to read "or engaged exclusively in voyages"?

Mr. BROWN. I would say no——

Mr. ROGERS of Texas. So there would be no controversy or fuss that you are trying to open a wide door here?

Mr. BROWN. No; I believe the change in wording would be beneficial to the understanding of the bill.

Mr. ROGERS of Texas. Thank you.

Any other questions of the committee? Thank you.

Let me ask you one further question. You may answer, of course, it would be hearsay. What is the position of labor groups on this, do you know?

Captain MCKENZIE. Well——

Mr. ROGERS of Texas. Mr. Pessel?

Mr. PESSEL. May I answer that one, Mr. Chairman?

Mr. ROGERS of Texas. You may, if you identify yourself for the record.

Mr. PESSEL. My name is A. J. Pessel, vice president of Matson Lines, Washington, D.C.

Mr. Chairman, we have already had three or four meetings with the various unions involved on the Pacific coast, Marine Engineers Beneficial Association, ARA, Radio Operators, and the SUP, which are the deck gang and the waiters and the stewards part of it, and they are going very successfully. We have had three at which the recent Chairman of the Federal Maritime Administration attended personally because they are interested in getting labor-management relations closer together on an automation basis, and we are making progress that way.

To be sure, our collective bargaining agreement for this vessel is not signed yet. So we have to have further union negotiations, as a matter of fact, to get this approved. But we are working toward that and it looks good.

Mr. ROGERS of Texas. Well, now, the waiters and stewards and all wouldn't be affected very much by this; would they?

Mr. PESSEL. Not at all.

Mr. ROGERS of Texas. It would just be a matter of what they thought it would do insofar as other working groups.

Mr. PESSEL. As a matter of fact, we are creating five jobs now for this vessel that aren't there now. Or is it six?

Captain MCKENZIE. Six.

Mr. PESSEL. The Coast Guard has approved this, incidentally.

Mr. ROGERS of Texas. Well, now, we had a telephone call yesterday from some people in the labor movement that are in Miami and going to Venezuela—I hope they are intending to come back——

Mr. PESSEL. I wish I was with them.

Mr. ROGERS of Texas. They wanted to be heard on this, and there is some indication there might be some opposition to this, and I sug-

gested they get someone up here or else file a statement setting forth their views so that the committee could go ahead and either vote this matter up or down, one.

Mr. PESSEL. I think that is a fair statement, Mr. Chairman. They should certainly be heard. I think without putting words in their mouth, they are mainly concerned with the extension of radiotelephone all over the country intercoastal and deep sea which would throw an operator out of work probably.

Mr. ROGERS of Texas. Do you think their interest goes toward the situation that we were talking about a minute ago of the overall coastal?

Mr. PESSEL. That is right.

Mr. ROGERS of Texas. I can see where there would be quite a bit of difficulty in moving into that area generally.

Mr. PESSEL. That would be a long process like it was with the longshoremen. We finally made on the Pacific coast, that is all steamship operators, jointly with the ILWU on a longshore basis, we made a fund. As a matter of fact, Senator Clark of Pennsylvania heard Paul St. Sure, the head of Pacific Maritime Association, and Harry Bridges, the head of ILWU, testify here in Washington just 3 months ago about the effectiveness of this agreement, automated agreement shoreside. And one of the interesting things was that it is not all sweetness and light, but it is one of the prime examples of how labor and management can progress and have progressed, and it has been proven out and this, of course, will happen offshore, too, some day, but that is a question of negotiation and will take some time.

So as you said, Mr. Chairman, all we are talking about is this one vessel restricted in Hawaiian waters. That is all.

Mr. ROGERS of Texas. Thank you very much.

Mr. PESSEL. Thank you.

Mr. ROGERS of Texas. Any further questions?

And without objection the letter from the Pacific American Steamship Association filed by Mr. John N. Thurman will be included in the record immediately following the testimony which has just been received.

(The letter referred to follows:)

PACIFIC AMERICAN STEAMSHIP ASSOCIATION,
Washington, D.C., February 18, 1964.

Subject: H.R. 8508.

Hon OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: The Pacific American Steamship Association, composed of the major American-flag steamship operators engaged in the foreign and domestic commerce of the United States from the Pacific coast, wishes to take this opportunity to express our support for H.R. 8508, a bill to amend section 356 of the Communications Act of 1934, to permit cargo ships on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations.

Twenty-five years ago at the time of enactment of the Communications Act of 1934, in order to guarantee accurate ship-to-ship and ship-to-shore communications, it was necessary to employ the exclusive use of radiotelegraph. However, in the ensuing years radiotelephone has become vastly improved, to the point that today in many areas of confined waters such as the Hawaiian Islands, the use of radiotelephone will add not only greater efficiency in navigation, but will promote the safety of vessels and their crews. This has been amply proven in that the use of radiotelephone in lieu of radiotelegraph on vessels operating in

close proximity has been an invaluable safety feature on the often stormy Great Lakes and St. Lawrence River since its adoption in 1954.

In the interest of safety and as strong advocates for the development of a modern, efficient U.S.-flag merchant marine, we urge favorable consideration be given to H.R. 8508.

It is respectfully requested that this letter be included in the record of the hearings on the subject bill, to be held on February 19, 1964, before the Communications and Power Subcommittee of the Interstate and Foreign Commerce Committee.

Sincerely yours,

JOHN N. THURMAN, *Vice President.*

Mr. ROGERS of Texas. If there is no further business to come before the subcommittee, the subcommittee will stand adjourned subject to the call of the Chair.

(Whereupon, at 11:20 a.m., the subcommittee was adjourned subject to the call of the Chair.)

RADIOTELEPHONES ON CERTAIN CARGO VESSELS IN HAWAIIAN WATERS

THURSDAY, MARCH 19, 1964

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COMMUNICATIONS AND POWER
OF THE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10 a.m., room 1334 Longworth House Office Building, Hon. Walter Rogers (chairman of the subcommittee) presiding.

Mr. ROGERS of Texas. The Subcommittee on Communications and Power will come to order for the further consideration of H.R. 8508 and similar measures.

Our previous hearing did not include the testimony of those parties who will be testifying this morning, and we had to put it off in order to work it out on a time schedule because the folks here this morning were experts in another field and had to testify. We are glad to have you this morning.

TESTIMONY OF HOYT S. HADDOCK, WASHINGTON REPRESENTATIVE, AFL–CIO MARITIME COMMITTEE, AND MORRIS HARVEY STRICHARTZ, TECHNICAL DIRECTOR, AMERICAN RADIO ASSOCIATION, AFL–CIO

Mr. HADDOCK. Mr. Chairman, Mr. Strichartz will make the statement on this and I will simply be with him to answer any questions that he happens not to be familiar with. He is the technical man and will give the principal statement.

Mr. ROGERS of Texas. This statement that I have before me, Mr. Strichartz, would you desire to have that entire document included in the record, together with the appendixes?

Mr. STRICHARTZ. The statement itself is 12 pages long. The appendixes are data and evidentiary material which we would like to include in the record. We have no intention of attempting to read the appendixes into the record. We simply want to place them in the record and to comment very briefly on 10 of the 11 appendixes and a little more in depth on 1 of them.

Mr. ROGERS of Texas. Without objection, the entire document will be included in the record and you may proceed, Mr. Strichartz, to give us your statement.

(The statement mentioned follows:)

STATEMENT OF MORRIS HARVEY STRICHARTZ, TECHNICAL DIRECTOR, AMERICAN RADIO ASSOCIATION, AFL–CIO ON ITS OWN BEHALF AND IN BEHALF OF RADIO OFFICERS UNION, AFL–CIO, INTERNATIONAL ORGANIZATION OF MASTERS, MATES, & PILOTS, AFL–CIO AND OF THE AFL–CIO MARITIME COMMITTEE, CONSISTING OF AMERICAN RADIO ASSOCIATION, AFL–CIO, NATIONAL MARITIME UNION, AFL–CIO, BROTHERHOOD OF MARINE OFFICERS (NMU), AFL–CIO, UNITED MARITIME DIVISION (NMU), AFL–CIO, UNITED STEEL WORKERS OF AMERICA, AFL–CIO, AND INDUSTRIAL UNION OF MARINE & SHIPBUILDING WORKERS OF AMERICA, AFL–CIO

My name is Morris Harvey Strichartz. I am technical director of the American Radio Association, AFL–CIO, and am a member of its national council.

This statement is submitted by the American Radio Association (ARA), for the Radio Officers Union (ROU), the International Organization of Masters, Mates, & Pilots (MMP), both affiliates of the AFL–CIO, as well as the AFL–CIO Maritime Committee, which includes the American Radio Association (ARA), the National Maritime Union (NMU), the Brotherhood of Marine Officers (BMO), the United Maritime Division (UMD), the marine locals of the United Steel Workers of America (USWA), and the Industrial Union of Marine & Shipbuilding Workers (IUMSWA).

ARA and ROU, composed of ship radio officers, hold collective bargaining agreements with steamship companies owning and operating over 90 percent of the oceangoing merchant ships flying the U.S. flag, including among them the Matson Navigation Co.

MMP members are the masters and licensed deck officers (mates) on over 90 percent of the U.S.-flag oceangoing ships.

The total membership of all these maritime unions is approximately 60,000 seamen, who are officers and unlicensed crew members aboard about 90 percent of the U.S. merchant marine—passenger ships, freighters, tankers, colliers, steam schooners, and other type vessels—carrying every type of cargo in the coastwise, intercoastal, and world trade of the United States.

We are likewise informed that your subcommittee has received a separate communication from the AFL–CIO Maritime Trades Department, composed of other AFL–CIO maritime affiliates not mentioned above.

All of our organizations are of one mind on H.R. 8508—we are opposed to its passage, in the public interest as well as in the interest of our men on the ships. It is significant that, despite serious disagreements in other areas, all of the maritime unions are united in opposition to this bill. Why?

To answer that question, we must described the present safety situation. On all the oceans of the earth, ships of 1,600 gross tons or larger are presently knit together in a worldwide lifesaving network.

They are equipped with ship radiotelegraph equipment, complying with standards set by international treaty and domestic law. At sea, this equipment is manned by radiotelegraph operators, who are licensed ship radio officers by act of Congress in 1947. These radio officers stand safety radio watch for at least 8 hours a day on cargo vessels carrying only one radio officer, and continuous round-the-clock watches on passenger vessels which are manned by three or more radio officers.

During these watches each radio officer listens continuously to radiotelegraph signals on 500 kilocycles, the worldwide calling and distress frequency. Ships of all nations initiate routine calls to other ships or to coast radio stations by calling on 500 kilocycles. Upon making contact they immediately shift to another frequency known as a working frequency to send and receive messages. As soon as the message handling is finished, the listening on 500 kilocycles is immediately resumed, without delay.

In any event, there are two periods during each hour when the ship radio officer must cease doing anything else and listen, in complete radio silence, on 500 kilocycles, known as the silent periods, because their silence may only be broken to transmit or retransmit distress messages that were sent during the preceding period.

When a ship is in distress, it is on 500 kilocycles that the call for assistance, the S O S is sent, and all communications between the stricken vessel and ships that may proceed to its side are handled. Other ships must maintain complete silence on 500 kilocycles during such distress traffic, until the all-clear is transmitted.

When distress signals are sent, it is of crucial importance that they be heard, recognized as such, and that the precise details given be received by the maximum number of ships able to render aid. The position of the ship is given precisely, in latitude and longitude, and the error of a single digit, for example, can be extremely important—that is why a reliable and accurate system is employed.

When distress situations exist, all hands turn to, to perform their necessary duties. The radio officers and radio operators aboard the deepsea vessels that have been in distress during the 65 years that this radio sea-safety network was developing and being perfected, have acquitted themselves in exemplary fashion, usually being the last to leave the ship, along with the master, often going down at his post of duty.

The system that I have described has the genius of simplicity and the record of having been used, successfully, in literally thousands of sea casualties. Literally tens of thousands of men mave been plucked from the clutches of a cruel sea by the assistance that this worldwide radiotelegraph sea-safety network summoned, in the present, living generation of seamen. One simple fact will give insight into the scope of this splendid, and effiecient system: the annual report of the FCC for fiscal year 1962, on page 86, notes:

"During the fiscal year, the radiotelegraph distress signal S O S was used in behalf of 275 vessels and aircraft. There were 181 reports of autoalarms being actuated to alert offduty radiotelegraph operators to distress calls. Radiotelegraph functioned effectively for such distress calls."

Multiply this one single year in the limited purview of a single nation's regulatory agency by the many years and countries involved, and you will understand why the seaman of the world and of this Nation looks upon the radiotelegraph station and the ship radio officer who mans it as his "lifeline"—his best assurance of reaching land alive and able to ship out again.

Seamen know they follow a calling that is of its very nature a hazardous one. They simply want the best chance available of surviving, and they know from their very own experience that radiotelegraph provisions give them that chance.

We have set forth below the manner in which this system developed, the legislative history of the compulsory requirements for this system, both domestically and international treaty. Now, what would be the effect of the bill that is being considered on that system?

First, it should be noted that the wording of the bill is not confined to a provision to exempt a single, experimental craft from the radiotelegraph requirements of the Communications Act. As it now reads, H.R. 8508 (and the companion measures before the subcommittee) would amend the Communications Act to permit cargo vessels, of any tonnage up to and including the largest in the world, to navigate between Hawaiian Islands ports without having to comply with the radiotelegraph requirements of title III, part II of the act. Thus, not just a single Matson craft, but all vessels in the Hawaiian interisland trade would be allowed to withdraw from taking part in that sea-safety network.

If this bill is passed, it would result in decreased sea safety. Seamen and passengers sailing aboard ships on coastwise, intercoastal, and international voyages, along sealanes that converge, cross, and are contiguous to Hawaiian waters, would face greater danger, in at least three ways:

(1) The affected vessel would itself be substandard, in that it would not possess an efficient and reliable radio safety system in common with other deep-sea vessels. It would thus be without the direct means to summon the great majority of these vessels to its aid in emergency.

(2) Other vessels plying these waters would be deprived of the direct participation of the affected ship in the radio sea-safety system in which each vessel is considered a potential lifeboat for all others. Thus, the entire sea-safety network, which is knitted together by the safety watches stood on all vessels of 1,600 gross tons and over, would be weakened.

Insofar as this particular legislation might lead to other and more general weakening of the provisions which now require that vessels participate in this mutual assistance network, all vessels everywhere might be rendered less safe, and the lives of passengers traveling on the ships and the men who earn their living by following the sea would be that much more expendable.

To lower safety standards is to take callous and calculated risks. Men who go down to sea in ships cannot win in such a gamble—a gamble in which their lives are unnecessarily risked to save expenses for the owners, who sit safely at their desks ashore, secure in their property behind vessel insurance coverage. It should be noted that the collective-bargaining agreements of all maritime unions presuppose a safe place to work, and do not require seamen to work under unsafe conditions.

The subcommittee is asked to note the full background of events that lead to this measure being before you at this time, including certain facts that might previously not have been made known to you.

On February 18, 1962, the Matson Navigation Co. applied to the Federal Communications Commission for an exemption, under section 352(b) of the Communications Act, as amended, to permit the Matson to sail a vessel that company proposed to build, of over 1,600 gross tons, in the Hawaiian interisland trade, without compulsory radiotelegraph equipment.

After full consideration of the facts submitted by Matson and the applicable law, the FCC denied Matson the exemption, by its order of March 6, 1963, which has previously been entered into the record by Commissioner Bartley.

On April 5, 1963, Matson asked the FCC to reconsider their request, and cited a number of further considerations, including factual data and automation plans, which Matson felt were pertinent.

On June 5, 1963, in its memorandum opinion and order, already inserted in this record by Commissioner Bartley, the Commission again rejected Matson request. Both orders were issued on sound and valid grounds, amply set forth in those two orders. They merit the careful study and consideration of this subcommittee in its deliberations.

Then comes a truly startling development. On June 27, 1963, Wayne L. Horvitz, vice president of the Matson Navigation Co., wrote a letter to all of the west coast maritime unions with which Matson holds collective-bargaining agreements, including ARA and MMP. This letter contained within it a most brazen display of corporate arrogance.

We are submitting copies of the entire letter for the records, as appendix A.

In forwarding a brochure on Matson's automation plans, the letter stated:

"You will note that on page 50 which sets forth the proposed manning, we have not included a licensed radio operator. Since the preparation of this brochure, the Federal Communications Commission has refused to grant us an exemption and has given us an administrative ruling that this vessel requires radiotelegraph equipment and, therefore, the addition of one licensed radio operator to the manning set forth. Matson, however, is not in agreement with this ruling and *it is our intention to introduce a bill* to amend the Communications Act of 1934 to provide an exemption from this requirement with respect to our proposed interisland container vessel." [Emphasis supplied.]

Please note the manner in which Matson proceeds: turned down twice by the regulatory agency responsible for issuing exemptions, Matson states they disagree with the FCC. It is, of course, their right to disagree. But when they go on to state "it is our intention to introduce a bill," many people will sit up and take notice. Here is fully revealed the type of mentality that has made the Matson interests the object of Justice Department antitrust proceedings under section 1 of the Sherman Act and section 7 of the Clayton Act, which were filed on January 20, 1964, and are now pending.

We do not question the good faith of the honorable Members of Congress who introduced the bills. We simply submit for their information the kind of attitude that lies behind the Matson interests who are pressing for the adoption of this special interest bill. This, however, is not all there is to the highly interesting prelude to this special interest Matson bill.

The subcommittee has the right to know that there is more than meets the eye in the present Matson request. In reaching its decision in a matter so crucial for sea safety, the subcommittee should be told of the real undercurrent at work in this entire picture: a brazen campaign has been in progress during the last 15 years to undermine and destroy the international sea-safety radio network.

The Matson effort is only the latest move in a series of open and covert maneuvers on the part of those engaged in this campaign. The subcommittee must assess Matson's effort for this bill's passage in the context of that campaign.

There are in the maritime industry some shortsighted shipowners, whose actions demonstrate a persistent indifference to the value of human life. This is sad, but true. To them, immediate cost savings, and opportune business considerations, take precedence over human life and the safety of vessel and cargo. These penny wise and dollar foolish elements among steamship owners and operators seek to avoid payment of the reasonable wage of a qualified radio officer. Of course, the factor of cost and business considerations are material and must not be overlooked. But, in the hierarchy of values, human life and safety are uppermost.

The very legislation requiring radiotelegraph equipment, operators, and watches aboard ship resulted directly from a succession of sea disasters caused by the failure of shipowners to provide safety at sea, due to their economic shortsightedness and callous indifference to the problem.

What impelled the Congress, in 1937, to adopt Public Law 97, that added part II to title III of the act, the terms of which this bill now proposes to amend? Was this public law the product of a brief and hasty consideration of the factors involved? It was not.

A clear and concise summary of the background of Public Law 97 was given in testimony before the House Interstate and Foreign Commerce Committee, by the Honorable John McCormack, who noted:

"* * * the reason ship radio legislation was passed in the first place: it passed the Congress because of such disasters as the great loss of life aboard the SS. *Morro Castle*. It was because of situations like this that we learned of the shocking indifference of shipowners to safety of life at sea. Provisions for safety at sea through the use of radio was the result of Congress taking a strong and firm hand in passing Public Law 97 of the 75th Congress, after the shocking facts were disclosed by the *Morro Castle* investigation" (hearings on H.R. 4090, Mar. 21, 1955).

At this point we include, as appendix B, a brief summary of the legislative history of title III, part II of the Communications Act, as amended.

It is quite obvious to any person who peruses the record on Public Law 97, that Congress was well aware of both the advances claimed for radiotelephony as well as its continuing limitations that prevent it then and now from replacing radiotelegraphy as a safety system for oceangoing vessels.

It would be inaccurate to state that radiotelephony was not available, or even that it was relatively undeveloped at the time the 1937 Public Law 97 was adopted. As a matter of fact, in the hearing on that very public law, representatives of Great Lakes shipowners argued, successfully, for being omitted from the coverage of the act, on the basis of claims for radiotelephone advanced in those hearings. Thus, Mr. Gilbert R. Johnson, Secretary of the Lakes Carriers Association, cited radiotelephone as sufficient for Great Lakes communications, and noted:

"Geographically isolated as we are, vessels on the Great Lakes could not come to the assistance of ocean craft, and, similarly, ocean craft could not come to our assistance. There is, therefore, no need, theoretical or practical for Great Lakes vessels communicating by means of the same radio tongue as ocean ships" (p. 34, hearings on S. 595, Feb. 22, 1937).

The differing radio tongues he was referring to was radiotelephone and radiotelegraph. Note that the vessels plying waters between Hawaiian ports are not similarly geographically isolated from the ships of the world which are radiotelegraph equipped. They should therefore be able to speak in the same radio tongue, radiotelegraph, to be able to go to the assistance of those ocean craft and summon their assistance, when needed.

The question arises, why was radiotelegraph chosen, both domestically by Congress and internationally by Safety of Life at Sea Conferences? To answer that question is not to dispute the limited uses to which radiotelephone may be put, under conditions that make it both useful and practical, within its inherent limitations, but simply to set forth the hard technical facts that are universally recognized, with respect to radiotelephone and radiotelegraph, that we have presented in appendix C, where we have compared radiotelegraph and radiotelephone and discussed them operationally.

AUTOMATION

Matson based its plea for consideration on its desire to experiment in automation, and bases its support of this bill on its automation program. However, the safety of lives and passengers should not be neglected in any automation process. At the annual meeting of the AFL–CIO Maritime Committee, this fact was underscored in a resolution, which we have included for your information as appendix D, and which we commend to your attention.

We would like to underscore, in addition, the fact that such automation programs as this or any other company undertakes, in line with the established policy of this administration, must be introduced by cooperative efforts of both labor and management. At the present time, Matson has proposed to try an "end run" around the collective bargaining agreement provisions by pressing for this bill which is of special interest to Matson. How-

ever, for the information of the subcommittee, the passage of this bill will afford no economic relief for Matson, since that company is signatory to collective bargaining provisions that require both radiotelegraph and radiotelephone to be handled only by radio officers, and no one else. (We have attached copies of these collective bargaining provisions as appendix E.) We call attention to the fact that these provisions have been the result of harmonious working relationships with the masters and mates, the deck officers aboard the ships, as attested to by the exchange of letters, beween the presidents of the ARA and MMP, recognizing the handling of all radiotelephone to be properly the work of radio officers. (We attach the letters as appendixes I and J.)

We note, moreover, that the collective bargaining agreements of all unions require that their men shall be provided with safe working conditions. Seamen of all ratings, from the master to the messmen, and their unions know when their safety is at stake, as evidenced by the AFL–CIO Maritime Committee resolution mentioned above.

What then does Matson expect to accomplish with their special interest bill? Apparently, they hope to place the maritime unions on the defensive, by flexing their monopolistic muscles in this bill they announced they were going to introduce. Is this the way to smooth the way for automation, or is it likely to produce unstable labor relations in the maritime industry? It is clearly the latter.

WHAT ARE THE CONDITIONS AND HAZARDS OF THE ROUTE?

Matson has made, and indeed can make, no showing that the route and circumstances of the voyages of vessels in the Hawaiian interisland trade are substantially different or less hazardous than those encountered along any U.S. coast, to warrant the special treatment for this trade that this bill would provide. The Treasury Department letter of February 19, 1964, to this subcommittee on this bill makes this clear when it states:

"We are not aware, however, of any factors which require operations between Hawaiian ports to be treated differently from operations between other coastwise ports where vessels stey within the same range of land. As to this and other aspects, therefor, we defer to the views of the Federal Communications Commission."

The route is not "sheltered"; that is, entirely to the lee of land. The waters are such that vessels navigating in them encountered high winds, a high traffic density of vessels, on voyages both local and international, since Honolulu is a stopover port for many ships, for cargo and bunkering purposes, among others. The area als has its unique characteristics, which includes some of the finest weather to be found anywhere in the world—and some of its worst.

For the information of the subcommittee, we have excerpted references to anchorages, tidal waves and, what is known as Kona weather, from the U.S. Coast and Geodetic Survey's Coast Pilot 7, on Hawaii, as appendix K.

Close study of this data will verify the fact that these are indeed no waters in which vessels may be exempted from participating in the radio sea safety system provided for vessels of over 1,600 gross tons, which are large enough to proceed in heavy weather to the side of a stricken vessel, provide a lee for launching lifeboats and for rescuing survivors from vessels in distress.

CONCLUSION

There are eight reasons, amply supported by the evidence presented to this subcommittee, why this bill should not be enacted:

First, the men who earn their livings at sea, and passengers traveling aboard U.S. ships, are entitled to an adequate safety system, to give them the best chances of survival in sea disasters;

Second, there now exists such a safety system, the international sea-safety radiotelegraph network, in which larger ships of 1,600 gross tons and over have been effectively functioning to provide such safety, resulting in the savings of thousands of lives, in this present generation alone;

Third, after almost 3 years of technical investigation and careful hearings the Congress adopted title III, part II in 1937, to fit the U.S.-flag ships which go into the open sea into this radiotelegraph sea-safety system, in order to provide U.S. citizens working and traveling on the seas with the highest measure of safety.

Fourth, there is ample authority for the Federal Communications Commission to provide exemption from the requirements of title III, part II, where such

requirements would be unreasonable or unnecessary, under the hazards and circumstances of the voyage;

Fifth, such exemption was applied for by Matson twice, and all the facts in the *Matson* case were carefully examined by the Commission, and exemption was denied Matson, since the hazards and safety considerations of the voyage route are not sheltered, but are indeed quite similar to those prevailing in other coastal voyages covered by the act;

Sixth, the effect of this bill is to enter an opening wedge that will whet the economic appetites of selfish companies and could lead to the weakening and ultimate destruction of radio sea safety and the lives of those who depend on it;

Seventh, Matson has proclaimed to the unions with which it bargains collectively that it can introduce and pass laws, in an effort to evade the collective bargaining process on the question of automation, and to evade the obligations to which Mason is committed under is collective bargaining agreements;

Eighth, the radiotelephone equipment Matson proposes to be allowed to substitute for the effective radiotelegraph safety system is inadequate for something as crucial as safety communications under most circumstances, and the so-called system providing safety through radiotelephone is undisciplined, chaotic and often inefficient;

Therefore, on the basis of—

The unremitting search by this country to enhance the safety of lives and property at sea;

The congressional wisdom embodied in present radio safety legislation;

The need to uphold the FCC in its conscientious application of the intent of Congress, as it has displayed in the *Matson* case; in order to maintain orderly governmental processes;

The failure of Matson to provide a basis for any special interest legislation such as it is requesting;

The need to avoid encouraging private companies to try evading their collective bargaining obligations, especially in the crucial areas of safety and automation;

The consequent need to maintain stable labor relations on the maritime industry to the end that technological progress may be made in an orderly and cooperative manner;

The fact that passage of this special interest bill would tend to weaken, and might ultimately end in the destruction of efficient and necessary safety radio system; and

The need for Congress to reaffirm the bipartisan public interest in maintaining high sea safety standards, both domestically and in compliance with our Nation's treaty obligation.

We submit that the public interest would be served by rejection of this bill, and urge this course upon the subcommittee most strongly.

APPENDIX A

MATSON NAVIGATION CO.,
June 27, 1963.

Mr. MORRIS WEISBERGER,
Secretary-Treasurer, Sailors Union of the Pacific,
San Francisco, Calif.
Mr. W. W. JORDAN,
President, Marine Firemen, Oilers, Wipers & Watertenders Union,
San Francisco, Calif.
Mr. E. TURNER,
Secretary-Treasurer, Marine Cooks & Stewards Union,
San Francisco, Calif.
Capt. ROBERT E. DURKIN,
Master, Mates & Pilots, Local 90,
San Francisco, Calif.
Mr. W. A. FERRON,
Marine Engineers Beneficial Association,
San Francisco, Calif.
Mr. PHILIP O'ROURKE,
American Radio Association,
San Francisco, Calif.

GENTLEMEN: I know you are aware that Matson has under consideration a proposal to build and operate a semiautomated vessel in the interisland trade in

Hawaii. Although there has been a considerable amount of publicity about these plans, we have purposely not directly contacted you until we could give as full a description as possible of the engineering and manning requirements of this vessel.

The attached brochure sets forth to the best of our ability all of the important features of vessel design and, in addition, includes a general description of the methods of proposed operation. The method of operation, of course, is subject to change as more information is developed from further discussion and also actual operation.

You will note that on page 50 which sets forth the proposed manning, we have not included a licensed radio operator. Since the preparation of this brochure, the Federal Communications Commission has refused to grant us an exception and has given us an administrative ruling that this vessel requires radiotelegraph equipment and, therefore, the addition of one licensed radio operator to the manning set forth. Matson, however, is not in agreement with this ruling and it is our intention to introduce a bill to amend the Communications Act of 1934 to provide an exemption from this requirement with respect to our proposed interisland container vessel.

Although this vessel, if completed, would represent a radical departure in ship design and crew complement from previously constructed vessels in our fleet, we recognize that it is, for purposes of collective bargaining, a ship covered by some or all of our present agreements with the offshore unions unless otherwise agreed to by the parties.

We would appreciate it if you would review the attached brochure and, in the near future, meet with a committee from Matson and PMA to discuss pertinent questions that may arise with respect to this vessel and the application of our existing agreements. It is also our intention at this meeting to inform you of our specific plans for the conversion of the *Coast Progress* and the *Hawaiian Motorist*, and to specifically set forth for your consideration proposed changes in the manning of these vessels that will result from these conversions.

Yours very truly,

WAYNE L. HORVITZ.

APPENDIX B

I. THE EARLY LEGISLATIVE HISTORY

1. Senate Resolution 7 (74th Cong.): It ordered an investigation of the *Morro Castle* and *Mohawk* disasters, and authorized the investigating committee to recommend necessary remedial legislation:

"The *Morro Castle* and the *Mohawk* disasters moved the Senate of the United States to adopt a resolution requesting the Committee on Commerce of the Senate or a subcommittee thereof to conduct a study of the causes of these disasters, to make studies which might throw light on the question of safety of life at sea, and to make recommendations to the Congress for greater security of persons and property at sea * * *" (S. Rept. 196 (on S. 595, Public Law 97, 75th Cong., 1st sess.), p. 2, Mar. 17, 1937).

2. Senate bill 595: This legislation was passed to add title III, part II, to the Communications Act of 1934, as amended, and,

"As a result of this study of the problem the bill which the Commerce Committee now reports, with certain modifications, was prepared and introduced by Senator Copeland * * *" (S. Rept. 196, above, p. 3).

3. Public Law 97 (75th Cong., 1st sess.): Its object was to increase safety at sea. This legislation received bipartisan support, since the members of both parties were unwilling to play politics with human lives.

(*a*) Purpose of the law was to increase safety at sea:

"* * * Section 1 of the Communications Act of 1934 is hereby amended by inserting after the words 'for the purpose of the national defense' a comma and the words '*for the purpose of promoting safety of life and property* through the use of wire and radio communication'" (sec. 1, Public Law 97, 75th Cong., C. 229, 1st sess., S. 595, approved May 20, 1937). [Emphasis supplied.]

(*b*) Senate Report No. 196 stressed that safety was to be the aim of the Commission in enforcing this law:

"The committee feels that it should be the aim of the Commission to assure itself, within practicable limits, that the radio installations required by law to be installed upon ships are at all times in operating conditions, manned by competent operators, and available to give the greatest assurance of protection to life and property on the high seas * * *" (S. Rept. 196 (on Public Law 97, S. 595), Mar. 17, 1937, 75th Cong., 1st sess., p. 4).

(c) Method: Coastwise and international voyages were similarly treated for the purposes of safety at sea. Congress applied the same principles to coastwise shipping as it applied to vessels making international voyages, and imposed the same radio requirements for cargo vessels over 1,600 tons:

"In this bill, therefore, an endeavor has been made to apply the requirements of the convention to our domestic shipping so far as *vessels which go into the open sea* are concerned and to restore some of the lost prestige which has come through our failure to keep abreast of modern developments in this important feature of safety at sea * * *.

"Today, there are probably 600 or more ships of the United States of substantial tonnage carrying many persons as passengers and crews, which neither by our law nor the convention are required to carry radio. No more pointed illustration of the danger and of the tragedy of this inadequacy of law can be found than in the fact that there was an American ship not required to be equipped with radio within 30 miles of the *Vestris* and which sailed away because it did not receive the S O S signals of that doomed vessel. We are told that that ship was so near to the *Vestris* that it might have saved all * * *" (S. Rept. 196, p. 2). [Emphasis supplied.]

(d) The reason Congress took this approach is obvious. Vessels entering the open sea face the same dangers and can provide the same contribution to a common network of vessels, knit together by radio, for mutual assistance in emergencies. The House report on the same legislation noted that—

"* * * a considerable number of *ships operating in coastwise service* which at present are not required by either the law or the treaty to be equipped with radio. These ships *go to sea, face the same dangers, and are available as lifeboats* to distressed vessels, in the same manner as those required by law to carry radio. This bill remedies this inconsistency * * *.

"These ships cruise *in the open sea and face the same dangers as those in international voyages*" (H. Rept. No. 686 (on Public Law No. 97, S. 595) Apr. 23, 1937, pp. 2, 4, 75th Cong., 1st sess.). [Emphasis supplied.]

(e) Coverage or exemption from the radio requirements were based on the hazards encountered on the route of the voyage, the circumstances of the voyage, and other conditions of the same nature; thus voyage considerations, not the nautical mileage limitations, were primary in the exemption provision Congress placed in the act, since the Congress had before it the facts of the *Morro Castle* disaster which had occurred well within the 20- and 150-mile limits, and in fact within sight of land:

"The proposed legislation provides—

"(2) That the Commission may exempt ships or make blanket exemptions of classes of ships if it considers that the *route or the conditions of the voyage or other circumstances are such as to render a radio installation unreasonable or unnecessary* * * *" (H. Rept. No. 686 (on Public Law No. 97, S. 595) Apr. 23, 1937, p. 5, 75th Cong., 1st sess.). [Emphasis supplied.]

4. International treaty standards were met—and raised: The Safety of Life at Sea Convention, London, 1929, had provided Congress with guidance on the coverage (to commence with 1,600 gross tons and up) and had indicated conditions relevant to exemption (Safety Convention, London, 1929, arts. 26 and 28).

Congress, however, had taken these convention requirements for international voyages, and in Public Law 97 applied them to coastwise voyages, as well:

"The 1929 convention (Safety of Life at Sea Convention, London, 1929) applies only to vessels employed in international voyages * * *" (S. Rept. No. 196, p. 1).

"This bill has taken from the 1929 Convention on Safety of Life at Sea the part thereof relating to radio and has sought to adapt it to our circumstances and our requirements. Your committee assert generally that we have written into the bill the standards of the world, that in some respects we have raised such standards, and we assert, unqualifiedly that we have immeasurably lifted the standards of present U.S. law" (S. Rept. No. 196, p. 3).

5. During the floor debate in the Senate on this bill, Senator Copeland underscored two points:

(a) The bipartisan nature of the legislation, and

(b) The safety purpose of the bill:

"Mr. COPELAND. * * * A full agreement was reached by all parties in interest; and by *unanimous* vote of the committee it was recommended that the bill be reported for the calendar and be passed.

"The bill provides, as the Senator from Arkansas has said, for carrying out the conclusions of the International Convention for the Safety of Life at Sea. It provides for radio on ships, so that *in case of disaster*

or distress there may be communication. The bill is in the public interest and certainly is in the interest of the preservation of human life * * *" (81 Congressional Record, p. 2465 (1937)). [Emphasis supplied.]

6. The floor debate in the House concerned itself, among other matters, with the exemption and coverage of various classes of vessels. House Merchant Marine Committee chairman, Congressman Bland, replied to an inquiry as to just which ships were referred to in the coastal trade, as follows:

"Mr. BARDEN. Mr. Speaker, reserving the right to object, may I ask the gentleman from Virginia to explain just *what* boats *this* refers to in the coastal trade?

"Mr. BLAND. As to freight vessels, they must be of 1,600 gross tons, and as to passenger vessels, affected. It does not affect any boats on the bays or inland waters" (81 Congressional Record, p. 4134 (1937)). [Emphasis supplied.]

II. THE MORE RECENT LEGISLATIVE HISTORY

Public Law No. 584 (83d Cong., 2d sess.), reveals the following factual history:

(1) As to Senate bill 2453: A recent session of Congress, the 83d Congress, 2d session, had before it S. 2453, Amendments to Communications Act Requiring Radio Equipment and Radio Operators On Board Ships (approved Aug. 13, 1954, Public Law 584, 83d Cong., chs. 7 to 9, 2d sess., 50 Stat. 192). During the course of consideration of S. 2453, Congress reviewed, again found valid, reaffirmed, and further extended the previously expressed congressional intent relative to ship radio requirements of Public Law 97, as to—

(*a*) Purpose—safety.

(*b*) Method—through covering coastwise voyages as well as international voyages.

(*c*) Reason—same hazards faced, in common safety network needed, by ships in open sea.

(*d*) Coverage or exemption—voyage conditions, route, circumstances.

(*e*) Treaty standards—met and raised.

(*f*) Bipartisan nature—passed unanimously in both House and Senate.

This is amply explained in identical wording in both Senate and House reports on S. 2453:

"In 1929, an International Safety of Life at Sea Conference was held in London at which time a compulsory ship radio formula was developed covering certain classes of ships engaged on international voyages. * * *

"The convention was ratified by the United States in 1936, and in 1937 the Congress amended the Communications Act (mainly the addition of pt. II to title III) so as to implement the provisions of the convention. This amendment also went beyond the radio provisions of the convention of applying higher technical radio standards to U.S. vessels and to foreign ships of nonconvention countries when departing from ports of the United States for a voyage in the open sea, regardless of whether such voyage was international or not. In consequence, the new legislation covered vessels on coastwise domestic voyages as well as those engaged on international voyages * * *.

"The amendments contained in this bill (S. 2453) are similarly designed to raise ship radio safety requirements for U.S. ships on domestic ocean voyages and for foreign nonconvention ships departing from U.S. ports by bringing them in line with those now specifically internationalized by the 1948 Safety of Life at Sea Convention. The principal effect of the legislation would be to insure that vessels engaged in domestic ocean voyages would comply with safety radio requirements no less effective than those applicable to ships engaged in international voyages" (S. Rept. No. 1583 (June 11, 1954), p. 2, and H. Rept. No. 2285 (July 19, 1954), p. 2).

(2) S. 2453 implemented and exceeded the provisions of the London convention of 1948: The 83d Congress adopted S. 2453 amending the Communications Act of 1934 to implement and to exceed the International Convention on Safety of Life at Sea, London, 1948, which had previously been ratified by the Senate. How does this 1948 safety convention approach exemptions?

(a) Regulation 3 of chapter III, "Life Saving Appliances, etc." of the 1948 convention states:

"Exemptions—(*a*) Each Administration, if it considers that the *sheltered* nature and conditions of the voyage are such as to render the application of the full requirements of this Chapter *unreasonable or unnecessary*, may to that extent exempt from the requirements of this Chapter individual ships or classes of ships belonging to its country which, in the course of their voyage, do not go more than 20 miles from the nearest land." [Emphasis supplied.]

As was established in the body of this statement, vessels are hardly engaged in making voyages of a sheltered nature when navigating between Hawaiian ports.

(*b*) Regulation 5 of chapter IV, "Radiotelegraph and Radiotelephone" of the 1948 safety convention reads:

"Exemptions from Regulation 3 '(*a*) The Contracting Governments consider it *highly desirable not to deviate from the application of Regulation 3*, nevertheless each Administration may grant to *individual* passenger and cargo ships belonging to its country exemptions of a partial and/or conditional nature, or complete exemption from the requirements of Regulation 3.' (The Regulation 3 referred to is the 1948 safety convention requirement for radiotelegraph.)

"(*b*) The exemptions permitted under paragraph (*a*) of this Regulation shall be granted only to a ship engaged on a voyage where the maximum distance of the *absence of general navigational hazards*, and other conditions affecting safety are such as to render the full application of Regulation 3 unreasonable or unnecessary.

"(*c*) Each Administration shall submit to the Organization as soon as possible after the first of January in each year a report showing all exemptions granted under subparagraphs (*a*) and (*b*) of this Regulation during the previous calendar year." [Emphasis supplied.]

It is well to observe the general principle that it is highly desirable not to exempt from safety at sea requirements, as set forth in subparagraph (*a*) above.

Note also that though mileage limitations were dropped in the Convention (though not in the Communications Act, as shown herafter), the absence of general navigational hazards along the route of the voyage is retained.

(3) S. 2453 specifically deals with the classes of vessels embraced within the requirements of law. The very question of what classes of vessels shall be equipped with radiotelephone and what classes with radiotelegraph was considered, and Congress set forth precise provisions in that regard in S. 2453. The bill, as adopted, made the following provisions:

(*a*) Radio requirements were extended, by amended section 351(a)(1), to cargo vessels of 500 gross tons and over which "leave or attempt to leave any harbor or port of the United States for a voyage in the open sea."

(*b*) Section 354(a), renumbered as new section 355(a), was reworded so that the radio installation required by section 351(a)(1) was required to comprise "a main and an emergency or reserve radiotelegraph installation," reaffirming the previous meaning and intent of the law that radiotelegraph equipment, operators, and watches provides the firmest foundation for safety at sea through radio.

(*c*) For cargo ships between 500 and 1,600 gross tons, the radiotelegraph requirements were made optional, and such vessels were permitted to carry a radiotelephone installation in lieu of radiotelegraph (sec. 356).

(*d*) These provisions were enacted to carry out the following obligations of the 1948 safety convention:

"The change in paragraph (1) of section 351(a) of the act is designed to carry out the requirement contained in regulation 4, 'Radiotelephone installation' of chapter IV, 'Radiotelegraphy and radiotelephony,' of the 1948 convention" (S. Rept. No. 1583, 83d Cong., 2d sess. (1954) p. 12).

That regulation reads as follows:

"Radiotelephone Installation—Cargo ships of 500 tons gross tonnage and upwards but less than 1,600 tons gross tonnage unless fitted with a radiotelegraph installation complying with the provisions of Regulations 9 and 10, shall, provided they are not exempted under Regulation 6, be fitted with a radiotelephone installation complying with the provisions of Regulation 15" (Reg. 4, ch. IV, of the Safety of Life at Sea Convention, London, 1948).

It is thus clear that neither the Congress nor the 1948 safety convention is silent on which class of vessels shall operate with radiotelephone and which shall be required to carry the full radiotelegraph installation and a qualified radio operator.

RADIOPHONE VERSUS RADIOTELEGRAPH; FURTHER LEGISLATIVE HISTORY

During the hearings on S. 2453 (83d Cong. 2d sess., March 16, 1954), the Congress was alerted to the drive against the existing radio sea safety network, aimed at destroying this system.

The ARA first learned the extent of these steps that were being taken to undermine sea safety radio standards while investigating a sea tragedy that occurred late in 1951, ironically enough, on the Pacific coast. Reference is made to the

tragically unnecessary loss of 19 lives when the U.S.S. *Benevolence* collided with the SS *Mary Luckenbach*. The ARA always submits the radio "side" of every sea disaster to careful and close analysis. This is done in the public interest to provide for radio officers, whose business it is to use improved safety practices and procedures, all of the facts relating to a particular disaster at sea.

Investigation of the *Benevolence* disaster revealed these tragic facts:[1]

(1) Distress signals had been transmitted from neither of the two vessels, on 500 kilocycles:

(*a*) In the case of the Navy hospital ship, U.S.S. *Benevolence*, the personnel and practices employed by them were apparently inadequate and were the subject of a separate investigation by the U.S. Navy.

(*b*) In the case of the cargo vessel, SS *Mary Luckenbach*, the master had failed to order transmission on 500 kilocycles (the international distress frequency guarded by every merchant vessel), of distress, safety, or urgent signals, despite the requirement of maritime and radio law (e.g., sec. 357(a) of the Communications Act).

(*c*) In the public hearings which followed, the radio officer, Mr. Ernest Travis, was found to have complied fully with the requirements of the law. He had gone on watch in the radio room immediately following the collision and awaited such orders from the master (pursuant to sec. 357 of the Communications Act and Rule No. 8.173 of the Commission's Rules and Regulations). The master of the SS *Mary Luckenbach* had failed to order the transmission of any radio signals to give all ships in the vicinity the following vital information—

(1) That there had been a collision in fog off the Golden Gate, entrance to San Francisco harbor:

(2) That the other vessel in the collision might be in distress or out of control (thereby constituting a menace to other shipping);

(3) That survivors might be struggling to stay afloat in the icy waters off the Golden Gate, as they were.

(2) Why this failure to observe the code of the sea?

(*a*) Investigation disclosed that the master of the *Mary Luckenbach* had apparently disregarded the normal channels of the sea safety radio network and had failed to order these signals due to reasons best summed up in one word: Radiotelephone. The sea safety network that has saved tens of thousands of lives in the past 50 years, was bypassed because of concerted efforts to destroy that network.

(1) It seems that the master of the *Mary Luckenbach* had merely gone to the radiotelephone installed on his vessel and called the office of his company. He gave them the details about the collision that related to his vessel alone. Due to the dense fog, he had no knowledge of the plight of the other vessel, its crew or passengers. Though she was a Navy hospital ship, fortunately the *Benevolence* was not carrying sick or wounded—she was on her shakedown cruise following reactivation. Otherwise the casualties might well have been staggering. The tragic toll to radiotelephone was the loss of 19 lives—19 who might easily have been picked up by numerous ships in the busy San Francisco approaches, had the proper radio signals been ordered sent.

(2) While other steamship companies, including some Pacific coast steamship operators, had properly installed radiotelephones as an integral part of the ship radio station, it was learned that the Luckenbach Steamship Co. had installed radiotelephone equipment aboard their vessels outside of, and apart from, the regular ship radio station. The intent was not to integrate this equipment into the ship radio station.

(3) After the *Benevolence* tragedy, ARA discovered that similar steps were being taken by certain other steamship companies. In the interest of safety at sea, ARA insisted that the artificial separation of radiotelephone equipment from the regular ship radio station be ended at once.

(4) In June 1953, identical clauses were included in all collective-bargaining agreements between ARA and every one of the various associations of steamship companies, which provided for the integration of the radiotelephones into the regular ship radio stations, thereby insuring proper operation by qualified radio officers.

Matson was and continues to be party to these very contract clauses. Now, Matson, through its present efforts for this bill, is attempting to make an "end run" around its agreement. ARA has reason to believe that in doing so,

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[1] The subcommittee is respectfully requested to "judicially note" the hearings before the U.S. Coast Guard and the U.S. Navy relating to this major disaster.

Matson is merely "carrying the ball" for the other companies who have apparently not abandoned their cynical program against sea safety through radio, despite the requirements of law.

The ARA recently described these efforts to Congress at the hearing on S. 2453, 83d Congress, 2d session, March 16, 1954, before the Communications Subcommittee of the Senate Interstate and Foreign Commerce Committee. ARA Technical Director M. H. Strichartz, speaking on behalf of ARA and other maritime unions, stated that:

"Radio officers and all other seamen have ample reason to know—not just to suspect, but to know—that shortsighted elements in the maritime industry have been exerting pressures to return us to the combination mate-radio operator of 20 years ago. As recently as last June radiotelephones were being brought aboard the ships, artificially separated from the rest of the ship radio station. They were being placed on the navigating bridge or in the chartroom or in the captain's office, and sometimes in his room, and the extra duties of operating them as duplicate radio stations were being forced onto masters and other licensed deck officers as combination jobs.

"As a result of the common desire of both radio officer and deck officer groups—attested to in the exchange of letters * * * that effort to turn back the clock of sea safety was defeated. Radiophones, when they come aboard, are being integrated now into the regular ship radio station where they are properly operated by the radio officer to serve the safety, navigation, business, and communications needs of the vessel. If this had not been done, there would have developed a situation under which the ship would have had two radio stations, the efficient one required by law but costing more, and the limited combination job operated by the deck officers to the detriment of their other duties.

"It was clear that before long efforts would be made to push the trained experienced radio officer off the ship altogether, regardless of what that would do to the worldwide radio network. It is hard to believe that such callous shortsightedness could exist, but there was the economic motive, the savings that were anticipated on the radio officers' wages.

"As a result of this recent experience, radio officers, navigating officers, and all other seamen have gained an awareness that such pressures do exist and are anxious not to let any hole be breached in the dike through which these pressures could flood to destroy sea safety standards. We want these standards kept high" (hearing on S. 2453, 83d Cong., 2d sess., Mar. 16, 1954, p. 12).

The above warning was sounded in the course of hearings on a proposed amendment to section 352(b), among other matters.

After hearings and conferences on S. 2453, Congress recognized the validity of the ARA–ROU request that section 352(b) be left intact and, in Senate Report No. 1583 and House Report No. 2285, 83d Congress, reaffirmed previously expressed congressional intent relative to coverage of coastwise ships by radiotelegraph.

III. The London Safety of Life at Sea Convention, 1960

At the most recent International Conference on Safety of Life at Sea, held in London in 1960, proposals to permit the use of radiotelephone in lieu of radiotelegraph on cargo ships greater than 1,600 gross tons received scant support. The U.S. delegation voted, with the overwhelming majority of maritime nations, to reject that proposal.

The 1960 SOLAS Convention merged the exemption requirements for both radiotelephone and radiotelegraph, but retained the language that is highly desirable not to grant exemptions, that had been in the 1948 SOLAS Convention. It then added new language:

"When deciding whether or not to grant exemptions to individual ships, administrations shall have regard to *the effect* that exemptions may have *upon* the general efficiency of *the distress service for the safety of all ships*" (from regulation 5, ch. IV, 1960 SOLAS Convention). [Emphasis supplied.]

In applying that limited exemption authority, the Commission in the past, and in the Matson application, clearly recognized the above considerations. Its conscientious adherence to the intent of Congress is revealed by the analysis, below, of prior decisions by the Commission on applications for exemptions under section 352(b).

THE APPLICABLE LAW

Shortly after the passage of Public Law 97, the Commission was flooded with applications which sought a "loose" interpretation of section 352(b). Exemp-

tions were sought from the radio provisions of the act for vessels of over 1,600 gross tons, in the coastwise trade.

(1) In matter of Atlantic Refining Co. (docket 4856, 5 FCC Rep. 104 (1938), p. 105), the Commission recognized the "limited discretion given us by Congress." The headnote of the official report states:

"* * * that where no material showing is made to distinguish the operation of the vessel from the operation of the whole group of vessels to which the laws apply, the Commission has no basis for the exercise of *its limited authority* to grant exemptions" (p. 104). [Emphasis supplied.]

The Commission found that all the normal hazards of ocean navigation are present in this coastwise operation, and it was therefore precluded from granting the exemption sought:

"For the purposes of this application, then, we must consider that the route navigated by this vessel lies along practically the entire length of the east coast of the United States from Miami to Boston. The operation over this route is not seasonal, but is conducted at any time of the year, so that the vessel may be expected to encounter any weather conditions that occur along this coast.

"We do not feel that it is necessary to enter into a discussion of the hazards inherent in coastwise navigation along the Atlantic coast other than to state that the record discloses that at least *all normal hazards of ocean navigation are present over the route* navigated by this vessel; nor do we deem it necessary to dwell upon the value of a radio installation as a measure of safety to other shipping. The applicant has offered nothing to distinguish the operation of its vessel from the operation of the great number of vessels normally plying in the coastwise trade, and we, therefore, have no basis for the exercise of the limited discretion given us by Congress (p. 105). [Emphasis supplied.]

In denying the application, the Commission concluded:

"It is our conclusion that the applicant has not presented facts sufficient to warrant this Commission in finding that the route and conditions of the voyage, or other circumstances, are such as specified in the Convention and in the act" (p. 106).

(2) *In matter of Bouchard Transportation Co., Inc.* (5 F.C.C. Rept. 163 (1938), Docket No. 4887), the Commission again acknowledged the congressional intent to include coastwise vessels in the international radiotelegraph safety network. In doing so, it stated:

"With respect to assistance to other vessels, it was *plainly the intentions of Congress to increase safety* of life at sea by increasing the effectiveness of radio. To accomplish this purpose, Congress not only provided for the installation of satisfactory radio equipment, but provided for the necessary corollary, namely, maintenance of a continuous listening watch on vessels so equipped. *Therefore, the exemption of any vessel operating in normal ocean trade removes one unit from the total* of vessels making up the potential safety factor *contemplated by the act*" (p. 164). [Emphasis supplied.]

The Commission then found that it could not grant an exemption to a vessel which sails in the normally hazardous conditions of a coastwise run:

"We find that hazardous conditions frequently occur in this area (Atlantic coast).

"From a full consideration of the examiner's report, the record, and the exceptions and oral argument of counsel, we have reached the conclusion that the operations of this vessel are not substantially different from those *to which Congress intended the act to apply*, and, that the route and condition of the voyages, or other circumstances, are not such as warrant an exemption of the vessel" (p. 165). [Emphasis supplied.]

(3) *Matter of Eastern Steamship Lines, Inc.* (5 F.C.C. Rept. 166 (1938), Docket No. 4857), is another case in which the Commission reached the conclusion that congressional intent was not to exempt but to include coastwise shipping, within the radio requirements of treaty and statute.

In concluding that the applicant in that case failed to make a sufficient showing that the requirements of a radio installation on the applicant's vessels was unnecessary or unreasonable for the purposes of part II of title III of the act, the Commission stated:

"The principal contentions of the applicant was that the coast is well supplied with aids to navigation; that *harbors of refuge are frequent;* that the *time spent in the open sea is comparatively short;* and, that the radio installation is unnecessary as an aid to other shipping for the reason that the vessels follow well traveled steamer lanes where other craft could be of more assistance because of their superior speed and accommodations.

"We do not see that these conditions or circumstances are peculiar to the vessels in questions, and if they were to be adopted by this Commission as the basis for exemptions, the result would be *to remove the requirement of radio in respect to a large number of coastwise steamships.* This, *we are certain, was not the intention of Congress*" (p. 167). [Emphasis supplied.]

In the *Oliver J. Olson Company* (applications X–549x–554), the Commission had before it exemption applications in which the same trade, similar ships carrying the same cargoes on voyages with the same conditions, route and other circumstances were involved as are involved in the instant application. In denying these applications, the Commission noted:

"2. The applications show that the vessels carry lumber products and wood pulp between ports in Washington, Oregon, and California; that their routes are *rarely more than 7 miles and never more than 25 miles from land* * * *. [Emphasis supplied.]

"6. Vessels, such as the instant vessels, engaged in the west coastwise lumber trade have heretofore been the subject of applications for exemption. In *Matter of Western Transport, et al, Docket No. 4774, et al.*, 5 F.C.C. 168, (1938) the Commission denied exemption to such vessels after finding that the routes and conditions of the voyages of the vessels were no less hazardous than in the case of any other coastwise vessels, and stating, at page 173, that these groups of vessels should * * * be required to fill their places in the general scheme to provide increased safety by increasing the number of vessels instantly available as potential lifeboats * * *.

"8. The applicant has not made or attempted to make any showing that the conditions and circumstances of the voyages or the ships are so exceptional that despite compliance since 1937 by four of the vessels and compliance since 1947 and 1948, respectively, by the remaining two vessels, with the radiotelegraph requirements of title III, part II of the act, such compliance has now become unreasonable or unnecessary * * *" (Memorandum opinion and order, adopted Mar. 16, 1955).

When the Oliver J. Olson Co. requested reconsideration and hearings, in denying Olson's request, the Commission shed considerable light on the history and philosophy of the provisions from which applicant seeks exemption, in stating:

"8. It appears that Olson has misconstrued the philosophy underlying the provisions of title III, part II of the act and the basis for the Commission's denial of its applications.

"9. The *Morro Castle* and *Mohawk* marine disasters occurred *short distances off* the New Jersey coast (the *Morro Castle* was *within sight of land* and the *Mohawk* was approximately *8 miles off the coast*). A senatorial investigation of these disasters resulted, among other things, in a recommendation by the Subcommittee of the Senate Committee on Commerce for amendment of the Communications Act by, in effect, adding part II to title III of the act (S. Rept. 776, pt. 2, 74th Cong., 2d sess., pursuant to S. Res. 7, 74th Cong., 1st sess.). This recommendation finally eventuated in S. 595 which was enacted into law in 1937 as part II of title III of the Communications Act of 1934. In Senate Report No. 196, 75th Congress, accompanying S. 595 it was made very clear that one of the purposes of the bill was to assure the application of radio requirements to certain *vessels engaged in coastwise voyages* in the open sea as well as those engaged on international voyages. Vessels on the latter types of voyages were already required by reason of the International Convention for the Safety of Life at Sea, 1929, to comply with specified radio requirements. Thus, the report stated:

"'In this bill * * * an endeavor has been made to apply the requirements of the convention to our domestic shipping *so far as vessels which go into the open sea are concerned* * * *.' [Emphasis supplied.]

"The report goes on:

"'Today there are probably 600 or more ships of the United States of substantial tonnage carrying many persons as passengers and crews, which, neither by our law nor the convention are required to carry radio. No more pointed illustration of the danger and of the tragedy of this inadequacy of law can be found than in the fact that there was an American ship not required to be equipped with radio within 30 miles of the *Vestris* and which sailed away because it did not receive the S O S signals of that doomed vessel. We are told that that ship was so near to the *Vestris* that it might have saved all.'

"10. The House report (Rept. No. 686, 75th Cong., 1st sess.) on S. 595 stated the proposition concisely as follows:

"'The 1929 convention applies only to vessels employed on international voyages. The United States has a very large and important merchant marine engaged in purely domestic shipping. There remain, therefore, a considerable number of ships operating in coastwise service which at present are not required by either the law or the treaty to be equipped with radio. These ships go to sea, face the same dangers, and are available as lifeboats to distress vessels, in the same manner as those required by law to carry radio. This bill remedies this inconsistency.

"Thus the congressional intent was clear that ships over 1,600 gross tons sailing in the open sea whether on coastwise voyages or on international voyages should constitute a pool of mutual assistance *whose effectiveness would be in direct ratio to number of vessels participating* therein. It was evident, however, that minimum uniformity in the radio equipment of these vessels was necessary if the plan of mutual assistance was to be carried into force. So far as direct response of one vessel to another vessel's distress signal is concerned, it does no good for the distressed vessel to transmit the distress signal by radiotelegraphy on one channel, when its potential rescuer is listening on another radio channel for a radiotelephone signal, and by the same token, a distress signal transmitted by radiotelephone on one channel will not be heard by another ship listening for a radiotelegraph distress signal on a different channel.

"11. Title III, part II of the act expressly recognizes this principle of minimum equipment uniformity and specifies that vessels of 1,600 gross tons and over must be uniformly equipped for participation in a radiotelegraph safety system. The Commission has consistently applied this principle of minimum uniformity to all ships which are members of the radiotelegraph safety system. Each such ship, which is regularly navigated in the open sea, is compelled to meet requirements so long as circumstances indicate that its permanent participation in summoning or rendering assistance would be of substantially normal value to the system and so long as inherent size, space, or design limitations did not render its participation peculiarly impractical or impossible. The necessity for a principle of equal treatment for all such ships similarly situated is obvious in the absence of any method of determining in advance which ship in the system might at any given instant be required to give or receive assistance.

* * * * * * *

"18. In the light of foregoing precedents, explanation, and legislative history, we turn to the Olson allegations. The Olson vessels are over 1,600 gross tons; they are engaged in coastwise voyages in the open sea; they navigate in waters also navigated by other oceangoing radiotelegraph equipped vessels; they are vessels which now constitute a part of *the radiotelegraph mutual assistance pool* which Congress contemplated in the enactment of title III, part II. There is no showing or, indeed allegation, that other radiotelegraph equipped vessels cannot or should not depend upon the Olson vessels for direct response to distress signals in the same way as other large vessels subject to title III, part II. Conversely, Olson has not shown or alleged that the safety of its vessels and their crew members would not be enhanced by reason of its ability to summon aid directly from other large vessels also equipped with radiotelegraphy. In short, although fully explaining the usefulness to it of radiotelephony, Olson has failed to show why the effectiveness of the congressionally created radiotelegraph safety system which depends upon universality, would not be unreasonably and unnecessarily impaired if its vessels were excepted therefrom.

* * * * * * *

"20. Olson's petition for rehearing remedies none of the defects of its original request for exemption. Instead it makes clear its failure to comprehend the statutory scheme of marine safety created by title III, part II, for ships like its own.

"21. Thus, the only facts it again alleges in support of its request for exemption are:

"'(i) the vessels operate *at all times within 25 miles* of the Pacific coast, along which an efficient network of coastal harbor radiotelephone stations is maintained.' But it has been demonstrated that one of the primary purposes in enactment of title III, part II was *to insure the direct participation* in the radiotelegraph safety system *of vessels* of 1,600 gross tons or over which engage in coastwise voyages" (memorandum opinion and order, adopted Nov. 25, 1955). [Emphasis supplied.]

In *Matter of Western Transport Co.*, et al., 5 F.C.C. Rept. 168 (1938), Docket No. 4774, et al., 28 shipping companies filed application in behalf of 57 vessels plying the Pacific coast, for exemption from the requirements of treaty and statute. Six of the vessels were used in the trade of "fish reduction." Fifty-one of the vessels were "lumber schooners" (like the vessels involved in the Tennant petition).

Although applicants in the *Western Transport* case stated that if the "exemption" application were granted, they would continue to maintain existing radio installations and to employ qualified operators, the Commission, in denying the application, nevertheless stated:

"We have not been convinced that the routes or conditions of the voyages, or other circumstances, have been shown to be such as to make the operations materially *less hazardous than might be expected in the case of any coastwise vessel* operating along this coast, nor that these groups of vessels should not be required *to fill their places in the general scheme* to provide increased safety by increasing the number of vessels, instantly available as potential lifeboats" (p. 173). [Emphasis supplied.]

Appendix C

Radiotelegraph & Radiotelephone; Comparison of Characteristics

For convenient comparison of the two systems by the subcommittee, we have set forth below, in parallel columns, the most important characteristics of radiotelegraph (CW) and radiotelephone (A3) systems, which later Matson hopes to substitute, in disregard of safety considerations and contract obligations:

1. Apparatus

(*a*) *Reliability*

Radiotelegraph (CW)	Radiotelephone (A3)
CW—High: Uniformly rugged and reliable, in line with the type approval requirements by FCC.	A3—Low: Most phone units abroad voluntarily, based on price considerations, with cheaper and less reliable equipment predominating, since type approval not main factor.

(*b*) *Provision for breakdown*

CW—Adequate: Technically trained and experienced radio officer can make prompt repairs; in emergency situations he can improvise to provide communications, based on his high level of technical ability.	A3—None: Vessel without effective communications, when breakdown occurs. In emergency situations, no repairs and improvisations available, due to lack of qualified radio officer.

2. Possibility of Misunderstanding or Evasion of Responsibility

CW—Minimum: Two complete logs, kept by qualified radio officers sending and receiving messages, with no distracting "other" duties, minimize both these dangers.	A3—Extreme: Sparse and incomplete radiophone logs kept by deck officers doubling as radiophone operator; their urgent "other" duties as deck officer are really their main normal function, such as maintaining lookout, making deck log entries, taking bearings, aszimuths, sights, D.F. bearings, answering the ship's interior phone, observing and interpreting radar scope patterns, operating blinker, checking the gyrorepeaters and taking soundings by fathometer, etc. Possibility of misunderstanding spoken unrecorded words as compared to spelled out written wordage, increases both these dangers.

3. Language Barrier

CW	A3
(*a*) International "Q" signals and abbreviations supply brief and rapid signals, universally understood by qualified radiotelegraph operators regardless of language. These "Q" signals, covering all, most frequently encountered maritime situations, are part of the knowledge a specialized radio operator possesses. (A list of these Q-signals is found in Appendix 9, RR of Final Acts of the International Telegraph Commission and Radio Conference, Atlantic City, 1947, pp. 251–E—272–E inclusive.)	(*a*) Absolute.
(*b*) Foreign accents no problem as Morse code transmission carries no inflection.	(*b*) Foreign accents a severe problem.

4. Operating Personnel

(*a*) *FCC requirements*

CW	A3
High: Radiotelegraph operator license, 2d or 1st class, requires knowledge of basic law and advanced electronic theory and practice, and radio procedure and equipment.	Absolute minimum: Low-grade radiotelephone operator license obtainable by answering a few simple questions on basis law. Any literate person can prepare for license examination in a few hours.

(*b*) *Experience requirements*

CW	A3
High: 6 months' previous experience required by FCC before operating aboard cargo vessels; personnel currently engaged in radiotelegraph operating possess 5 to 30 years' experience, on the average.	None.

(*c*) *Training*

CW	A3
Specialized: Radio officer require what has been acknowledged to be the equivalent of junior engineering training to obtain a license and to perform duties under it.	Sparse, if any: Most deck officers well trained and competent in navigation, ship handling, but not in radio communications.

(*d*) *Accrual of knowledge*

CW	A3
Continual: Radio officer keep abreast of new developments, equipment, and practices. Because they possess basic and advanced understanding of subject, can fit new information, and results of experience into orderly patterns of knowledge.	Superficial: Lacking basic groundwork in radio, the best such personnel can do is accumulate unrelated bits and scraps of "practical" information, which they cannot correlate and maintain. Organic growth of a deck officer's knowledge occurs in his own field, navigation and ship handling.

(*e*) *Availability in emergency*

CW	A3
Immediate: Sole duty of qualified radio officers is to be available to function in emergencies, such as distress, safety, and urgent situations.	Elsewhere: Necessary and vital duties of deck officers in emergencies are relative to vessel course, speed, extricating vessel from emergency, fighting fire, damage control, launching lifeboats, etc. This is a full program of priority activity leaving little time for communications essential for safety and survival.

(f) Availability—approaching or leaving ports

CW—On radio watch: Radio officer available for communications, either in radio room or at any other location necessary to facilitate communications required for safety, navigation, and ship handling.

A3—Elsewhere: Deck officer must perform exacting navigation and ship handling duties to avoid collision or grounding, in heavy traffic and narrow channels at port entrances. Radiotelephone operating would distract deck officer from these vital duties to the detriment of his own and other vessels' safety.

5. EFFECTIVENESS

The effectiveness of CW for satisfactory communications is 17 decibels greater than voice. The reason for this very great difference, which represents a power ratio of 50 to 1, is that with voice most of the intelligence is carried by the weak consonants and most of the power is dissipated in the less effective vowel sounds.

The facts are entirely different with CW where all of the power radiated is in the form of useful communication.

The 50-to-1 power ratio mentioned above has been arrived at without considering the interference which is normal on the bands. A voice communication has to be at least 6 decibels better than all other communications on the same band in order to be intelligible; but, if any other signal as strong as, or stronger than, the one being considered, is present anywhere within 6 or 8 kilocycles, the communication is impossible.

There is an entirely different story on CW. With highly selective receiver, a weak CW signal can be selected and copied although other signals may be much stronger and less than 1 kilocycle away. As the 50-to-1 power ratio is arrived at under perfect conditions, it can be seen that this ratio is greatly increased as interference increases.

6. INTELLIGIBILITY OF TRANSMISSION

(a) Effect of interference

CW—Low: Unaffected by presence of other signals on same or adjacent waves, in most instances.

A3—Severe: Curtailed by interference from other stations on AM. (See 5. "Effectiveness" above.)

Note also statement on interference problem on 2-megacycle band communications by Harold F. Cary.

"In what is termed the local area (roughly north from 20° N.) our ship-to-ship communication is always difficult. In the summer and fall months when more than 4,000 boats are actively endeavoring to get their ideas across to each other, it is virtually impossible * * *" (symposium papers delivered at the RTCM spring assembly meeting, April 28, 29, 30, 1954, San Francisco, Calif., "Communications—Tunaboat Fleet," by Harold F. Cary, general manager, American Tunaboat Association, p. 12). Similar conditions prevail in Hawaiian waters.

(b) Effect of harmonic radiations

CW—Slight: A qualified operator can select desired signal against background of any others by tuning, supplying beat note, peaking, etc.

A3—Bad: Severe interference from harmonics can make communication impossible.

7. FREQUENCY

(a) Bandwidth required

A1—Telegraphy, 0.224 kilocycles.
A2—Telegraph, 2.724 kilocycles.
A3—Telephony, 8 kilocycles.

Thus radiophone requires from 3 to 36 times more space in the crowded frequency spectrum than radiotelegraph.

(b) Flexibility

CW—Good: Qualified radio officer can adjust and calibrate for frequency.	A3—Severely limited: Only 10 preset channels on most units; no one possessing technical ability to calibrate.

(c) Selection of appropriate frequency

CW—Good: Selection of appropriate frequency in medium or high frequency bands by qualified radio officer assures reliable communication at all times on one or another channel.	A3—Poor: Limited to preset channels; further limited by lack of qualified man with sufficient know-how to make proper selection.

(d) Choice of propagation to employ

CW—Good: Qualified operator has know-how to select the groundwave transmission or skywave, according to time of day, season of year, location of vessel, and desired path of transmission.	A3—None: Lack of qualified operator, and lack of frequency and band flexibility, limits transmissions to groundwave in 2 megacycle bands; telephony in high frequency bands, being largely skywave, depends for success on frequency selection based on knowledge not usually possessed by unqualified operators.

8. Performance Record of Both Systems

CW—Excellent: The history of maritime radiotelegraph is an unsullied record of fidelity by radio operators, of the sea safety radiotelegraph network that has been growing to maturity during the past 50 years.	A3—Very poor: There has been no international network composed of radiotelephone equipped vessels. The requirement for compulsory radiotelephone equipment is only first going into effect. Of the 39,000 licensees, 34,000 are pleasure craft, incapable of participating in any sea safety network useful to large vessels, such as the Matson ships.

"In 1948, the maritime nations of the world convened in London, England, and adopted a new safety at sea convention. That international conference, recognized for the first time the shipboard radiotelephone as an instrument capable of being used effectively in a marine safety communication system in place of telegraphy. Although such acceptance is *confined to the smaller cargo vessels*, the action was highly significant in *tentatively* elevating the stature of telephony at sea. I use the word "tentatively" because in my opinion at least, the wisdom of raising telephony to this higher plane *must be demonstrated by actual experience* in its practical operation as a safety communications system at sea * * *" (symposium papers delivered at the RTCM spring assembly meeting, April 28, 29, 30, 1954, San Francisco, Calif., Radio Technical Commission for Marine Services, Washington, D.C., "Maritime Telephone Service From the Governmental Point of View," W. N. Krebs, Chief, Marine Division, Federal Communications Commission," p. 38). [Emphasis supplied.]

"The enforcement staff of the Commission is severely limited in number. This situation, being directly related to the allocation of Government operating funds, is quite beyond the control of the Commission * * *" (p. 47).

"Considering the wide diversification of interests among the 39,000 ship station licensees and the absence of any centralized or national organization of these licensees in the United States there is need for the best possible leadership in this field * * *" (p. 47).

Has this situation improved appreciably? All reports since indicate it has not. Thus:

"The Commission devoted special effort to an enforcement problem occasioned by the misuse of radiotelephone distress and calling frequency by small boats. Superfluous communications and unauthorized transmissions have been hampering the use of this frequency for its intended high-priority purposes * * *. Unfortunately, the number of corrective actions is greatly exceeded by the number of transgressions. A disregard for official notices heralds a real and difficult

problem. * * * Also, in the case of small boats, the captain usually serves as radiotelephone operator and has a tendency to ignore his responsibility to keep a radio watch on the distress and calling frequency" (p. 138, FCC Report for Fiscal Year 1959).

More recently in the Commission's last available annual report, we learn that there are now 116,000 station licenses issued to small boats, and only "some leveling off in the number of violations * * *. However, much work remains to be done, both from an enforcement and educational standpoint, to alleviate the chaotic conditions that still exist in certain areas" (p. 141, FCC Report for Fiscal Year 1962).

These are the undisciplined, "chaotic conditions" that exists in the radiotelephone system which militates against withdrawing vessels from the disciplined, orderly, and efficient radiotelegraph safety network, as Matson seeks to do.

> A3 (continued):
>
> "The larger vessels that have had radiotelephone installations have operated in a manner not conducive to confidence in this medium to date. While there are doubtless many other examples of failure of radiotelephone to provide safety, we refer the Commission to the four marine casualties listed below for example of the manner in which this medium has been inadequate.

RADIOPHONE IN DISTRESS—SOME CASE HISTORIES

(*1*) *The U.S.S. "Benevolence" case.*—The collision of cargo vessel SS *Mary Luckenbach* and U.S. Navy hospital ship U.S.S. *Benevolence*, discussed in detail above, points up the following: The master, preoccupied with ship-handling problems, understandably failed to perform adequately on radiophone for safety. Master is, after all, not a radio officer but a deck officer by background, training, and outlook. It must be expected that safety, distress, and general communications would deteriorate if the substitution of a combination deck officer-radio operator for the qualified radio officer who now performs his specialized functions well, were allowed. Such substitution has not been permissible under U.S. law, nor should it be.

(*2*) *The SS "Princess Kathleen" case.*—Attached, as appendix F, a copy of an article by Harold Lockwood, radio officer of the SS *Hawaiian Craftsman* describes the grounding and sinking of the SS *Princess Kathleen* (ARA Log, January–February 1953 issue, p. 13). We respectfully urge upon the subcommittee the second, third, fourth, fifth, and eighth paragraphs, especially. They reveal the inexperience of deck officers for distress communication and their preoccupation with important other duties during emergencies.

(*3*) *The SS "Joao Costa" sinking.*—We have attached as appendix G, an article by Mr. L. F. Joslyn, radio officer of the SS *Compass*, on the SS *Joao Costa* sinking (ARA Log, May–June 1953 issue, p. 25). Note that survivors were rescued by the international radiotelegraph sea safety network although odds were against the 62 crewmembers being picked up. What stacked the cards against these men was the fact that this vessel was equipped with radiotelephone. Though it was of the type that could be keyed for radiotelegraph transmission, there was one important factor missing. The ship lacked a qualified radio officer who could get the radiotelephone working or who knew how to operate the key. This sort of experience would be a constant, were qualified radio officers lacking from the sea safety network; the happy ending would, however, be ruled out except by the rarest stroke of luck.

(*4*) *SS "Loide Panama" collision.*—We attach, as appendix H, an article by Mr. Joseph T. Silva, radio officer on the SS *Gulftrade* on the collision of that vessel with the Brazilian freighter, SS *Loide Panama* (ARA Log, November–December 1953 issue, p. 33). Note that the third mate of the SS *Loide Panama* was a combination mate-radio operator who was evidently too busy with his duties to even attempt to transmit safety communications for 45 minutes after the collision. Even then, his signals were inadequate. Had the SS *Gulftrade* not been able to supply radiotelegraph communications in this situation, there could have been serious loss of life due to the long delay in getting on the air.

CONCLUSIONS TO BE DRAWN FROM THE ABOVE FOUR MARINE CASUALTIES

In any evaluation, the following conclusions must be reached:

(1) Deck officers already have more than enough important duties to perform during safety emergencies, without the additional function of communications being thrust upon them.

(2) Deck officers, though competent in their own field, lack the skill, training, and experience necessary to adequately perform the function of safety communications.

(3) Only the timely and effective intervention of radiotelegraph-equipped ships salvaged the situations where the deficiencies of radiotelephone were present.

(4) When radiotelephone is substituted for radiotelegraph, there is a consequent decrease of sea safety for that particular vessel as well as for all shipping, and the records show radiotelephone has performed miserably in emergencies involving safety at sea.

APPENDIX D

AFL–CIO MARITIME COMMITTEE RESOLUTION ON SAFETY AT SEA THROUGH RADIO

Whereas the Matson Navigation Co. applied on February 18, 1963, to the Federal Communications Commission for an exemption that would permit a semi-automated vessel Matson is building to navigate in the interisland trade in Hawaii without complying with the requirements of the Communications Act of 1934 as amended for radiotelegraph equipment, watches, and radio officers. The FCC refused to grant this exemption; and

Whereas on June 27, 1963, Matson brazenly announced, in a letter to all west coast maritime unions, that in their proposed manning of the interisland vessel they "have not included a licensed radio operator * * * the Federal Communications Commission has refused to grant us an exemption and has given us an administrative ruling that this vessel required radiotelegraph equipment and, therefore, the addition of one licensed radio operator to the manning set forth. Matson, however, is not in agreement with this ruling, and it is our intention to introduce a bill to amend the Communications Act of 1934 to provide an exemption from this requirement with respect to our proposed interisland container vessel"; and

Whereas on September 19, 1963, Representative Walter Rogers of Texas introduced H.R. 8508 "to amend section 356 of the Communications Act of 1934, to permit cargo ships on voyages between Hawaiian ports to carry radiotelephone in lieu of radiotelegraph installations." The AFL–CIO Maritime Committee, and the American Radio Association, AFL–CIO, have continually at frequent intervals, requested advance notice to appear at hearings on this bill in the interest of safety of life at sea of the maritime workers in the organizations it represents as well as of the seamen and passengers who might be traveling aboard other vessels in the waters navigated by this vessel, and in the public interest; and

Whereas the House Interstate and Foreign Commerce Committee's Subcommittee on Communications and Power held hearings on February 18, 1964, upon only 18 hours' notice and disregarding urgent requests that these hearings be postponed or at least held open to permit the AFL–CIO Maritime Committee and the American Radio Association, AFL–CIO spokesmen to be heard in behalf of the maritime workers and the public interest in sea safety; and

Whereas the lives of the men who sail aboard this ship as well as the seamen and passengers who travel aboard other vessels in the waters navigated by this ship are protected by the radiotelegraph equipment, manned by licensed, skilled, and experienced radio officers who maintain safety radio watches and thus knit all vessels into a radiotelegraph sea-safety network that makes it possible for every ship to call upon every other vessel in distress and thus makes each vessel a potential lifeboat for all other vessels; and

Whereas the hazards encountered by vessels that navigate in the waters between the ports of the Hawaiian Islands are as great as those which face vessels covered by the congressional intent in adopting the 1937 amendments to the Communications Act of 1934, including section 356. Such protection provided by Congress after years of careful study and hearings following the *Morro Castle*, *Mohawk*, and *Vestris* disasters, should not lightly be set aside; and

Whereas spokesmen of the seamen have a right to be heard in their own behalf and in the public interest in sea safety: Now, therefore, be it

Resolved, That—

1. The AFL–CIO Maritime Committee, firmly opposed to any weakening of the radiotelegraph sea-safety network, by exemption, waiver, or special legislation, strongly opposes passage of H.R. 8508 or any similar legislation, without public hearings upon adequate advance notice at which the spokesmen of maritime workers may be heard; and

2. The AFL–CIO Maritime Committee urges that full hearings be held on this bill before it is reported or action taken on it; and

3. The AFL–CIO Maritime Committee urges Members of Congress to refuse special-interest legislation requests by Matson Navigation Co. or any other steamship company or group of companies which may seek to weaken the structure of safety of life at sea through radio in the interest of increasing profits through saving the costs of providing safety; and

4. The AFL–CIO Maritime Committee will take all steps necessary to insure that profit-greedy steamship companies do not succeed in attempts to reduce safety under pretexts of so-called technological improvements, automation, mechanization, or otherwise. We will protect the lives of seamen and passengers on automated and mechanized vessels and in the waters navigated by such vessels fully as much as on conventional ships. We view attempts to remove radio officers, who provide the maximum degree of safety, both preventative and remedial, as attempts to reduce the survival possibilities of seamen and passengers when faced with the hazards of the sea.

Adopted: February 21, 1964.

BAL HARBOUR, FLA.

APPENDIX E

DEFINITION OF RADIO OFFICER

"Section 2(a). As used in this agreement, the term 'Radio Officer' shall mean any person employed by the Company who operates and maintains a Radio Station, including radiotelegraph, radiotelephone, or any electronic devices used in communicating between vessels and/or between vessels and shore, on any of the U.S. Flag vessels operated by the Company pursuant to Section 1, and who is authorized by the proper authority to operate and maintain a mobile Radio Station including any communication devices as aforesaid.

"To assure proper operation and maintenance of the above mentioned communications equipment, the Union and the Company agree that all persons who operate and/or maintain such equipment shall be holders of a valid first- or second-class Radiotelegraph Operator's License."

JURISDICTION OF ARA

"Section 3(b). The Union shall have complete jurisdiction over all work involved in the operation and/or maintenance of all radio and/or electronic communications devices as described in Section 2(a)."

DUTIES OF RADIO OFFICER AND LOCATION OF RADIOTELEPHONE

"Section 22(a). Radio Officers shall perform all duties incident to the operation and maintenance of all radio and/or electronic communications devices on vessels operated by the Company. All radio and/or electronic communications devices, described in Section 2(a), including Radiotelephone, when carried, shall be located only in the Radio Room and shall be operated and maintained only by the Radio Officer."

PAYMENT FOR RADIOPHONE OPERATION

"Section 23(b) 16. (A) On freighters which carry radiotelephone equipment, the Radio Officer shall receive additional basic monthly wages of Ten dollars forty cents ($10.40) effective June 16, 1961, Ten dollars dollars sixty-three cents ($10.63) effective June 16, 1962, Ten dollars eighty-seven cents ($10.87) effective June 16, 1963, and Eleven dollars eleven cents ($11.11) effective June 16, 1964, for operating the Radiotelephone during regular watch hours. Overtime shall be payable for all Radiotelephone operation outside of regular watch hours for handling of ship's business only. Radiotelephone calls other than ship's business

shall be payable as overtime by the person placing the call. For the purpose of this section all calls placed by the Master or other Officer in charge of the vessel shall be considered as ship's business. The additional basic wages payable to the Radio Officer under this paragraph shall be treated as base wages for all purposes."

Appendix F

The Grounding and Sinking of the S.S. "Princess Kathleen"

(By Harold Lockwood, SS *Hawaiian Craftsman*)

The SS *Princess Kathleen* struck a jagged ledge while underway at normal speed, being a mile and a quarter off her course at the time. Although over 350 passengers were aboard, the vessel carried only one radio officer.

The ship was equipped with D. F., radar, and normal radio telegraph equipment required for this class of vessel. Also she carried ship-to-shore radiophone being similar to the RMCA 65-watt radiophone which is used by a great many merchant ships of U.S. registry. Like many U.S. ships, the radiophone was installed on the ship's bridge and not in the radio room. This phone was used mostly by the mates and captain of the ship and was not under direct control of the radio officer although he was required to service the phone and perform maintenance work from time to time (with no overtime).

When the vessel struck the rocky reef, the radio officer immediately endeavored to get the bridge on this ship's intercommunication system for instructions on whether to send for help or give other information in connection with rescue work, etc. The bridge ignored his calls from the radio room. Being the only radio operator, he was duty bound to stay at his post, which he did, awaiting orders from the captain on the bridge. But none were forthcoming.

After waiting for some time, and being unable to gain the attention of the bridge, he asked one of the crew who was passing near the radioroom, to have bridge or captain send some instructions that would be necessary in connection with rescue work, including ship's position. But this too was ignored. In the meantime the vessel was sinking by the stern at such an angle that the radio officer could no longer sit in his chair and was forced to stand up bracing himself as best he could while continuing to maintain his listening watch.

While this was going on, one of the bridge officers warmed up the ship's radiophone on the bridge, and without placing the set on the distress band, started hollering: "Mayday." Not being on the distress frequency he was not immediately heard. Due to the Coast Guard watch who was cruising over all bands, they were heard on this off frequency. The Coast Guard immediately made every effort to contact the *Princess Kathleen* and get position, instructions for possible rescue of passengers, etc., but were unable to get the ship's officer to pass them this information as confusion reigned supreme on the bridge. The phone finally went off the air leaving the Coast Guard in Juneau, Alaska, wondering what it was all about. They immediately put their D. F. and radar equipment in use. The radar showed the location of the *Princess Kathleen*, and a Coast Guard cutter was dispatched to the point shown by radar.

As soon as they came within sight the Coast Guard realized the precarious position of the ship, and came alongside her and took all passengers off, returning sometime later for the ship's captain and crew who in the meantime had left the ship and waded ashore awaiting rescue. The vessel meanwhile had sunk by the stern at a very acute angle, being about two-thirds submerged. It finally slid off the reef into deeper water and sank with only her masts showing above the water's surface.

The only contact the radio officer had was a few minutes prior to the time the vessel slid under water and sank, at which time he was ordered to abandon ship.

The point clearly brought to mind is, had the captain notified the radio officer to send for help or given written instructions by messenger regarding the ship's position, nature of the damage, number of passengers aboard and other vital information needed by the Coast Guard, rescue operations would have been speeded up considerably and they would have proceeded immediately on receipt of the distress message, as the radiotelegraph equipment was able to function up till the time the vessel commenced to settle in her final resting place.

At a preliminary hearing on these events in Ketchikan, the radio officer was asked why he did not send out any distress information. It was then brought out that he received none whatsoever from the captain or bridge although

he had made every effort to get in communication with the bridge. The radio officer said that he stayed by his radio equipment on watch until the very last when ordered off. This he was bound to do and was completely exonerated by the Coast Guard for so doing.

At a hearing conducted later by Canadian officials, blame for the failure of the radiophone and lack of distress information was laid on the radio officer. However, he proved that he never left his post in the radioroom, had nothing to do with broadcasting of "Mayday" over the ship's radiophone and brought out the point that he was unable to get any information whatsoever from the bridge or the captain.

The point is that the bridge officers were so busy trying to use the radiophone, that the radioroom was completely ignored as was the radio officer's plea for instructions to be broadcast by telegraph over the usual distress band.

Appendix G

The "Joao Costa" Sinking

On September 29, about 3 in the afternoon, approximately 60 miles north of San Miguel, the SS *Compass* came upon three dories filled with 12 men. They were obviously in distress and we picked them up. From them we learned that they were a part of the crew of the M/V *Joao Costa*, a fishing vessel of Portuguese registry, that had sunk 300 miles north of the Azores on September 23. They had been without food or water since that time; they were overcrowded, 4 men in each of small 2-man dories, and somewhere around us there were another 62 men in the same condition. We immediately started a search of the area.

I put my first XXX on the air at 1733, first sending the auto alarm signal and from then on worked continuously until late at night. Our information was at first a bit garbled, we were working with a language barrier, no one aboard the ship speaking Portuguese, but as we got other information from the 12 survivors, I would go on the air with another urgent message. I must say that I had splendid cooperation from all ships and shore stations. Ships with high frequency equipment transmitted my urgent messages to various high frequency shore stations and I later heard GLD repeating them just as I originally sent them.

The other 62 members of the crew of the *Joao Costa* were picked up at daylight next morning at 0811 GMT just 14 hours 38 minutes after I first sent the news, and despite being in open overcrowded boats, without food or water for 7 days, every man of the crew of the *Joao Costa* was rescued. I believe that is some sort of record in the history of the sea.

During the time that we had the survivors aboard, we were able to get a pretty complete story of the cause of the disaster. The *Joao Costa* had caught fire, then exploded. Of the greatest interest to me, however, is the fact that they were unable to send a distress call although there was plenty of time to do so. They were not equipped with radiotelegraph although their radiophone was rigged so that it could be keyed. I am not too familiar with such a set but imagine that some of the fellows around the hall would be. However, to get back to my story, they carried no one who could get the radiophone to working or who knew how to operate the key. I look upon this very fact as a screaming argument for the inclusion of a radio operator aboard every ship regardless of size or flag. It was only through a happy run of fate that these men were rescued. Had the preceding night been clear we would have made our course south of the Azores rather than north of them, had not an unexpected current set us 5 miles off our course we would have never seen the dories. It is probable that a number of the men would have made the Azores but it is doubtful if all of them would have done so. They had been passed by other ships who evidently thought them only fishermen, had we passed them they said that they would have given up all hope.

What follows is rather embarrassing. We landed the 12 survivors (with rest, good food, and water, quite recovered) at Lagos, Portugal, October 3. We were boarded by reporters, photographers, representatives of the Portuguese Government, representatives of the owner of the *Joao Costa* (forgot to tell you, his son was her captain) and God knows who else. These people were extremely flattering and grateful to the captain, Vildo Cerasoli, and he in turn told them that if there were any credit it belonged to me. I explained to them that I had only done

my job. That the only reason for a radio officer was to fulfill the requirements of the International Convention for the Safety of Life at Sea, and that, even if I had done my job well, such was no more than I should be expected to do.

I doubt that they even heard what I said. I was photographed, interviewed, had my health drunk (didn't mind that a bit, they included a drink for me) and, all in all, they made a devil of a lot of fuss over a strictly routine operation. I understand that they have also arranged some sort of reception at the Portuguese consulate when we reach Savona tomorrow (October 7).

If any credit is due, I think it should belong to the various radio officers who were alert to my messages and who took part in the rescue operation. My ship could not have made an effective search of the area; we are a slow Liberty; we had to have assistance in the search. The radio officers who copied my calls assured that assistance and to them, especially to the radio officers of the other two ships who picked up survivors (don't know the ships' names but have their calls as KROL and DVCO) belongs the credit for the successful rescue of the 72 men.—L. F. Joslyn, Bk No.

Appendix H

We have been hearing a lot lately about replacing radio officers on American ships with radiophone and combination mate-radio officers. Last June 28, I, as radio officer on the SS *Gulftrade*, had an experience which proves what a terrible mistake that could be.

That night at about 8:46 we collided with the Brazilian freighter SS *Loide Panama*. This happened about 2 miles from Barnegat Lightship in a light fog. At 8:47 p.m. I was on the air with an S O S. After I had cleared the air, I repeatedly called the *Loide Panama* by name and by call letters. She didn't answer. I then asked WSC to try to raise her. He also was unable to raise the *Loide Panama*.

Finally, about 45 minutes after the collision, the *Loide Panama* sent out an S O S saying that they were abandoning ship. I was then able to raise her for a short Q S O, but she went off the air before I could get any details as to men killed or injured or their ability to launch lifeboats, as she had a very bad list when last seen.

We had a severely damaged bow, but the *Loide Panama* had a huge hole in her hull just aft of the midships house that stretched from bilge to deck and left her in a sinking condition. The two ships had been together most of the time; but we pulled away from them when there was imminent danger of fire, our ship being a loaded tanker.

It was nearly half an hour after that that I received details on their condition and casualties from the radio officer on the SS *African Endeavor* which had arrived on the scene and dispatched her motor lifeboats to rescue the crew of the *Loide Panama*.

I afterwards learned from the FCC that the third mate on the *Loide Panama* was also the radio operator. He was evidently too busy with his duties on deck to attend to his duties in the radioroom. If my transmitters had been put out of commission by the crash, and our ship had caught fire, there would have been serious loss of life due to his long delay in getting on the air.

What would happen if two ships with combination mate-radio operators had a really bad collision? The mate-radio operators would be so busy with their duties on deck that no one would know what had happened. The requirement of a radio officer on board all ships is a safety factor the value of which cannot be easily denied.

I was very pleased with the speed with which the air was cleared for me that night. At no time was there any interference with the distress traffic, and all radio officers in the vicinity were more than willing to lend a hand if needed. A few years ago there were always interruptions.

This accident certainly made a firm impression in my mind as to the need of a fully qualified radio officer on all ships whose only duties are those of radio officer.

Joseph T. Silva, *Book No. 1049.*

APPENDIX I

INTERNATIONAL ORGANIZATION OF MASTERS, MATES & PILOTS,
New York, N.Y., November 1, 1963.

Mr. WILLIAM R. STEINBERG,
President, American Radio Association,
New York, N.Y.

DEAR SIR AND BROTHER: On April 27, 1953, you were notified by Capt. John M. Bishop, national secretary-treasurer of this organization, as follows:

"We are pleased to advise you that the national executive committee of this organization, in a meeting on April 21, 1953, in the Hamilton Hotel, Washington, D.C., unanimously concurred in a resolution to notify you and all other parties concerned that we do not claim jurisdiction over proper operation and maintenance of any radio or electronic communication devices on American-flag vessels.

"We agree that this is properly the work of the radio officers on board the vessels."

Nothing has transpired in the intervening 10-year period that would require a change in that statement recognizing your jurisdiction of the radio officers aboard the vessels over the operation and maintenance of any radio or electronic communication device, including radiotelephone, on American-flag vessels.

If anything, experience has confirmed the value of this arrangement and its complete workability. Performance of safety communication by the radio officer permits the master and licensed deck officers of the vessel to perform their vital duties in the safe navigation of the vessel.

Fraternally yours,

CHARLES M. CROOKS,
International President.

APPENDIX J

AMERICAN RADIO ASSOCIATION,
New York, N.Y., November 4, 1963.

Mr. CHARLES M. CROOKS,
President, International Organization of Masters, Mates & Pilots, AFL–CIO,
New York, N.Y.

DEAR SIR AND BROTHER: I am in receipt of your letter of November 1, 1963, confirming the position taken by Captain Bishop in his letter of April 27, 1953, on behalf of your organization. On May 5, 1953, I replied to Captain Bishop in a letter which read as follows:

"This is to acknowledge your letter of April 27 and we wish to thank you for the forthright position taken by the Masters, Mates & Pilots of America in regard to the radio officer's jurisdiction over any and all radio and/or electronic communications.

"We are likewise pleased to notify you that the American Radio Association does not claim jurisdiction over any or all electronic equipment, which is now in use or which may later be used directly in connection with the navigation of the vessel. Our position is that the operation of such navigational equipment is without question under the jurisdiction of your union."

Our experience in the interim has been similar to yours in confirming the validity and feasibility of the working relationships that were set forth in our exchange of letters. As a result of teamwork of the ship radio officer group, supplying specialist radio communications service for safety and other purposes, and the master and licensed deck officer group, performing their essential navigational duties, each group is enabled to perform its duties the better, while both groups together have been producing that added margin of safety that has preserved life and conserved property at sea.

We appreciate the firm and forthright position your organization has been following in the interest of safety of life at sea, in this and other areas, and look forward to the continuing friendship and cooperation of our two unions.

Fraternally,

W. R. STEINBERG, *President.*

APPENDIX K

Pertinent excerpts from Coast and Geodetic Survey, U.S. Department of Commerce: "U.S. Coast Pilot, Pacific coast, California, Oregon, and Washington and Hawaii," eighth (1959) edition, revised to January 5, 1963, by fourth supplement, published by U.S. Government Printing Office, Washington, D.C. (based on 7 to 100 years recorded observation, varying with locality; italics supplied).

"*General.*—The climate of the Hawaiian Islands is unusually pleasant for a tropical area, the result principally of the marked marine influence and the persistent trade winds" (p. 282).

"*Kona weather.*—The word 'Kona' is of Polynesian origin and means leeward. It refers to the southerly winds and accompanying weather on the normally leeward slopes of the principal Hawaiian Islands which because of the wind shift, have temporarily become the windward slopes.

"The Konas, which occur most frequently during the months of October through April, provide the major climatic variations of the Hawaiian Islands. *During these storms heavy rainfall* and cloudiness can be expected on the lee sides of coasts and slopes which, under the usual wind pattern, receive less cloudiness and may have almost no rain. *Near gales* may occur, especially near points where the air tends to funnel into sharp mountain passes located near the coasts. At such times leeward anchorages may become unsafe for smaller craft" (p. 283).

"*Seismic sea waves.—The destructive effect* of the great seismic sea waves *which have visited the Hawaiian* Islands from time to time *should not be minimized.* The *loss of life and property* can be lessened if shipmasters and others acquaint themselves with the behavior of these waves so that intelligent action can be taken when they become imminent."

"In general, the destructive force of the waves is greater on the sides of the islands facing the oncoming waves. The waves may attain great heights in funnel-shaped bays and at capes or other places where a submarine ridge projects seaward toward the oncoming wave. Unusual heights may also be attained at any place where two waves traveling different paths arrive at the same time so as to reinforce one another. There is much to be learned about such waves and the best course is to avoid them in any way possible."—Pages 281–282.

"These waves travel great distances and can cause tremendous damage on coasts far from their source. The wave of April 1, 1946, that originated in the Aleutian Trench demolished nearby Scotch Cap Lighthouse and also caused $25 million damage in the Hawaiian Islands 2,200 miles away.

"The speed of seismic sea waves varies with the depth of the water, reaching 300 to 500 knots in the deep water of the open ocean. In the open sea they cannot be detected from a ship or from the air because their length is so great, sometimes a hundred miles, as compared to their height, which is usually only a few feet. Only on certain types of shelving coasts do they build up into waves of disastrous proportions."—Pages 32–33.

"*Anchorages* are numerous, except on the northerly and easterly sides of the islands, the first requirement under ordinary conditions being shelter from the trade winds. During Kona weather most of the anchorages on the southerly and westerly sides of the islands are *unsafe.*"—Page 281.

Mr. STRICHARTZ. Mr. Chairman, gentlemen, my name is Morris Strichartz. I am technical director of the American Radio Association, AFL–CIO, and am a member of its national council and have been for 15 years. Prior to that, for 6 of the previous 8 years during all of World War II and the immediate postwar period, I was a ship radio officer on board every type U.S. merchant vessel.

This statement is submitted for the American Radio Association (ARA), for the Radio Officers Union (ROU), the International Organization of Master, Mates & Pilots (MMP), both affiliates of the AFL–CIO, as well as the AFL–CIO Maritime Committee, which includes the American Radio Association (ARA), the National Maritime Union (NMU), the Brotherhood of Marine Officers (BMO), the United Maritime Division (UMD), the marine locals of the United

Steelworkers of America (USWA), and the Industrial Union of Marine and Shipbuilding Workers (IUMSWA).

ARA and ROU, composed of ship radio officers, hold collective bargaining agreements with steamship companies owning and operating over 90 percent of the oceangoing merchant ships flying the U.S. flag, including among them the Matson Navigation Co.

MMP members are the masters and licensed deck officers—mates—on over 90 percent of the U.S.-flag oceangoing ships.

The total membership of all these maritime unions is approximately 60,000 seamen, who are officers and unlicensed crew members aboard about 90 percent of the U.S. merchant marine—passenger ships, freighters, tankers, colliers, steam schooners, and other type vessels—carrying every type of cargo in the coastwise, intercoastal, and world trade of the United States.

The shore size membership of these unions comes to an additional million. But the seamen affected and for whom we speak number some 60,000.

We are likewise informed that your subcommittee has received a separate communication from the AFL–CIO Maritime Trades Department, composed of other AFL–CIO maritime affiliates not mentioned above.

All of our organizations are of one mind on H.R. 8508—we are opposed to its passage, in the public interest as well as in the interest of our men on the ships. It is significant that, despite serious disagreements in other areas, all of the maritime unions are united in opposition to this bill. Why?

To answer that question, we must describe the present safety situation. On all the oceans of the earth, ships of 1,600 gross tons or larger are presently knit together in a worldwide lifesaving network.

They are equipped with ship radiotelegraph equipment, complying with standards set by international treaty and domestic law. At sea, this equipment is manned by radiotelegraph operators, who are licensed ship radio officers by act of Congress in 1947. These radio officers stand safety radio watch for at least 8 hours a day on cargo vessels carrying only one radio officer, and continuous round-the-clock watches on passenger vessels which are manned by three or more radio officers.

During these watches each radio officer listens continuously to radiotelegraph signals on 500 kilocycles, the worldwide calling and distress frequency. Ships of all nations initiate routine calls to other ships or to coast radio stations by calling on 500 kilocycles. Upon making contact they immediately shift to another frequency known as a working frequency to send and receive messages. As soon as the message handling is finished, the listening on 500 kilocycles is immediately resumed, without delay.

I would like to point out that any radio officer worth his salt continues to stand his watch on 500 while handling other frequencies on a split phone basis. This provides continuity.

In any event, there are two periods during each hour when the ship radio officer must cease doing anything else and listen, in complete radio silence, on 500 kilocycles, known as the "silent periods," because their silence may only be broken to transmit or retransmit distress messages that were sent during the preceding period.

When a ship is in distress, it is on 500 kilocycles that on the call for assistance, the S O S is sent, and all communications between the stricken vessel and ships that may proceed to its side are handled. Other ships must maintain complete silence on 500 kilocycles during such distress traffic, until the all clear is transmitted.

When distress signals are sent, it is of crucial importance that they be heard, recognized as such, and that the precise details given be received by the maximum number of ships able to render aid. The position of the ship is given precisely, in latitude and longitude, and the error of a single digit, for example, can be extremely important—that is why a reliable and accurate system is employed.

When distress situations exist, all hands turn to perform their necessary duties. The radio officers and radio operators aboard the deepsea vessels that have been in distress during the 65 years that this radio sea-safety network was developing and being perfected, have acquitted themselves in war and peace in exemplary fashion, usually being the last to leave the ship, along with the master, often going down at his post of duty.

The system that I have described has the genius of simplicity and the record of having been used, successfully, in literally thousands of sea casualties.

Literally tens of thousands of men have been plucked from the clutches of a cruel sea by the assistance that this worldwide radiotelegraph sea safety network summoned, in the present, living generation of seamen. One simple fact will give insight into the scope of this splendid, and efficient system: the Annual Report of the FCC for Fiscal Year 1962, on page 86, notes:

> During the fiscal year, the radiotelegraph distress signal S O S was used in behalf of 275 vessels and aircraft. There were 181 reports of auto alarms being actuated to alert off-duty radiotelegraph operators to distress calls. Radiotelegraph functioned effectively for such distress calls.

I would like to note that when we say literally tens of thousands of persons are walking the earth because of this radiotelegraph system we mean just that. We refer to the fact that in the neighborhood of a thousand persons were saved in the Andrea Dorea-Stockholm collision. Whatever the human failings, whatever the mistakes that were made, when the Stockholm and Andrea Dorea collided all vessels in the vicinity were alerted and brought to its side. There were unfortunately some 50 deaths, but about 1,000 were saved on that one. Every day if people bother to read the marine pages of the newspaper you will see 24 men saved here, 32 saved there. The unfortunate side of these stories is the 6 that were lost or the 5 that were lost or the 12 that were lost in the initial casualty. You multiply this one single year in the limited purview of a single nation's regulatory agency by the many years and countries involved, and you will understand why the seamen of the world and of this Nation look upon the radiotelegraph station and the ship radio officer who mans it as his "lifeline"—his best assurance of reaching land alive and able to ship out again.

Seamen know they follow a calling that is of its very nature a hazardous one. They simply want the best chance available of surviving, and they know from their very own experience that radiotelegraph provisions give them that chance.

We have set forth below the manner in which this system developed, the legislative history of the compulsory requirements for this system, both domestically and international treaty. Now, what would be the effect of the bill that is being considered on that system?

First, it should be noted that the wording of the bill is not confined to a provision to exempt a single, experimental craft from the radiotelegraph requirements of the Communications Act. As it now reads, H.R. 8508 (and the companion measures before the subcommittee) would amend the Communications Act to permit cargo vessels, of any tonnage up to and including the largest in the world, to navigate between Hawaiian Island ports without having to comply with the radiotelegraph requirements of title III, part II of the act. Thus, not just a single Matson craft, but all vessels in the Hawaiian interisland trade, would be allowed to withdraw from taking part in that sea safety network.

If this bill is passed, it would result in decreased sea safety. Seamen and passengers sailing aboard ships on coastwise, intercoastal, and international voyages, along sealanes that converge, cross and are contiguous to Hawaiian waters, would face greater danger, in at least three ways:

(1) The affected vessel would itself be substandard, in that it would not possess an efficient and reliable radio safety system in common with other deep sea vessels. It would thus be without the direct means to summon the great majority of these vessels to its aid in emergency.

(2) Other vessels plying these waters would be deprived of the direct participation of the affected ship in the radio sea safety system in which each vessel is considered a potential lifeboat for all others. Thus, the entire sea safety network, which is knitted together by the safety watches stood on all vessels of 1,600 gross tons and over, would be weakened.

(3) Insofar as this particular legislation might lead to other, and more general weakening of the provisions which now require that vessels participate in this mutual assistance network all vessels everywhere might be rendered less safe, and the lives of passengers traveling on the ships and the men who earn their living by following the sea would be that much more expendable.

To lower safety standards is to take callous and calculated risks. Men who go down to the sea in ships cannot win in such a gamble—a gamble in which their lives are unnecessarily risked to save expenses for the owners, who sit safely at their desks ashore, secure in their property behind vessel insurance coverage. It should be noted that the collective-bargaining agreements of all maritime unions presuppose a safe place to work, and do not require seamen to work under unsafe conditions.

The subcommittee is asked to note the full background of events that lead to this measure being before you at this time, including certain facts that might previously not have been made known to you.

On February 18, 1962, the Matson Navigation Co. applied to the Federal Communications Commission for an exemption, under section 352(b) of the Communications Act, as amended, to permit the Matson to sail a vessel that company proposed to build, of over 1,600 gross tons, in the Hawaiian interisland trade, without compulsory radiotelegraph equipment.

After full consideration of the facts submitted by Matson and the applicable law, the FCC denied Matson the exemption, by its order of March 6, 1963, which has previously been entered into the record by Commissioner Bartley.

On April 5, 1963, Matson asked the FCC to reconsider their request, and cited a number of further considerations, including factual data and automation plans, which Matson felt were pertinent.

On June 5, 1963, in its memorandum opinion and order, already inserted in this record by Commissioner Bartley, the Commission again rejected Matson's request. Both orders were issued on sound and valid grounds, amply set forth in those two orders. They merit the careful study and consideration and support of this subcommittee, in its deliberations.

Then comes a truly startling development. On June 27, 1963, Wayne L. Horvitz, vice president of the Matson Navigation Co., wrote a letter to all of the west coast maritime unions with which Matson holds collective-bargaining agreements, including ARA and MMP. This letter contained within it a most brazen display of corporate arrogance.

We are submitting copies of the entire letter for the record, as appendix A.

In forwarding a brochure on Matson's automation plans, the letter stated:

> You will note that on page 50 which sets forth the proposed manning, we have not included a licensed radio operator. Since the preparation of this brochure, the Federal Communications Commission has refused to grant us an exemption and has given us an administrative ruling that this vessel requires radiotelegraph equipment and, therefore, the addition of one licensed radio operator to the manning set forth. Matson, however, is not in agreement with this ruling and it is our intention to introduce a bill to amend the Communications Act of 1934 to provide an exemption from this requirement with respect to our proposed inter-island container vessel.

Please note the manner in which Matson proceeds: turned down twice by the regulatory agency responsible for issuing exemptions, Matson states they disagree with the FCC. It is, of course, their right to disagree. But, when they go on to state "it is our intention to introduce a bill," many people will sit up and take notice. Here is fully revealed the type of mentality that has made the Matson interests the object of Justice Department antitrust proceedings under section 1 of the Sherman Act and section 7 of the Clayton Act, which were filed on January 20, 1964, and are now pending.

We do not question the good faith of the honorable Members of Congress who introduced the bills. We simply submit for their information the kind of attitude that lies behind the Matson interests, who are pressing for the adoption of this special-interest bill. This, however, is not all there is to the highly interesting prelude to this special interest Matson bill.

It should be noted that other steamship companies have been before the FCC for exemption in the past. Generally, when it was unreasonable or unnecessary to carry radiotelegraph equipment the Commission granted such exemptions. However, there were many situations in which it was not warranted to grant such exemptions, and the most interesting feature of this entire procedure is that those companies that came before the FCC with unwarranted requests for exemption and which were refused had, prior to their request and after

it, operated their vessels in complete disregard of the usual considerations of safety. The two major cases before the FCC in recent years were the Oliver Olsen and the John Tennant Co. cases. In the case of Oliver J. Olsen, which had requested to proceed along the Pacific coast without radiotelegraph, we note that they managed to take an 11 ship fleet and reduce it to 1 or 2 vessels, all by sea casualties. Their vessels in this supposedly safe area suffered grounding, foundering, fires, collisions, every conceivable hazard. Luckily in the nature of their cargo there were not many lives lost, because lumber adds to the buoyancy of the vessel. But in a supposedly safe context this entire fleet proceeded to disappear. The more recent case, the John Tennant case, the order on which Commissioner Bartley entered into the record in the last hearing, in the course of the exemption procedures and without the knowledge of the FCC when they issued their order, but simultaneously with it, John J. Tennant & Co. lost two vessels, the *Sea Trader* and the *Alaska Spruce*, which was the name of the case before the Commission. They lost them right in the course of the hearings.

The *Alaska Spruce* was lost on January 4 or was disabled on January 4, 1964, just about the time the Commission issued its ruling. This is the significance of this thing. The Matson Navigation Co. comes before this committee for a bill of special interest to them. I think it might be interesting to note that there is some similarity in the safety record of this company. Here is a company which just within my recollection has in the last few years suffered quite an extraordinary number of marine casualties. On May 1, 1962, at 10 p.m. at the harbor entrance to Kailulu the SS *Hawaiian Educator*, a Matson vessel, collided with the tug *William Walsh*, and sunk it. Two men were lost and presumed drowned. It is my recollection that another Matson vessel collided with the U.S. naval submarine *Permit* on another occasion. I recall that another vessel collided with the *Bayou States*, a States Marine freighter. There are any number of marine casualties in which Matson was involved, and if the committee wished, a careful tabulation could be made.

The point I am making in all of this is that the companies that come before the Commission have all of these factors taken into consideration and when they are refused by the Commission we have continually participated in these cases before the Commission, we have always challenged them to go to the Congress and see if they can get the law changed. There is a reason. We feel that on the evidence and the facts they will not get such a bill passed. We would like to point out that there has been for 15 years a continual stream of these cases, a brazen campaign in progress to undermine and destroy the international sea safety radio network.

The Matson effort is only the latest move in a series of open and covert maneuvers on the part of those engaged in this campaign. The subcommittee must assess Matson's effort for this bill's passage in the context of that campaign.

There are in the maritime industry some shortsighted shipowners, whose actions demonstrate a persistent indifference to the value of human life. This is sad, but true. To them, immediate cost savings, and opportune business considerations, take precedence over human life and the safety of vessel and cargo. These penny wise and dollar foolish elements among steamship owners and operators—and note, we don't say this is all of them or even the bulk of them, but some of

them—seek to avoid payment of the reasonable wage of a qualified radio officer.

And you note we do not say this is all of them or even the bulk of them, but some of them seek to avoid payment of the reasonable wage of a radio officer.

Of course, the factor of cost and business considerations are material and must not be overlooked. But, in the hierarchy of values, human life and safety are uppermost.

The very legislation requiring radiotelegraph equipment, operators, and watches aboard ship resulted directly from a succession of sea disasters caused by the failure of shipowners to provide safety at sea, due to their economic shortsightedness and callous indifference to the problem.

What impelled the Congress, in 1937, to adopt Public Law 97, that added part II to title III of the act, the terms of which this bill now proposes to amend. Was this public law the product of a brief and hasty consideration of the factors involved? It was not.

A clear and concise summary of the background of Public Law 97 was given in testimony before the House Interstate and Foreign Commerce Committee, by the Honorable John McCormack, who noted:

"* * * the reason ship radio legislation was passed in the first place: it passed the Congress because of such disasters as the great loss of life aboard the SS *Morro Castle*. It was because of situations like this that we learned of the shocking indifference of shipowners to safety of life at sea. Provisions for safety at sea through the use of radio was the result of Congress taking a strong and firm hand in passing Public Law 97 of the 75th Congress, after the shocking facts were disclosed in the *Morro Castle* investigation" (hearings on H.R. 4090, March 21, 1955).

At this point, we include, as appendix B, a brief summary of the legislative history of title III, part II of the Communications Act, as amended.

We have no intention of going into this. This is a 15-page history. It is a careful summary of every phase of the legislative history. Mr. Haddock was part of that legislative history having participated in the 1935 to 1937 hearings.

Subsequently, he was a representative at the 1948 Safety of Life at Sea Convention. In 1960, the Safety of Life at Sea Convention in London was attended by the president of the American Radio Association and myself, as well as Commissioner Bartley, and all of this development is summarized. I am sure you gentlemen will give it the careful consideration it deserves. But for those who may not be familiar with the background and atmosphere that prevailed before Public Law 97, which the bill seeks to amend, I would like to read a couple of very pertinent facts.

The Senate joint resolution in one of the first days of the 74th Congress, early in January 1935, acted against a background of a whole series of disasters that occurred involving U.S. citizens or ships. The *Vestris*, a British vessel, went down right off the coast of the United States. She took with her 153 men, women, and children. The supervising inspector of the U.S. Steamship Inspection Service commented at the time of the disaster, after making an investigation, and I quote:

Another lesson to be learned from the loss of the *Vestris* is that wireless should be required on all ships navigating the ocean or the coasts. Had such a law been in effect it is probable that everybody on board the *Vestris* might have been saved

because there was a ship within as near as 45 miles of the *Vestris* but not equipped with wireless that could have gone to her assistance.

This is what occurred on the *Vestris*. On the *Morro Castle*, the *Morro Castle* took to the bottom a large number of persons. The *Mohawk* did likewise.

The Senate joint resolution resulted in an investigation. In this investigation there literally were scores of experts in every phase of maritime operation, naval architecture, operations, and radio. There were numerous reports and hearings that occurred over a period of 2 years. That is all I will say on the legislative history. If there are any further questions we would be glad to answer them. But this is what produced the law which this bill now seeks to amend. It has been aired about that at the time this law was adopted radiotelephone was not available or was not perfected.

It is quite obvious to any person who peruses the record on Public Law 97, that Congress was well aware of both the advances claimed for radiotelephony as well as its continuing limitations that prevent it then and now from replacing radiotelegraphy as a safety system for oceangoing vessels.

It would be inaccurate to state that radiotelephony was not available, or even that it was relatively underdeveloped at the time the 1937 Public Law 97 was adopted. As a matter of fact, in the hearing on that very public law, representatives of Great Lakes shipowners argued, successfully, for being omitted from the coverage of the act, on the basis of claims for radiotelephone advanced in those hearings. Thus, Mr. Gilbert R. Johnson, secretary of the Lakes Carriers Association, cited radiotelephone as sufficient for Great Lakes communications, and noted:

> Geographically isolated as we are, vessels on the Great Lakes could not come to the assistance of ocean craft, and, similarly, ocean craft could not come to our assistance. There is, therefore, no need, theoretical or practical, for Great Lakes vessels communicating by means of the same radio tongue as ocean ships (p. 34, hearings on S. 595, Feb. 22, 1937).

The differing radio tongues he was referring to was radiotelephone and radiotelegraph. Note that the vessels plying waters between Hawaiian ports are not similarly geographically isolated from the ships of the world which are radiotelegraph equipped. They should therefore be able to speak in the same radio tongue, radiotelegraph, to be able to go to the assistance of those ocean craft and summon their assistance, when needed.

The question arises, Why was radiotelegraph chosen, both domestically by Congress and internationally by safety of life-at-sea conferences? To answer that question is not to dispute the limited uses to which radiotelephone may be put, under conditions that make it both useful and practical, within its inherent limitations, but simply to set forth the hard technical facts that are universally recognized, with respect to radiotelephone and radiotelegraph, that we have presented in appendix C, where we have compared radiotelegraph and radiotelephone and discussed them operationally.

That is the only appendix I would like to explain in detail at conclusion of the statement. The problem that is before you comes to you in part because automation has been on the agenda of many steamship companies. It should be noted that Matson is not the only company that is considering automation.

Matson based its plea for consideration on its desire to experiment in automation, and bases its support of this bill on its automation program. However, the safety of lives and passengers should not be neglected in any automation process. Automation, yes; sacrifice of safety, no.

At the annual meeting of the AFL–CIO Maritime Committee, this fact was underscored in a resolution, which we have included for your information in appendix D, and which we commend to your attention.

We would like to underscore, in addition, the fact that such automation programs as this or any other company undertakes, in line with the established policy of the Kennedy and Johnson administrations, must be introduced by cooperative efforts of both labor and management. At the present time, Matson has proposed to try an "end run" around the collective-bargaining agreement provisions by pressing for this bill which is of special interest to Matson. However, for the information of the subcommittee, the passage of this bill will afford no economic relief for Matson, since that company is signatory to collective-bargaining provisions that require both radiotelegraph and radiotelephone to be handled only by radio officers, and no one else. (We have attached copies of these collective-bargaining provisions as app. E.)

We call attention to the fact that these provisions have been the result of harmonious working relationships with the masters and mates, the deck officers aboard the ships, as attested to by the exchange of letters between the presidents of the ARA and MMP, recognizing the handling of all radiotelephone to be properly the work of radio officers. (We attach the letters as apps. I and J.)

We note, moreover, that the collective-bargaining agreements of all unions require that their men shall be provided with safe working conditions. Seamen of all ratings, from the master to the messmen, and their unions, know when their safety is at stake, as evidenced by the AFL–CIO Maritime Committee resolution mentioned above.

What then does Matson expect to accomplish with their "special interest" bill? Apparently, they hope to place the maritime unions on the defensive, by flexing their monopolistic muscles in this bill they announced they were going to introduce. Is this the way to smooth the way for automation, or is it likely to produce unstable labor relations in the maritime industry? It is clearly the latter.

Matson has made, and indeed can make, no showing that the route and circumstances of the voyages of vessels in the Hawaiian interisland trade are substantially different or less hazardous than those encountered along any U.S. coast, to warrent the special treatment for this trade that this bill would provide. The Treasury Department letter of February 19, 1964, to this subcommittee, on this bill, makes this clear when it states:

> We are not aware, however, of any factors which require operations between Hawaiian ports to be treated differently from operations between other coastwise ports where vessels stay within the same range of land. As to this and other aspects, therefore, we defer to the views of the Federal Communications Commission.

We might note that the great sea tragedy we have talked about, the *Vestris*, *Morro Castle*, or *Mohawk* all occurred within a short distance of the coast. The *Morro Castle* burned off the Jersey coast and was watched by people on the shore. Nonetheless, the only assistance that

could be brought to it was the great sea vessels in the vicinity radio equipped. I would like to make that point, that not a hundred thousand pleasure craft can go out into the seas that a vessel encounters when it is in trouble. It is the large vessel of 1,600 gross tons and over, and that is the dividing line that has been set internationally and domestically, head into the sea, go to the side of the vessel in distress and provide a lee for the lifeboats and the survivors to be picked up. This is the important factor.

The route is not "sheltered"; that is, not entirely to the lee or land. The waters are such that vessels navigating in them encountered high winds, a high traffic density of vessels, on voyages both local and international, since Honolulu is a stopover port for many ships, for cargo and bunkering purposes, among others. The area also has its unique characteristics, which includes some of the finest weather to be found anywhere in the world, and some of its worst.

For the information of the subcommittee, we have excerpted references to anchorages, tidal waves, and what is known as Kona weather, from the U.S. Coast and Geodetic Survey's Coast Pilot 7, on Hawaii, as appendix K.

This is based on the 110 years of observation by the Government agency having knowledgeability in the area and we commend your attention to the excerpts we have provided. This is not to attempt to say that the sun doesn't shine on Honolulu. It does. It is our regret that we couldn't have held this hearing there. This is simply to say that when the sun doesn't shine this safety system is needed and others ought to be there.

Close study of this data will verify the fact that these are indeed no waters in which vessels may be exempted from participating in the radio sea safety system provided for vessels of over 1,600 gross tons, which are large enough to proceed in heavy weather to the side of a stricken vessel, provide a lee for launching lifeboats and for rescuing survivors from vessels in distress.

In conclusion, there are eight major reasons, amply supported by the evidence presented to this subcommittee, why this bill should not be enacted:

First, the men who earn their living at sea, and passengers traveling aboard U.S. ships, are entitled to an adequate safety system, to give them the best chances of survival in seas disasters.

Second, there now exists such a safety system, the international sea safety radiotelegraph network, in which larger ships of 1,600 gross tons and over have been effectively functioning to provide such safety, resulting in the savings of thousands of lives, in this present generation alone.

Third, after almost 3 years of technical investigation and careful hearings the Congress adopted title III, part II, in 1937, to fit the U.S.-flag ships which go into the open sea into this radiotelegraph sea safety system, in order to provide U.S. citizens working and traveling on the seas with the highest measure of safety.

Fourth, there is ample authority for the Federal Communications Commission to provide exemption from the requirements of title III, part II, where such requirements would be unreasonable or unnecessary, under the hazards and circumstances of the voyage.

Fifth, such exemption was applied for by Matson twice, and all the facts in the Matson case were carefully examined by the Commission,

and exemption was denied Matson, since the hazards and safety considerations of the voyage route are not sheltered, but are indeed quite similar to those prevailing in other coastal voyages covered by the act.

Sixth, the effect of this bill is to enter an opening wedge that will wet the economic appetite of selfish companies and could lead to the weakening and ultimate destruction of radio sea safety and the lives of those who depend on it.

Seventh, Matson has proclaimed to the unions with which it bargains collectively that it can introduce and pass laws, in an effort to evade the collective bargaining process on the question of automation, and to evade the obligations to which Matson is committed under its collective bargaining agreements.

Eighth, the radiotelephone equipment Matson proposes to be allowed to substitute for the effective radiotelegraph safety system is inadequate for something as crucial as safety communications under most circumstances, and the so-called system providing safety through radiotelephone is undisciplined, chaotic, and often inefficient.

I would like at this point to explain appendix C, which is the appendix comparing radiotelegraph and radiotelephone before making my final remarks.

Appendix C is seven pages. I will not attempt to read it completely.

Mr. ROGERS of Texas. What pages are those?

Mr. STRICHARTZ. Pages 30 to 37. I will not read it but give a layman's guided tour on this material. This evidence will stand under probate by any experts that it is considered by since it is the summary, the essence of the expert information that is available on these two systems.

We have listed the radiotelegraph system which is known as CW for continuous waves, in a column-by-column comparison with the radiotelephone system which is known in internatinal law and domestically as A–3. We discuss first the apparatus. As to reliability the radiotelegraph equipment is rugged and reliable. It is type approved by the FCC. By contrast the radiotelephone equipment is generally low in standards since most telephone units are voluntarily equipped on pleasure boats, small fishing boats, and cost is a consideration. They are cheaper. The provisions for breakdown under radiotelegraph is adequate. There is a technically trained and experienced radio officer. This is not just a dot-and-dash man. This is a technician who can make prompt repairs. For radiotelephone there is nothing. There is a man who can change a tube or fuse but if the equipment breaks down it is down. The possibility of misunderstanding or evasion of responsibility is extremely important. You will note that the hot line that was set up between President Kennedy and Khrushchev was not a voice line; it was a record communication line. The reason for this was twofold. No. 1, to avoid misunderstanding. No. 2, to avoid evasion of responsibility or anything that might result from misunderstanding. Record communication is extremely important. It can be the difference between life and death in the case of giving positions of vessels, and describing situations.

We know, for example, in the *Laconia* distress more vessels might have gone to its assistance had the master of the *Laconia* indicated that his vessel was a passenger ship with over a thousand aboard. This is one of the sad facts that has emerged in the aftermath. Nonethe-

less, most of the *Laconia* people were saved. Their suffering might have been that much less had there been a clear statement as to the need for greater lifeboat capacity in the area. The two systems in this respect do not stand comparison. You can sit and shout into a microphone at a very high rate. You can talk at 200 or 250 words a minute. Don't get the idea from this, gentlemen, that radiotelephone on a ship is similar to that. It is not even similar to your telephone which you use in your office or home. Your telephone on the ship is subject to considerable difficulties which will be described later in comparison. The most important thing is to get 20 or 25 clear, concise, and accurate words through under any and every circumstance with respect to the possibility of misunderstanding or evasion of responsibility.

On the next page is the language barrier. The language barrier on radiotelephone, as you gentlemen understand, is absolute. On radiotelegraph it is negligible since all radio officers have familiarity with the international code of abbreviations that is used. There is an additional problem in the language barrier and that is the question of foreign accents and these accents in the Hawaiian Islands are quite as serious as anywhere in the world. The accent problem is very serious with respect to understanding of communication. We come then to operating personnel. The radiotelegraph operator, the radio officer, is licensed by the FCC, with two of its highest licenses which require the knowledge of basic law, advanced electronic theory and practice, and radio procedure and equipment. For radiotelephone, you can practically get a radiotelephone license by mail. It is a Sears, Roebuck-type license except for one or two of the very high radiotelephone licenses which are not required for radiotelephone operating on the high seas in most situations.

Experience requirements—a man may not go out as the only radio officer abroad a freighter without at least 6 months' experience. There are no experience requirements for radiotelephone. Training—The radio officer has had specialized training. The radiotelephone personnel generally are trained but not in radio communications. But, from having been shipmates with these very fine and experienced officers, they are trained in navigation, ship handling and other considerations and not in radio communications. It is not expected that a man is to have expertise in every area. We might add that the employers, the steamship companies, and the union or both unions (ARA and ROU), maintain a training program with a school in New York and San Francisco which is continually upgrading radio officers and which is currently engaged in upgrading radio officers for automation equipment and techniques.

The accrual of knowledge—there is a continual accrual of knowledge and experience in the radiotelegraph system. There is a superficial or no accrual in radiotelephone. Availability in an emergency—radiotelegraph is immediately available. It is the sole responsibility of the qualified radio officer to handle emergency communications. But in the case of radiotelephone you have this situation: the master or the deck officers are struggling to save the ship. This takes the full focus of any man's attention and any group of men's attention with expertise.

When you have the choice between the struggle to save the ship and the need to communicate about your situation, you can have not so much a conflict as a distribution of attention and energy and what

limited facilities a human being has. In an emergency there is just so much that a man has to give to a situation; where you have a radiotelegraph operator this is his prime responsibility. In radiotelephone it is one of many responsibilities. I think you gentlemen will agree attempting to save the ship is a little more important than the help that might be necessary after the ship has gone down. The availability after leaving ports is for radio officers no problem because they are there. For the masters and mates this is the most exacting trial that a deck officer can go through, taking his vessel through the difficult waters and avoiding collisions, grounding, and all of the other problems that occur in harbor entrances and exists. We come to the heart of the matter in item 5, effectiveness. The effectiveness of radiotelegraph for satisfactory communications is 17 decibels greater than voice.

The reason for this great difference which represents a power ratio of 50 to 1 is that with voice most of the intelligence is carried by the weak consonants and most of the power is dissipated in the less effective vowel sounds. This is the truth in the nature of language. That the "u" is where your power goes but it is the "s" and the "n" sounds which have the least power that carry that intelligence and shape the meaning of the words. The facts are entirely different with radiotelegraph where all of the power radiated is in the form of useful communication. With radiotelegraph the intelligence is conveyed by the presence or absence of a simple signal. This is what constitutes Morse code transmissions. The 50-to-1 power ratio mentioned above has been arrived at without considering the interference which is normal on the bands. A voice communication has to be at least six decibels better than all other communication on the same band in order to be intelligible. But if any other signal is strong as or stronger than the one being considered is present anywhere within 6 or 8 kilocycles, the communications are impossible on radiotelephone. There is an entirely different story with radiotelegraph. With a highly selective receiver a weak CW signal can be selected or copied although other signals can be much stronger or less than 1 kilocycle away. Any radio officer knows that when you are copying a signal it is one of many signals that you are hearing but the one you are focusing on is the one you copy and you can copy it through anything. As the 50-to-1 power ratio is arrived at under perfect conditions, it can be seen that this ratio is greatly increased as interference increases. On intelligibility of transmission, we have discussed the language and accent factor, but in terms of the communications technical problems, you have first of all interference. Interference is a factor in any situation but for radiotelegraph it is low. It is unaffected by the presence of other signals on the same or adjacent waves in most instances.

In radiotelephone it is severe. It is curtailed by other stations on AM and, in the case of FM, FM's "capture effect" absolutely permits the stronger signal to block out the weaker one. Note also the statement on the interference problem on 2-megacycle bands communication by Harold F. Carey, the general manager of the American Tuna Boat Association, who made this statement in 1954, which is almost 10 years ago.

Very little has transpired that has changed this situation. We quote:

In what is termed the "local area" (roughly north from 20° north latitude) our ship-to-ship communication is always difficult. In the summer and fall months when more than 4,000 boats are actively endeavoring to get their ideas across to each other, it is virtually impossible. (See p. 33 of prepared statement, top, for source of this quotation).

The effect of harmonic radiation in CW is slight, in radiotelephone it is extremely bad.

The frequency problem is always a severe one since the frequency bands are not unlimited, especially in certain portions of the spectrum.

The bandwidth required for telegraphy is 0.224 kilocycles; telephony, 8 kilocycles. Radiotelephone requires from 3 to 36 times more space in the crowded frequency spectrum than radiotelegraph.

Flexibility, for CW you have a good deal of flexibility as to flexibility of frequency. For radiotelephone you have preset channels which are available on a fixed basis and there is nobody who can recalibrate to acquire new frequencies. Selection of appropriate frequencies—the expert radio officer can select a frequency that can get through under most situations except absolute sun spot blackout and that nobody can do anything about.

The choice of propagation to employ, the radiotelegraph can do. The radiotelephone man has no expert information. The final point in this comparison is the performance record of both systems. I won't undertake to read all that we have put here on the performance record of both systems but I would like to state that the history of maritime radiotelegraph is an unsullied record of fidelity by the radio operators that has been growing to maturity during the past 65 years. For radiotelephone it has been rather poor. There has been no international network composed of radiophone equipment vessels for discipline. There are thousands of licenses that have been given to pleasure boats and these are incapable of participating in any sea safety network useful to larger vessels, such as the Matson ship. This doesn't mean that there are not forces at work in the pleasure boat field, like the U.S. power squadrons, that are attempting educationally and in other manners to make order in the chaos.

I would like to call your attention to the fact that in 1954 the Chief of the Marine Division of the FCC pointed out what the problem was. We have a rather long quotation but it amounts to this: that radiotelephone has been confined to the smaller vessels. As you know, it goes down to 500 tons under the 1948 convention and it has gone down to 300 to 1,600 tons since.

In the interest of safety at sea, we are glad to see this kind of thing. But Mr. Krebs noted that—

the action was highly significant in tentatively elevating the stature of telephony at sea.

I use the word "tentatively" because in my opinion at least, the raising of telephony to this higher plane must be demonstrated by actual experience in its practical operation as a safety communications system at sea.

What has happened since then, Mr. Krebs pointed out that:

The enforcement staff of the Commission is severely limited in number. The situation, being directly related to the allocation of Government operating funds, is quite beyond the control of the Commission.

Considering the wide diversification of interests among the 39,000 ship station licenses, and the absence of any centralized or national organization of these licensees in the United States, there is need for the best possible leadership in this field. Has this system improved in the interim? All reports indicate it has not.

In 1959, FCC noted on page 138 that—

> The Commission has devoted special efforts to an enforcement problem occasioned by misuse of radiotelephone distress and calling frequencies by small boats. Superfluous communications, just plain jabber, have been hampering the use of this frequency for its intended high priority purposes * * *. Unfortunately the number of corrective actions is greatly exceeded by the number of transactions (that is, they have not broken even). A disregard for official notices heralds a real and difficult problem * * *. Also, in the case of small boats the captain usually serves as radiotelephone operator and has a tendency to ignore his responsibility to keep a radio watch and the distress and calling frequency (p. 138, "FCC Report for Fiscal 1959").

In the last Commission annual report for fiscal 1962 we learn that there are now 116,000 station licenses issued to small boats and only "some leveling off in the number of violations."

In other words, this has not diminished. There has been a leveling off in violations. The FCC goes on:

> However, much work remains to be done both from an enforcement and educational standpoint to alleviate the chaotic conditions that still exist in certain areas (p. 141, "FCC Annual Report for Fiscal Year 1962").

Note that "chaotic conditions." These are the undisciplined chaotic conditions that exist in the radiotelephone system which militates against withdrawing from the efficient radiotelegraph safety network as Matson seeks to do. The appendix then discusses, and I will not read them, four case histories on radiotelephone, one of which was discussed at some length, the U.S.S. *Benevolence* in appendix B, on the legislative history. The *Princess Kathleen* case, and the other two mentioned there, are discussed. We draw from the above four marine casualties, the following conclusions:

One, deck officers have more than enough duties to perform during safety emergencies without the additional function of communications being thrust upon them.

Two, the deck officers, though competent in their own field, lack the skill and experience necessary to perform safety radio communications.

Three, only the timely and effective intervention of radiotelegraph-equipped ships salvaged the situations where the deficiencies of radiotelephone were present.

Four, when radiotelephone is substituted for radiotelegraph, there is a consequent decrease of sea safety for that particular vessel as well as for all shipping, and the records show radiotelephone has performed miserably in emergencies involving safety at sea.

I think it should be fair to note that radiotelephone has performed well in some situations. These situations are generally the in-close situations and generally involve the U.S. Coast Guard whose role in sea safety should never be diminished and should receive the appreciation it has coming to it.

In preparation for this hearing we sent out a general request for letters from the men who have been sailing to the Hawaiian Islands. With your indulgence I will introduce copies of these letters into the record and make a larger number available later.

Mr. ROGERS of Texas. Which letters are those?

Mr. STRICHARTZ. These are letters from radio officers who have sailed in Hawaiian waters. We asked for the comparative characteristics of radiotelephone and radiotelegraph in the Hawaiian areas.

Mr. ROGERS of Texas. How many of those do you have?

Mr. STRICHARTZ. We have about five or six.

Mr. ROGERS of Texas. What length are they?

Mr. STRICHARTZ. They go from one page to three or four.

Mr. ROGERS of Texas. Is there objection to including those in the record? If not, it is so ordered.

(The letters referred to follow:)

SAN FRANCISCO, CALIF.

Subject: H.R. 8508.

SIR: I was third assistant radio officer on the Matson Navigation Co. ship *Mariposa* from July 4 to August 22 of 1963. The vessel was fitted with radiotelegraphy and radiotelephony. On a number of occasions we had telephone calls to make to Hawaii via station KQM (owners: Hawaiian Telephone Co., 1130 Alakea Street, Honolulu). The chief radio officer in charge of telephone communications on the *Mariposa* nearly always experienced great difficulty first trying to contact KQM on the radiotelephone and the majority of times the only way he could contact him was by first alerting him on telegraphy. After contact was established problems arose due to static interference and drift conversations that would run as long as 10 minutes would get a chargeable time of only 3 or 4 minutes from FQM. The other 6 minutes of conversation would be written off due to above-named conditions. No doubt the logs of the Hawaiian Telephone Co. will confirm this, not alone for the *Mariposa* but for other vessels that have used their facilities.

One big problem encountered working KQM is difficulty in understanding the operators unless conditions are near perfect. If the signal is QSA 3 or thereabouts or there is any QRN or QRM around it's almost impossible to make out what they are saying unless a person is familiar with the Hawaiian accent. In a lot of cases unnecessary repetitions were asked for by both ends owing to the accent problem. We rarely or never used 2182 or associate frequencies when in Hawaiian waters as the delay in raising the station would be too much owing to pleasure boats or fishing boats holding prolonged conversations on that frequency. The naval station on Hawaii can easily confirm these practices are common and I'm sure they also experience a lot of difficulty from the same source.

Coverage: It depends a lot on the position you are at, sometimes if close up to the land both the naval station and KQM are barely readable. That is with no QRN or QRM something that very rarely happens because if you haven't got one you've got the other.

Radiotelegraphy versus radiotelephony in Hawaiian waters. My experience with radiotelegraphy at Hawaii has been that no matter what part of the island you are at you can read station KHK on 500 kilocycles. There are times when his signal is not too strong, QSA 3–4, but it is always possible to read him as every letter is spelled out when using telegraphy and on 500 kilocycles you have no pleasure boats or fishing boats to contend with, also no accent and the people using 500 are all trained radio officers who realize the importance of keeping QRM to a minimum. I sailed on the *Matsonia* now renamed the SS *Lurline* as third assistant radio officer from August 27 to October 29 on a regular scheduled run between San Francisco, Hawaii, and Wilmington, Calif. The following were my experiences with the radiotelephone communications:

We rarely or ever tried to use the radiotelephone in Hawaiian waters. In fact, I can't remember any occasion when it was used for the usual reasons QRM and you had to be nearly on top of the station before you could contact him on 2182 kilocycles. But a better example of the power of the radiotelephone that was installed in the *Matsonia* or *Lurline*, Matson's flagship, passenger capacity 750.

Between October 1 and 10—I can't remember the exact date—when within 100 miles of Wilmington, Calif., we called one of the local stations at Los Angeles and after about an hour made contact on 2182 kilocycles. Conditions were bad, usual QRM. Anyway, we shifted up to a working frequency and the chief radio officer, Bill Freeman, placed a call for the captain (I think his name was Chuck

Webb, he was relieving captain on there) with Matson's port captain at Wilmington. That conversation lasted quite a long time, only about half of it chargeable, rest mutilated and every second sentence was a request for a repeat. Bear in mind that the vessel was less than 100 miles from Wilmington, it will give you some idea of the power of the radiotelephone transmitter that is installed and are we now to believe that the Matson Navigation Co. are going to go ahead and install a super-super radiotelephone transmitter, and the receiver of the future guaranteed no QRM—I seem to keep hearing that tune "The Big Rock Candy Mountain"—on what they have been calling a barge when that's the best they could do for the flagship of their fleet with over 1,000 persons on board?

From the above you will gather Matson officials are well aware of the limitations of radiotelephony but they are closing their eyes to it and are giving a false impression to various people that are not familiar with maritime communications.

If it would be possible to get hold of the logs of the *Mariposa Matsonia* or for that matter any other vessel trading in Hawaiian waters that is fitted with telephony or the records from the Hawaiian Telephone Co. you will have no trouble proving that the greater parts of nearly all telephone conversations are mutilated by QRM and a big time delay exists in making contact 90 percent of the time. May I take the opportunity to say what a grand job I think the ARA is doing and I wish you every success in your fight against the forces of evil that are trying to push through H.R. 8508. A victory for them will undermine the whole structure of safety of life at sea based on a sound telegraph system and leave the door wide open for unscrupulous shipowners of every nation who don't give a tinker's curse for seamen and are only interested in cutting expenses with no thought for human life.

Fraternally,

TOM MANAHER,
Group Two, Ex-SS "Sue Lykes."

HONOLULU, HAWAII, *February 22, 1964.*

GOOD MORNING, MR. RUBIN: Hope that you had good weather during your recent visit to Miami, and did not leave any broken hearts down there. I have no fear of that, Joe, as you are all work and no play.

Called the office last Thursday from here to inform you that Captain McKenzie, Matson port captain, was testifying in Washington that he thought that telegraphy was not necessary on this interisland barge they now have, and that the phone service was quite excellent. Joe, I had the charges reversed because I knew that you were supposed to go to Miami for the pension and welfare meeting, but I was not sure just when. Mrs. Granger informed the operator that you would not be available until Monday. So. I got the information I wanted and it did not cost anything. I immediately wrote to my wife and asked her to let you know as soon as possible about the proceedings going on. I think you will be aware of the situation anyway. But I would like to give you a few details on the situation firsthand. Last trip McKenzie called me when we were in port and asked questions about the service, and I informed him I thought it very poor.

I pointed out to him that approximately one-quarter of the times you want to make a phone call you have to call KHK, local telegraph station, and ask him to inform KBP, local telephone station (only one), that you are calling him. He finally comes on, and if it is daylight you cannot carry on a conversation with him within 100 miles. You cannot read his signals. Hilo, Hawaii, is approximately 193 miles from Honolulu where the station is based. Kahului, Maui, is 88 miles from Honolulu. Nawiliwili and Port Allen, Kauai, are approximately 93 and 108 miles, respectively. This barge is going to operate into all of these places so you can readily see that the communications is not going to be satisfactory at these distances. That there is a constant motorlike hum that you pick up on his frequency, and also on 500 kilocycles when you are within 200 miles of the islands. The noise makes it impossible to read him within less than a hundred miles as I previously stated. In the evening when you try to place a call, KQP, which is the Galveston, Tex., phone station, drowns out the KBP station and you have to wait for hours at times to make a satisfactory connection. Fourth, the Navy interferes with the KBP channel and I am constantly protesting because it interfers with the traffic going on and the operators refuse to make adjustments to the charges caused by the interference. Even though it was not the ship or shore station's fault. Last trip

we were phoning the office and the shore station broke down for 6 hours. The call was not completed. When KBP did come back on the air and we were able to complete the call she added the morning charges to the second call also.

I objected as the completion was not effected and due to the shore station equipment. But of course the complaint fell on deaf ears. He also informed me at the time he had been in touch with the phone company and they were going to install new receivers and transmitters. He also complained that ships arrived in Honolulu without calling the office 24 hours prior to arrival by phone, which is Matson's requirement. In Washington, according to the newspapers, he said that the service was very satisfactory and that the telephone company and the Coast Guard both monitored 2182 kilocycles. If they don't monitor their own working frequency, refer to KHK waking them up, how good of a job of monitoring are they going to do on 2182 kilocycles. Since I have been out here all of Matson ship and tug boat and pilot boat traffic is conducted on 2638 kilocycles. This is improper procedure and can get you a citation for improper procedure. Should call on 2182 and shift to 2638 to work. I found this situation when I came out here and it has been impossible to change the situation. I would not want to rely on 2182 kilocycles for an emergency because apparently it is not used as it should be. And as far as calling for help on 2638, that is practically an impossible situation because the fishermen are talking back and forth about how the fishing is where they are. When I say that 2182 is not used as it should be, I mean that these fishing boats, etc., do not monitor 2182. On 2638 kilocycles they talk back and forth by name without identifying their station, which is also another violation. The Coast Guard in Honolulu does keep watch on 2182 and I think that their log will substantiate that there is very little traffic on 2182 while the traffic on 2638 is quite heavy all the time. So, there are the fellows listening 2638 obviously. The waters in this area do get quite rough and the winds get up quite high. These facts again can be substantiated by the U.S. Weather Bureau, Honolulu. If they do get this barge in operation with permission, are they going to have an emergency phone in case the main set breaks down? Are they going to have an emergency power supply in case they lose their main power? I think these are questions that should be looked into.

I called the SUP, MFOW, MC&S, MEBA, and MM&P and asked their local patrolman to dispatch wires to the communications committee protesting the use on the barge as not complying with existing safety of life at sea regulations and also stating that the present setup in the Hawaiian Islands with the radiotelephone was not a satisfactory substitute. I would also be willing to testify before any committee on my experiences out here with communications. (Only) it is certainly amazing how this jerk suddenly got to be an authority on communications in such a short time. He has been ashore here for the past 7 or 8 years sailing a desk chair.

The *Hawaiian Planter*, *Craftsman*, and *Packer* have sailed for India with no pursers on board. I would like to have either Steinberg or O'Rourke write to these ships' radio officers demanding that they comply with sections 7, 8, and 9 of the agreement with PMA. Especially since it is Matson involved, not that I condone or would do paperwork for any steamship company. I advised the captain on Thursday of what I thought of Captain McKenzie's ability as an electronic and communications expert. Also put in the part about the mates being radio operators, pursers, doctors, and asked what else they were qualified for. But assured him I have not seen a qualified mate in any capacity in the whole of the Matson organization, let alone assume all of these other jobs.

Fraternally,

JACK STUDEN.

MATSON PLAN HITS FCC SNAG

WASHINGTON.—Matson Navigation Co.'s plan to modernize its interisland cargo ships in Hawaii with radiotelephones has hit a temporary snag created by the Federal Communications Commission.

It was not that the FCC is opposed to the plan, but Commissioner Robert T. Bartley said more time and effort should be spent in fully investigating it.

According to Matson, the radiotelephone system is a better safety device in the interisland traffic. It also will permit Matson to use its new *Islander* barge for quicker trips between the islands, the company said.

Capt. R. J. McKenzie, Matson marine operations superintendent, told a House Commerce subcommittee:

"When Congress, more than 25 years ago, chose radiotelegraph as the safety communications system for ships on voyages between American ports, it was not because it denied the advantage of voice communication.

"The choice was dictated by the fact that there was no reasonable assurance at the time that contact could be made by radiotelephone in a safety situation.

"Radiotelephone equipment was still in a developmental state and few stations existed which could monitor a distress frequency for radiotelephone; indeed, a radiotelephone distress frequency did not even exist then."

But the situation is different today, said McKenzie. He said a radiotelephone contact for safety purposes in Hawaii is assured on a continuous 24-hour-a-day basis by reason of the stations in the area monitoring the distress and ship-to-shore frequencies.

However, Bartley suggested that the Hawaii plan be included in a general review of all radiotelephone and other communications on ships.

S.S. C.R. MUSSER, CRISTOBAL, C.Z., *March 16, 1964.*

AMERICAN RADIO ASSOCIATION,
New York, N.Y.

DEAR SIR AND BROTHER: I sailed on Matson freighters between the Pacific coast and the Hawaiian Islands 1937 to 1940 without phone and again from 1948 to 1955 with phone.

There were a considerable number of small fishing and pleasure craft equipped with phone around the islands then. Interference on the phone frequencies was almost always severe. The distance these small craft work is small and they will set the gain on their receivers low so will miss any calls not in their immediate vicinity. They could be of no assistance to a ship in trouble, but they would cause considerable interference on the phone bands.

We always had trouble, and not always successful, in trying to work another vessel on phone when there was an island between the two ships. I can recall, once, while at Kukuihaele, 40 miles up the coast toward Honolulu from Hilo, I was unable to contact KQM, Honolulu, anytime during our stay there. Another time while at Hilo was unable to keep a prearranged phone schedule with the SS *Hawaiian Rancher* who was at Mahukona, just across the Island of Hawaii from Hilo. And there were many more times that phone failed or was delayed, the details of which do not come to mind just now. It was a common thing to have the phone fail unless conditions were just right.

Of course, there are times when the phone works wonderfully, but a vessel in trouble cannot wait for favorable conditions. We all know that the higher phone frequencies are subject to fading, skipping, and reflection at times which makes them useless, while at the same time the lower frequencies, 500 to 400 kilocycles, will get through with no trouble.

Static is often a problem around the islands, and it always is in the tropics and anyone who has stood both a phone and CW watch know that when conditions are rough, CW will get through with greater speed and accuracy, all necessary to anyone in trouble. Further, the communication on CW will be handled by someone who has made a career of radio communications, not by someone out for a pleasure trip some weekend, or someone whose interests are in commercial fishing, towboating, etc.

Our phone transmitters on the Matson ships in those days was built by RCA with plenty of power, but it takes more than power to overcome skipping, fading, echoing, and other faults characteristic of frequencies in the 2-megacycle and higher bands, especially so in an area of high mountains, narrow channels between the islands, such as the Hawaiian group.

I can recall no particular difficulties I had with the CW equipment, even of World War I vintage around the islands the several years I worked out that way.

These phone calls to the company office, etc., are almost always made during the daylight hours when the higher frequencies have settled down and become stable and anyone whose experience has been limited to these calls (masters, agents, etc.) will soon arrive at the opinion that the phone works wonderful and is the answer to all their problems.

I regret that I haven't more specific cases of phone failure to offer you and you have my sincere best wishes for your efforts for the 19th.

Respectfully,

ROY J. WHITTINGTON,
Ex SS Mapele, ex SS Hawaiian Forester.

SS "PRESIDENT HARRISON" AT GUAM, MARIANAS,
March 11, 1964.

ARA NATIONAL OFFICE,
New York City, N.Y.

GENTLEMEN: About 3 years ago I took a relief job for one trip (3 months) on the Matson steamer *Ventura*.

There was a radiotelephone in the radioroom.

I remember Captain Gately requesting me to alert the radio station at Sydney, VIS by telegraph to their radio telephone circuit so he could talk to the agent. I contacted VIS on 500 kilocycles CW while about a hundred miles distance from Sydney. However, contact could not be established on radiotelephone until we were about 20 miles from Sydney.

Coming up from Australia to Honolulu I kept a watch for the Honolulu phone, and only when we were 25 miles from the city could contact be established. It was nip and tuck all the rest of the way into Honolulu. Sometimes phone connections could be made when the noise level was down, and there was a pause in the interference. It was very difficult and spotty communication with the telephone. However, we did not worry too much as radiotelegraph provided instant contact with Honolulu at any time.

I am now the radio officer aboard the SS *President Harrison*. At this instant as I write, we are passing the Hawaiian group of islands, on our way to Guam from San Francisco. The ship's Guam traffic is routed via the RCA radiotelegraph facilities at Honolulu. The radiophone facilities at the same city are useless except for entering and leaving the harbor but even then sometimes gets jammed out by local interference. This never happens to the radiotelegraph facilities.

It has been my experience that the radiotelephone is good only for very short distances and then under only good conditions. These good conditions are the exception rather than the rule when a moving vessel is traveling from one port to another. On the other hand, the radiotelegraph is almost impossible to stop under any conditions.

Respectfully,

JOSIAH J. TAYLOR.

GLEN ELLEN, CALIF.

HONOLULU, HAWAII, *March 16, 1964.*

DEAR MR. STEINBERG: Your request for information on telephone conditions in the Hawaiian Islands was received last night. Since we are arriving and sailing Honolulu today, and with the hearing date near, the composition of a formal and detailed letter is precluded. The following information is presented as a statement.

The radiotelegraph mode of operation is completely reliable and rapid, particularly within the distances involved in interisland movement. Under similar conditions, radiophone is usually reliable, with qualifications.

When running in island waters, areas are encountered where phone contact sometimes cannot be immediately established with the coast stations. This is true even with the considerable height of our antenna. The interisland ship has a much lower silhouette and will have a resultant lower antenna height, plus a sailing route closer to the island land masses than the larger freighters.

Radio station KBP (RCA telephone) cannot always be raised, even though distance and conditions are favorable. In such a circumstance the practice is to contact either NMO (U.S. Coast Guard) or KHK (RCA) on the radiotelegraph net, requesting they contact KBP via their landline facilities and notify him of the attempt to establish contact. KBP then comes up on frequency, and communications are generally established.

Without the use of the telegraph net, two courses of action are possible: extended calling in violation of FCC regulations, or deferring the call until a later time.

Only two stations can be seriously considered a part of the 2,182-kilocycle emergency net—NMO and KBP. Of the two, NMO is the more reliable. Fishing vessels in these waters generally operate only dawn to dusk, and on 2,638–2,738 kilocycles.

In observing ship's personnel in the use of the radiophone over the past few years, I've noticed the following: rarely if ever, do technically unqualified personnel recognize trouble symptoms as they occur. Invariably, in my experience,

they must be instructed to cease keying the transmitter before serious damage to the unit would result.

By spotting symptoms as they develop, corrective steps are possible that keep "down" time to a minimum. Since an emergency situation is a transmitting situation, long "down" time is potentially disastrous. This is particularly so with no backup system on which to rely in case of major or unique breakdown.

Summarily, radiotelephone in near-shore waters is quite reliable when controlled by technically qualified personnel, and can be made more so with a secondary radiotelegraph facility.

But, regarding the interisland ship, I believe the manning of it by a licensed radio officer with the sole duty of maintaining a safety watch is unrealistic. I believe he should have expanded seagoing duties and responsibilities, which would make him a productive as well as protective member of the crew.

The *Islander* is a new concept in shipping and calls for a new concept in manning. I think if you'll query the objective element of the membership, a considerable number I believe, you'll find that the majority do not mind working for a living, particularly if dignity and compensation accompany the discharge of their duties.

I regret that, time being essential, I cannot now expand this theme. I intend to in the near future, but for now I hope this letter will in some way contribute to the strengthening of the ARA position at the hearings.

Fraternally,

ROBERT R. LENGYEL,
Radio Officer, SS Hawaiian/KPZP, ARA Book No. 628.

Mr. STRICHARTZ. I think you will note from the letters these are entirely objective. We did no ask for a loaded case. We asked for all of the factors at play. There is a letter from Mr. Taylor, who is now on the *President Harrison* and who notes the difficulties involved in establishing radio communications in the Hawaiian Islands. There is a letter from the SS *Musser*, Mr. Roy J. Wittington. A letter from Robert R. Langyel, radio officer aboard the SS *Hawaiian*. Interestingly enough you will note in each of these cases writing to the president of the ARA these do not hesitate to express different and varying views.

For example, they understand that there will be changes and they are willing to be realistic and provide more service and more ability and more training. There is a letter which did not come as a result of a request but came as the result of a clipping in a Hawaiian newspaper from a Mr. Jack Sturm, who noted many characteristics of the radiotelephone traffic in the islands. There is a letter from Mr. Thomas M. Manaher, who was formerly on various Matson vessels. They make various points.

The recurring theme we get is that the radiotelephone system in the island is poor and in order to utilize it, it has often been necessary to have the radiotelephone station alerted by means of radiotelegraph. The Coast Guard or a radiotelegraph station is called and asked, "Call them up and tell them I am calling them." While Matson is optimistic about the type of service they are going to get, I would doubt that for one single vessel, or even a few vessels, there will be a considerable change of service in the islands. I note that while a great deal of material has been introduced as to the radiotelephone facilities in the islands, the fact still remains that the radiotelegraph facilities are available and effective. There are two technical points that should be noted. When there is a land mass intervening between the vessel and the station receiving a signal, land effect is in direct relationship to the height of the antenna. The silhouette of this vessel is considerably lower than some of the big vessels that are discussed in these letters.

Therefore, on the basis of the unremitting search by this country to enhance the safety of lives and property at sea; the congressional wisdom embodied in present radio safety legislation; the need to uphold the FCC in its conscientious application of the intent of Congress, as it has displayed in the Matson case, in order to maintain orderly governmental processes; the failure of Matson to provide a basis for any special-interest legislation such as it is requesting; the need to avoid encouraging private companies to try evading their collective bargaining obligations, especially in the crucial areas of safety and automation; the consequent need to maintain stable labor relations on the maritime industry to the end that technological progress may be made in an orderly and cooperative manner; the fact that passage of this special-interest bill would tend to weaken, and might ultimately end in the destruction of efficient and necessary safety radio system; the need for Congress to reaffirm the bipartisan public interest in maintaining high sea safety standards, both domestically and in compliance with our Nation's treaty obligation, we submit that the public interest would be served by rejection of this bill, and urge this course upon the subcommittee most strongly.

Thank you for your time and the attention you have given us, gentlemen.

Mr. ROGERS of Texas. Thank you, Mr. Strichartz. The groups which you represent, Mr. Strichartz, do they operate also in the Great Lakes area? I mean the people who are members of the groups on the seacoast, would they be members of the same group in the Great Lakes?

Mr. STRICHARTZ. No, sir; they do not. The only occasional voyages of deep sea vessels into the lakes now that there is a seaway bring the deep sea vessels into the lakes. Our people are on the lakes and while on the lakes they provide communication services in conjunction with others aboard the ship.

Mr. ROGERS of Texas. Are the members who work on the Great Lakes shipping industry members of the National Maritime Union and Brotherhood of Marine Officers?

Mr. STRICHARTZ. Some of them are members of the National Maritime Union. When we say 90 percent of the U.S.-flag merchant marine in the deep sea area, we exclude those vessels navigating solely on the lakes.

Mr. ROGERS of Texas. Why wouldn't the problem be the same with regard to everything except the language barrier insofar as communications between ships on the Great Lakes are concerned?

Mr. STRICHARTZ. This is an entire question of its own. What was done in 1937 was to consider the specific situations that relate to close order navigation in the canals and channels and rivers and the lakes. Special provision was made for them. The biggest factor that was introduced was that there was no need to intercommunicate with the other deep sea vessels who were in the radiotelegraph system because they could not get out to help them and the big ships couldn't get in to help them.

Mr. ROGERS of Texas. I understand that. What I am thinking about is the radiotelegraph operations as between ships plying the Great Lakes. Isn't it just as important that lives be saved as between ships on the Great Lakes as it would be between ships on the ocean?

Mr. STRICHARTZ. That is true, sir. If you are asking me whether

I agree that the use of radiotelephony on the Great Lakes is the best of all possible systems, I would have to answer "No." But in arriving at the decision to exempt the lakes the Congress decided that this represented an exceptional situation which did not require an intermix with all the other vessels of the world. With respect to the voyages on the seacoast in the Hawaiian waters there is the need, the opportunity, and the desirability of fitting into that worldwide system.

Mr. ROGERS of Texas. That is the reason I asked you if the groups you represent had membership in the Great Lakes areas. I was wondering why these groups, if they do have membership in there, did not insist on radiotelegraph in the Great Lakes and why they yielded to radiotelephone.

Mr. STRICHARTZ. I think that the problem in the lakes is really one of close water navigation. It is similar to the provisions that are made in the deep sea when you enter harbors for bridge-to-bridge communication by radiotelephone which occurs on the deep sea. At the actual harbor entrances and in this close order navigation there is this need to exchange signals with vessels that are very close, a few hundred yards or a mile or two. In this situation the radiotelephone has its limited uses, a mile or two. Generally this is conceded by pretty much everybody. But in the 200-, 300-, 400-mile stretch of waters in and around the inlands this is considerably different.

Mr. ROGERS of Texas. If the *Morro Castle* had been an equal distance off the shore of the Great Lakes or a ship that size as it was off the coast of New Jersey, would the loss of life be the same, do you think, or would there have been means of rescuing people off that ship that were not available off the New Jersey coast?

Mr. STRICHARTZ. I think the question is difficult to answer. It relates to the number of vessels that are equipped by different systems. In the lakes the phone system has developed prior to the congressional investigation and in the deep sea the telegraph system had developed. It was based on the greater distances. I would say offhand that for a span of 8, 10, 20 miles, radiotelephone might almost be as effective, with the limitations that are set forth as to personnel and what they are doing. Unfortunately, on the *Morro Castle* you ran into the problem of a master who was so busy trying to save his ship in a fire that he died and a chief mate who became master in a matter of minutes and neglected to send out an S O S until very much too late. There you have the problem in a nutshell.

Mr. ROGERS of Texas. What I am getting at, Mr. Strichartz, is this: The thing I cannot understand is if this radiotelegraph saves lives on the ocean and it is the best available, why it should not be used on the Great Lakes.

Mr. STRICHARTZ. I agree with you, sir. It is the best available. I think it would find usefulness on the Great Lakes. This is a chapter in the history of the legislation that we have not been able to turn back to. It was before my day.

Mr. ROGERS of Texas. I think some of the other members may have some questions on that. Let me ask you one further question, and then we will proceed with the other questions.

What would be you feeling, on page 1, line 7 of the bill, if the words "in the course of a voyage" were stricken out and inserted in lieu thereof with the words "are engaged exclusively in voyages"? As I understand it, that amendment was discussed before at the hearings

of this subcommittee and it would limit the application to specific vessels. As far as the matter is presently concerned, as I understand it, it would limit this specifically to the one vessel in controversy here or in question here, the Matson vessel that is now plying between those ports.

Mr. STRICHARTZ. We would still feel that this constituted the unwarranted breach of a system, the unwarranted withdrawal of a vessel from the system. In the course of the legislative history we have included references to the rationale of the Congress. The Congress felt that you must include the maximum number of vessels in any network. If you could know which vessel could be available when a vessel is in distress you could exempt a vessel which would never be available. The FCC has on occasion done so. But each time you remove a link from a chain you weaken the chain. Each time you remove another violin from an orchestra it gets down to the point where it is a quartet and then where you can no longer hear it. Every instrument in the orchestra is necessary and we think the link in the chain is necessary. We would be firmly opposed to this treatment for this vessel in these waters.

Mr. ROGERS of Texas. You would be opposed to that bill if the change was made?

Mr. STRICHARTZ. Yes, sir.

Mr. ROGERS of Texas. Mr. Moss?

Mr. MOSS. At the present time this vessel is operating in the Hawaiian trade, is that correct?

Mr. STRICHARTZ. We understand that there is a barge operating in the Hawaiian waters under tow.

Mr. MOSS. The experimental vessel is now operating under tow as a barge, is that correct?

Mr. STRICHARTZ. That is correct, sir.

Mr. MOSS. What is the difference, then, if you make it self-propelled?

Mr. STRICHARTZ. When it is made self-propelled, sir, it becomes a vessel which can and should participate in the safety network on behalf of those aboard the vessel and on behalf of those aboard other vessels that are in the same waters. That is the total difference.

As a barge it is an unmaneuverable vessel which reasonably cannot be expected to go to the aid of the other vessels. As a self-propelled vessel, it becomes a vessel which qualifies by virtue of size, ability to navigate, and everything else.

I might add, sir, that the speed given or the proposed speed given for the vessel which we understand is in the neighborhood of 11 knots is a speed that many a freight has, including all of the Liberty ships that are still operating, and there are something in the neighborhood of a hundred in the American flag and many under other flags.

Mr. MOSS. On page 3, at the bottom of that page of your statement you state that first it should be noted that the wording of he bill is not confined to a provision to exempt a single experimental craft from the radiotelegraph requirements for communications. Would your position be different if it were confined to a single experimental craft?

Mr. STRICHARTZ. I think our position would not be different, but the point we were making here is that as it is presently written the language is drawn very broadly. We don't feel that this particular body of navigable waters would be subject or should be subject to a relief

from participating in the system. We might add something else: We have read the brochure of Matson on their semiautomated ship. Reading it over it is not a semiautomated ship and it is not at all realistic as an approach to automation. Many of the other companies have mation plans but they have included people who will be aboard for the purpose of providing the necessary maintenance, repair, and standby for breakdown. What do you do if something goes out on this vessel? Blow a whistle, shout, or are they going to holler on radiotelephone? Are they going to send out a repair crew by helicopter? Are they trying to tell us that a vessel that navigates in the open sea is not going to be subject to breakdowns? Your washing machine sitting on the cement floor of your basement is. We submit, sir, that an expert radiotelegraph officer who is also an electronic technician has a useful part to play on a vessel with automated equipment, because automation is essentially communications and control by electronic instruments.

Mr. Moss. In your statement, on page 34, you mention the number of licenses for radiotelephone issued by the Commission. I believe 116,000. Do you have figures indicating the number of those in Hawaiian waters?

Mr. STRICHARTZ. We do not, sir. But we understand that the testimony of Matson in the last hearing that figures were introduced on the record that indicated that there are some thousands of small craft in the Hawaiian waters. There was a letter from some organization of small craft operators which gave some figures of that sort.

Mr. Moss. In the extemporaneous comment, not in your prepared text, you said that radiotelephone conditions around the islands were poor; that you frequently have to call and alert by other means.

Is there some characteristic or is it contended that some characteristic in the island area is different and therefore interferes with the frequencies upon which the radiotelephones operate?

Mr. STRICHARTZ. The condition that exists in Hawaii may be a trifle better or worse than other places. But this is largely the experience that has been encountered in many areas. The ability to raise the stations is a rather poor one.

First of all, the radiotelephone is subject to interference. Two kinds of interference, natural and manmade. You get the interference of atmospherics, known as static. You also get manmade interference from other ships. You have a lot of pleasure-boat owners out there jabbering away about their personal affairs. You have tuna boats and other fishing craft owners and operators talking about business conditions and it is impossible to get them off. The letters we have gotten from the islands are interesting in that they indicate that the radiotelephone provisions in the islands are just not that good.

Whether that is due to the nature of propagation in that particular area or poor provisions or both is something I cannot answer.

Mr. Moss. Have you any knowledge of any technical studies of this condition in the islands that could be referred to by the committee for its information?

Mr. STRICHARTZ. I don't know of any technical study on the condition that could be referred to by the committee. There are, however, records of what happens when you make a radiotelephone call and how you are charged in that area. That is mentioned in these letters. Quite often the difficulties of radio communication by radiotelephone can be seen in this manner. To make a 3-minute call, you

have to spend 10 minutes repeating and repeating and repeating. There have been a number of controversies between radiophone callmakers and the Hawaiian Telephone Co. or whatever the company's name is, stating that they should not have been charged for 10 minutes when 3 minutes is all the communication they got out of it. In the course of these letters there is mention of some of these factors. This indicates the kind of problem that exists. If you must continually repeat and repeat when life is at stake you are just going to be in very poor shape. Frequently you won't get through at all.

Mr. Moss. In other words, you feel that the commercial phone company there would have records that would tend to indicate this to be the case.

Mr. STRICHARTZ. I don't know whether they have those records, sir, but I know in the course of these letters there are specific instances referred to continually which go to that question.

Mr. Moss. What is the experience in contacting the Coast Guard stations in the islands by telephone?

Mr. STRICHARTZ. Generally better, although as you know the Coast Guard is not engaged in commercial communication. The experience with the Coast Guard stations generally is better, but with respect to radiotelephone it is not that much better because of the inherent limitations of the system.

Mr. Moss. Have you any comment from the Coast Guard officials in the area as to their views on the efficiency or effectiveness of radiotelephone?

Mr. STRICHARTZ. The Treasury Department letter went to the question of the fact that they do see no differences between the Hawaiian waters and the other coastal areas and therefore they were deferring to the FCC in this respect. But this is something we generally find. If anybody takes the trouble to write to the Coast Guard about provisions that they have for one or another type system they will get a good clear answer. We note that Matson has done this with respect to radiotelephone. They might also do the same thing with respect to radiotelegraph. We note that the Coast Guard maintains radiotelegraph facilities on the island as well.

Mr. Moss. Do you feel that the additional stations which are to go into service and those now existing would not provide adequate insurance of communication in time of emergency?

Mr. STRICHARTZ. Yes, sir; I do so feel. We have queried people about that and it is their feeling that radiotelephone is simply not going to be adequate unless you have a much closer range than is indicated in these voyages—8-, 10-, 20-mile ranges you can handle. Although when you get up to 20 you are on the limits of your effective communication. But when you have large land masses intervening and long runs you won't have effective communication. I might add that this is all projected and in the future, and we would have to judge by the experience after the new facilities go in. But we would urge that the committee not act in haste on legislation that is based on possible plans and the possible results that may come from these plans of the private company in the islands.

Mr. Moss. This is specifically limited to Hawaiian waters?

Mr. STRICHARTZ. Yes, sir.

Mr. Moss. The proposed legislation?

Mr. STRICHARTZ. Yes, sir.

Mr. Moss. This would require the concurrence of the Congress in such a request?

Mr. STRICHARTZ. It is addressed to Hawaiian waters, but we feel it is not warranted against the background of the route conditions, the communication facilities available and the most important thing, the need to maintain the integrity of this worldwide radio safety system. I would like to stress that men on the ships feel extremely strong about this. Generally speaking their attitude is that they will not go to sea without a ship radio officer.

Mr. Moss. If this bill should become law, it would still require negotiations between your organization and the operator of the vessel before it could undertake to rely solely on radiotelephone?

Mr. STRICHARTZ. It is true that we now have a collective bargaining provision which obligates the company to continue using radiotelegraph officers for all communications. Those collective bargaining agreements would not be abrogated by the change in the law. But the law would be breached.

Mr. Moss. In other words, it would still have to be negotiated?

Mr. STRICHARTZ. Yes, sir. The collective bargaining provisions would still be in effect, but the law would be breached and the safety system would be weakened.

Mr. ROGERS of Texas. Mr. Younger.

Mr. YOUNGER. Thank you, Mr. Chairman.

What is the tonnage of the largest vessel in the tuna fleet? You casually mentioned the tuna fleet in your testimony.

Mr. STRICHARTZ. I can't answer accurately. I would venture the opinion that it is not over 1,600 gross tons.

Mr. YOUNGER. You think they are under 1,600 gross tons?

Mr. STRICHARTZ. I would imagine they are, sir.

Mr. YOUNGER. In other words, if any ship used in the island waters that was 1,600 tons or under would not have to comply with this anyway, would it?

Mr. STRICHARTZ. That is correct, sir. The 1,559-gross-ton vessels, or the vessels under 1,600 tons, would not. Generally speaking, you will find this to be true. That either a vessel is 20, 40, 80, or 150 tons or they go to very large units. There is an economic point for operating a very small vessel and once you get into the larger classes you generally operate well above them.

For example, this automated ship is to be on the order of 3,000 gross tons.

Mr. YOUNGER. That is all.

Mr. ROGERS of Texas. Mr. Hull.

Mr. STRICHARTZ. Mr. Chairman, may I beg your indulgence for a bit of information that has come to my attention in the last minute. A newly formed steamship company has purchased the SS *President Hoover*, which is a large passenger ship. It plans to convert the *President Hoover* into a luxury resort ship which will ply among the four major islands of Hawaii beginning late this summer. I think that the subcommittee should note—would know nothing about the Hawaiian line——

Mr. ROGERS of Texas. Let us wait to discuss that until Mr. Hull completes his questions.

Mr. HULL. I have just one.

On page 6 you say in reaching its decision on matters crucial to sea safety, the subcommittee should consider a brazen campaign which has been in progress during the last 15 years to undermine and destroy the international sea safety radio network. What are the other instances beyond this one that you made a point on today?

Mr. STRICHARTZ. They are carried in the appendixes starting on page 20 going to page 23. We have the SS *Benevolence* and the other instances. They are set forth in some detail.

Mr. HULL. It seems strange to me that our great shipping industry—incidentally, I come from the Midwest and the largest body of water I am adjacent to is the Missouri River—it would seem strange to me that our great steamship companies would be opposed to safety factors.

Mr. STRICHARTZ. The great steamship companies as of now have not been opposed to safety, except for this one company, Luchenbach, which was an unsafe operating outfit and lost many ships. We find it is the companies that disregard safety in other areas that want to breach this radio safety system.

Mr. HULL. Are you talking about foreign ships?

Mr. STRICHARTZ. I am talking about some American companies. We ran into this problem in 1952, 1953. At pages 20 to 23 of our statement we discuss it in some detail.

Mr. HULL. I notice you mentioned several times it would be loss of one radio operator. Do they have just one radio operator on ships that ply the seas?

Mr. STRICHARTZ. Yes, sir; they one radio officer who stands an 8-hour watch. They have an automatic alarm which responds to a signal that is actuated by vessels in distress. The radio officer maintains the equipment, repairs it when it is out, stands his watch, and obtains for the ship all these services and provides the communications in distress when it really matters.

Mr. HULL. Would the difference be in the cost of operating a vessel comparing the two together, radiotelephone and radiotelegraph.

Mr. STRICHARTZ. I would say there would be no personnel difference for this company since this company is obligated by its collective bargaining agreements to maintain a radio officer.

Mr. HULL. This would not mean an economy measure for them?

Mr. STRICHARTZ. I think they harbor the notion that they are going to get away with it. But I don't think they will. For one thing, the mates are not about to pick up this work. They feel they are doing some pretty important work, and they are. We are not about to give it up, sir.

Mr. HULL. How much money would be involved if they were to get away with it?

Mr. STRICHARTZ. The annual wages of a ship radio officer run basically something like $700 a month, which runs in the neighborhood of $9,000 a year. The cost of feeding him and insuring him and everything.

Mr. HULL. That would really be miniscule in the overall cost of operating the vessel.

Mr. STRICHARTZ. It may be miniscule but they would like this.

Mr. HULL. You think they would like to get rid of each few hundred dollars?

Mr. STRICHARTZ. Yes, sir; they do unfortunately.

Mr. HULL. Thank you.

Mr. ROGERS of Texas. Did you have something else now, Mr. Strichartz?

Mr. STRICHARTZ. The only comment I want to make is that here you will have a passenger vessel which the wording of the bill does not cover but tomorrow a company might come in, it could very well be Matson, I don't know who it is, for a similar piece of legislation and you might find yourself besieged with this kind of request for legislation every time the FCC turned somebody down.

Mr. MOSS. On that point, I think the record should be very clear, it is true that the FCC in its refusal made its findings—I haven't the opinion or order before me—and further stated that there were policy considerations here which should be considered by the Congress.

Mr. STRICHARTZ. The FCC has said in every situation and in the *Matson* case, the *Tennant* case, *Olsen* case, and all the others, for the FCC to permit radiotelephone in lieu of radiotelegraph where the voyage circumstances do not make the carriage of this equipment and living up this requirement unreasonable and unnecessary, for the FCC to grant this exemption would be tantamount to an administrative reversal of the intent of Congress as embodied in the law.

Mr. MOSS. As I recall one order said that the policy considerations should be considered by the Congress.

Mr. STRICHARTZ. I don't think it is stated that way, sir. They said if we do it, we would be usurping——

Mr. MOSS. You make that point because we frequently in this committee have requests from licensees of the Commission for consideration of changes affecting policies which the Commission feels properly are the prerogative and responsibility of the Congress.

Mr. STRICHARTZ. That is true.

Mr. MOSS. We had a hearing on clear channel broadcasting, and we have had quite a number of others that indicate the Commission feels that the Congress should speak out on such matters.

Mr. STRICHARTZ. Yes, sir. As I say, it is not as though the FCC says this is something that needs changing and the Congress ought to do it.

Mr. MOSS. I think the record should reflect what the FCC said because, as I recall in the first series of these hearings, the FCC order was made a part of the record of these hearings.

Mr. STRICHARTZ. Yes, sir. This is the FCC memorandum, opinion, and order refusing the reconsideration.

Mr. MOSS. That has been made a part of the record of these hearings.

Mr. STRICHARTZ. Yes, sir.

The FCC is explicit: "Such a finding applied on a general basis would be tantamount to an administrative reversal by the Commission of the legislative judgment expressed in title III, part II, in the absence of exceptional circumstances radiotelegraphy is the preferred and required mode of maritime safety communications, for vessels of over 1,600 gross tons."

This is the language they use in all of these decisions. You will find that in our legislative history which we have amended.

Mr. MOSS. There are other comments by the Commission, however, that I recall. I don't know whether it is a letter to us or the testimony of the Chairman. It is in the record, though. There is in effect an

indication by the Commission that this is a matter of policy which should be considered by the Congress.

Mr. STRICHARTZ. Congressman Moss, we feel that Congress should always be open on every subject and should make its decision carefully and deliberately on all the evidence.

Mr. MOSS. That is the point I was getting at. The requests of this type to the Congress are not unusual. In my 12 years here I have encountered many of them. The Congress should impartially and objectively undertake an evaluation of the merits of the requests. This in no sense constitutes anything unusual in the type of business the Congress is called upon to consider.

Mr. STRICHARTZ. Yes, sir; I agree with you. It would be our hope, though, that in arriving at these communications the safety of life of our people would be given some considerable weight.

Mr. MOSS. I express the sincerity of my colleagues that we do not move without trying to give consideration and very careful consideration to those factors.

That is all I have, Mr. Chairman.

Mr. ROGERS of Texas. Thank you, Mr. Strichartz and Mr. Haddock.

Mr. STRICHARTZ. Thank you, Mr. Chairman.

Mr. ROGERS of Texas. Mr. Pessel.

Mr. PESSEL. I am sure the committee wants all the facts in the record—at least both side of all of the facts so-called. We would like to have permission to submit for the record a short statement within the next 10 days in answer to some of the questions that have been brought up.

Mr. ROGERS of Texas. The Chair was going to make this statement.

Without objection, the record will be kept open for 10 days to receive such information and data as any of the parties desire to submit; of course, subject to the usual rules and regulations as to inclusion in the record. It will be submitted and the Chair will submit it to the ranking minority member and unless there is objection it will be included in the record. Otherwise, the parties will be informed. That period will be 10 days.

Mr. STRICHARTZ. Thank you.

Mr. ROGERS of Texas. The subcommittee will stand adjourned subject to further call of the Chair.

(The following material was received for the record:)

AMERICAN RADIO ASSOCIATION,
New York, N.Y., March 30, 1964.

Re H.R. 8508.

DEAR CHAIRMAN HARRIS: In the interest of full disclosure of all the facts that relate to H.R. 8508, which is of special interest to the Matson Navigation Co., I am asking that the enclosed antitrust complaint against Hawaii's Big Four and Matson be included in the record of this bill, and that the Subcommittee on Communications and Power of the Interstate and Foreign Commerce Committee give careful consideration to its startling revelations.

Hawaii's Big Four, as the Antitrust Division of the Justice Department calls them, are charged with acquiring control of Matson Navigation Co. and using that control to maintain a monopoly of shipping, between Hawaii and the mainland, of sugar, pineapple, and general cargoes.

The Justice Department complaint (civil No. 2235, filed January 20, 1964) defines Hawaii's Big Four as: Alexander & Baldwin, Ltd.; Castle & Cooke, Inc.; C. Brewer & Co. Inc.; and American Factors, Ltd., and details its octopuslike operation. Through scores of subsidiaries, the Big Four-Matson monopoly run wholesale and retail trade, seafood canning, two of Hawaii's largest trucking firms, sell machinery and equipment, are in the lumber business, manufacture

and distribute fertilizer and other chemical products, retail household appliances, run the largest department store retailing operation in Hawaii, operate a retail drug outlet, are the largest wholesaler of consumer goods in Hawaii, including drugs, chemicals, dry goods, beer, wines, liquors, tobacco, candy, tires, hardware, glass, lumber, applicances, and commercial and industrial machinery and equipment, food, cement, mill supplies—and, through Matson, shipping of all of it.

The Big Four-Matson monopoly produce and ship 95 percent of Hawaii's sugar, and over 50 percent of its pineapple production. Most of the flood of goods bought and sold by the Big Four are transported between the mainland and Hawai by Matson.

Now, this "octopus," which controls every kind of product from baby foods to geriatric drugs, and most other goods and services consumed between the cradle and the grave in the islands, apparently seeks to extend its monopoly from the islands themselves out to the open sea waters in and around them, and who knows to what other waters.

Through H.R. 8508, their special-interest legislation, Matson is seeking exemption from sea safely radiotelegraph requirements for the interisland trade. Its passage is sought by Matson to reduce its costs, at the expense of sea safety, so that they will be lower than radiotelegraph equipped and manned vessels which participate in the radio sea safety system. Is this done in order to give Matson a further competitive advantage over other American ships who might be potential competitors in the interisland trade? This question may be of further interest to the Antitrust Division of the Department of Justice, and should be seriously considered by the subcommittee in its deliberations on this bill, or any amended version of it.

In our testimony on H.R. 8508 before the subcommittee on March 19, 1964, we included the full text of a letter Mr. Wayne L. Horvitz, vice president of Matson wrote to all west coast maritime unions, brazenly stating Matson's intention to "introduce a bill" to override the Federal Communications Commission which had twice refused to let Matson operate vessels over 1,600 gross tons without taking its part in the worldwide sea safety radiotelegraph network.

We pointed out that Matson is only interested in trying to save radio officers' wages, not lives, if they can get away with it. As FCC stated, in refusing a similar request for exemption: "Petitioner's reasons are, in our opinion, entirely economic * * * all shipping could operate more cheaply with none of the many types of safety devices now used, but to state such a proposition as justification for eliminating their use is to refute it."

At stake in H.R. 8508 are the lives of the traveling public on ships in and near Hawaiian waters as well the lives of our members and of the other American seamen, all of whose organizations are unanimously on record as opposed to this bill. Going beyond this immediate bill, at stake, also, could be the entire structure of safety at sea through radio that has been protecting human life in shipboard distress situations, which H.R. 8508 now threatens to breach.

Once again, we urge that the subcommittee refuse the Big Four-Matson monopoly their special-interest legislation. Do not feed their economic appetites with our lives. Thousands of seamen and passengers now walk the earth alive because help summoned by radiotelegraph came in time to save them. Every link in this sea safety radio network is important. Do not let Matson withdraw from the worldwide sea safety radiotelegraph system to save radio officer wages. Do not grant Matson the means to extend its monopoly tentacles into areas it does not now control, destroying safety standards in the process. Reject this bill, with or without amendments.

Can you place a dollar value on the life of the one you love most—your wife, child, parent, brother, friend? Choose, we urge, human life over dollars for Big Four-Matson.

Very truly yours,

W. R. STEINBERG, *President.*

MATSON NAVIGATION CO.,
Washington, D.C., March 25, 1964.

Hon. WALTER ROGERS,
Chairman, Communications Subcommittee, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

MY DEAR MR. ROGERS: This letter is written in connection with the testimony given before your committee on Thursday, March 19, by a representative of the

American Radio Association, AFL–CIO, in opposition to H.R. 8508 and related bills. In our view, only two matters raised by the testimony need be adverted to.

First, to the extent that the testimony attempted to raise questions as to the efficacy of radiotelephony in general as a system of safety communication at sea, and, particularly in Hawaiian waters within 50 miles of land, the record already shows the following:

1. Commissioner Robert T. Bartley, of the Federal Communications Commission has already indicated that radiotelephony adopted in 1954 by international agreement with Canada as the safety communications system in the Great Lakes, has proved successful there. Ships of all nations now ply the waters of the Great Lakes, including ships manned by sailors affiliated with the CIO–AFL. In addition, Commissioner Bartley pointed out that Canada has approved radiotelephony as a means of safety communication for all its coastwise shipping.

2. The Treasury Department, the parent governmental department of the U.S. Coast Guard, in a communication to your committee, has stated that it has no opposition to H.R. 8508 from the point of view of safety at sea in Hawaiian waters, and defers to the Federal Communications Commission views on other accounts. Inferentially this reflects the position of the U.S. Coast Guard in Hawaiian waters, with whom telephone contact can be maintained 24 hours a day on the interisland route set out on the maps we submitted for the record.

3. Radiotelephony is in fact now the safety communications system aboard the tug which is towing the hull of Matson's automated vessel over the routes set out in the maps referred to above. Aboard the tug, the present law sanctions such a system, and the tug is manned by union seamen. Radiotelephony does not become less satisfactory as a safety system by being moved from the tug to the hull the tug is towing. The Coast Guard, capable of communicating with the automated vessel at any point in its route, can direct it to the aid of any vessel without telephone.

One other matter, tangential to this proceeding, perhaps should be referred to. We confirm that, upon passage of H.R. 8508, it will still be necessary for Matson to engage in collective bargaining on the question of manning the automated vessel equipped with a radiotelephone. In this connection, it may be relevant to note that the U.S. Coast Guard has already approved the manning of Matson's automated vessel (except with respect to radio, which is not in its jurisdiction) from the point of view of safety at sea and Matson is now in the process of collective bargaining with the affected unions on the issues between them and Matson which must be resolved before the vessel can operate as it was designed.

We appreciate the courtesy extended to us by the committee, in having the opportunity to submit these further comments about H.R. 8508 and related bills.

Sincerely,

A. J. PESSEL, *Vice President.*

AMERICAN RADIO ASSOCIATION,
New York, N.Y., March 31, 1964.

Re H.R. 8508.

Hon. WALTER ROGERS,
Chairman, Communications Subcommittee,
Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

MY DEAR MR. ROGERS: We are in receipt of a copy of a letter to you from the Matson Navigation Co., dated March 25, 1964, commenting on the above bill. We wish to add our responsive comments, for the consideration of the subcommittee and for inclusion in the record.

With respect to the numbered comments we note the following:

1. Radiotelegraphy, not radiotelephony, is the international safety-at-sea communications system; the specific provisions relating to the landlocked Great Lakes which are accessible only via canal and seaway passage, have not weakened, nor should they be allowed to weaken, this international radiotelegraphy network.

2. A careful perusal of the entire Treasury Department letter referred to indicates that the conclusion of all comments by Treasury Department is that Treasury is deferring to the FCC on this bill, and the FCC is on record as opposed to it. Statements made earlier in the Treasury Department letter were carefully qualified; e.g., "specified vessels" was used and "not appreciable" was used in qualifying the previous comments.

3. As has been pointed out, the difference between a tugboat of under 1,600 gross tons and a self-propelled vessel of over 3,000 gross tons, is that the latter is in the tonnage class for which radiotelegraphy was prescribed by Congress.

This however, is not the heart of the matter, the fact is that a barge under tow is incapable of proceeding to the assistance of other vessels in distress, while a self-propelled vessel of 3,000 gross tons and over is capable of proceeding at 11 knots (which by the way, is the speed of a Liberty ship) to the assistance of other vessels in distress.

We, of course, appreciate the fact that Matson recognizes at this late date its collective bargaining obligations, but still feel that the proposals that Matson is sponsoring in this legislation do not warrant amending the law.

Thank you for this opportunity to comment.

Very truly yours,

W. R. STEINBERG, *President.*

GALVESTON LABOR COUNCIL, AFL–CIO,
Galveston, Tex., April 30, 1964.

Hon. WALTER ROGERS,
Chairman, Committee on Communications and Power,
House of Representatives, Washington, D.C.

DEAR SIR: I urge you to vote against H.R. 8508. This bill, if enacted into law, would cause many lives to be in jeopardy.

There were 175 S O S distress calls from American-flag vessels in the year 1963. Any reduction in radio operators on merchant ships, operating in coastal waters, would greatly increase the incidence of loss of life, as the number of stations listening for distress calls within the coastal area would be greatly reduced.

There are times when a vessel within a few miles of another vessel in distress or when medical assistance could be had from another vessel in the area, that this assistance would not be available if H.R. 8508 is enacted into law.

Any law that would permit the loss of life for the sake of economy is a bad bill and should be voted against. I urge you to do so and further urge you to use all your influence and powers of persuasion to see that this heartless bill is not enacted into law.

With best wishes for your health and welfare, I am,

Respectfully yours,

JAMES W. KENNEDY, *President.*

SEATTLE, WASH., *May 7, 1964.*

Congressman WALTER ROGERS,
Chairman, Communications Subcommittee,
House Office Building, Washington, D.C.:

King County Labor Council with its 62,000 members vigorously opposes the passage of bill, H.R. 8508, which if passed would weaken and ultimately destroy the safety at sea network. We urgently request the rejection of this bill in the interest of the safety of the thousands of seamen that brave the hazards of the sea in the pursuit of their livelihood. We request that this statement be made a part of the hearing record.

HARRY CARR, *President.*

(Note.—Approximately 200 communications were received from radio officers and other ships' crewmembers in opposition to the subject legislation. This material has been placed in the files for the information of the committee.)

(Whereupon, at 12:15 p.m. the committee was recessed subject to call.)

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Radiotelephones on certain cargo vessels in Hawaiian waters.

Hearings... Committee on Interstate and Foreign Commerce.
House of Representatives.