

Y4
.In 8/4
95-101

1019

95/4
In 8/4
95-101

GOVERNMENT DOCUMENTS

Storage

JUL 2 1978

MARKELL LIBRARY
KANSAS STATE UNIVERSITY

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS

OF THE

COMMITTEE ON

INTERSTATE AND FOREIGN COMMERCE

HOUSE OF REPRESENTATIVES

NINETY-FIFTH CONGRESS

SECOND SESSION

ON

H.R. 11209

A BILL TO PROVIDE FOR THE ESTABLISHMENT, OWNER-
SHIP, OPERATION, AND GOVERNMENTAL OVERSIGHT AND
REGULATION OF INTERNATIONAL MARITIME SATELLITE
TELECOMMUNICATIONS SERVICES

APRIL 4, 1978

Serial No. 95-101

Printed for the use of the
Committee on Interstate and Foreign Commerce



U.S. GOVERNMENT PRINTING OFFICE

29-289 O

WASHINGTON : 1978

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION



COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

HARLEY O. STAGGERS, West Virginia, *Chairman*

JOHN E. MOSS, California
JOHN D. DINGELL, Michigan
PAUL G. ROGERS, Florida
LIONEL VAN DEERLIN, California
FRED B. ROONEY, Pennsylvania
JOHN M. MURPHY, New York
DAVID E. SATTERFIELD III, Virginia
BOB ECKHARDT, Texas
RICHARDSON PREYER, North Carolina
CHARLES J. CARNEY, Ohio
RALPH H. METCALFE, Illinois
JAMES H. SCHEUER, New York
RICHARD L. OTTINGER, New York
HENRY A. WAXMAN, California
ROBERT (BOB) KRUEGER, Texas
TIMOTHY E. WIRTH, Colorado
PHILIP R. SHARP, Indiana
JAMES J. FLORIO, New Jersey
ANTHONY TOBY MOFFETT, Connecticut
JIM SANTINI, Nevada
ANDREW MAGUIRE, New Jersey
MARTY RUSSO, Illinois
EDWARD J. MARKEY, Massachusetts
THOMAS A. LUKEN, Ohio
DOUG WALGREN, Pennsylvania
BOB GAMMAGE, Texas
ALBERT GORE, Jr., Tennessee
BARBARA A. MIKULSKI, Maryland

SAMUEL L. DEVINE, Ohio
JAMES T. BROYHILL, North Carolina
TIM LEE CARTER, Kentucky
CLARENCE J. BROWN, Ohio
JOE SKUBITZ, Kansas
JAMES M. COLLINS, Texas
LOUIS FREY, Jr., Florida
NORMAN F. LENT, New York
EDWARD R. MADIGAN, Illinois
CARLOS J. MOORHEAD, California
MATTHEW J. RINALDO, New Jersey
W. HENSON MOORE, Louisiana
DAVE STOCKMAN, Michigan
MARC L. MARKS, Pennsylvania

W. E. WILLIAMSON, *Chief Clerk and Staff Director*

KENNETH J. PAINTER, *First Assistant Clerk*

ELEANOR A. DINKINS, *Assistant Clerk*

WILLIAM L. BURNS, *Printing Editor*

Professional Staff

ELIZABETH HARRISON
JEFFREY H. SCHWARTZ
BRIAN R. MOIR
KAREN F. NELSON

ROSS DAVID AIN
CHRISTOPHER E. DUNNE
WILLIAM M. KITZMILLER
MARK J. RAABE

THOMAS M. RYAN

RONALD D. COLEMAN, *Associate Minority Counsel*

SUBCOMMITTEE ON COMMUNICATIONS

LIONEL VAN DEERLIN, California, *Chairman*

JOHN M. MURPHY, New York
CHARLES J. CARNEY, Ohio
TIMOTHY E. WIRTH, Colorado
MARTY RUSSO, Illinois
EDWARD J. MARKEY, Massachusetts
THOMAS A. LUKEN, Ohio
ALBERT GORE, Jr., Tennessee
BARBARA A. MIKULSKI, Maryland
HENRY A. WAXMAN, California
HARLEY O. STAGGERS, West Virginia
(Ex officio)

LOUIS FREY, Jr., Florida
W. HENSON MOORE, Louisiana
CARLOS J. MOORHEAD, California
MARC L. MARKS, Pennsylvania
SAMUEL L. DEVINE, Ohio (Ex officio)

HARRY M. SHOOSHAN III, *Counsel*

CONTENTS

	Page
Text of H.R. 11209	2
Statement of—	
Andres, Roy, vice president, planning, Western Union International, Inc ..	93
Bercovici, Martin W., counsel, Mobile Marine Radio, Inc	72
Biller, Joel W., Deputy Assistant Secretary for Commercial and Telecom- munications Affairs, Bureau of Economic and Business Affairs, Depart- ment of State	16
Carr, E. E., director, overseas administration, Long Lines Department, American Telephone & Telegraph Co	75
Charyk, Joseph V., Ph. D., president, Communications Satellite Corp. (Comsat)	58
Conn, Robert E., executive vice president and counsel, Western Union International, Inc	93
DeRosa, Francis J., vice president and general counsel, RCA Global Com- munications, Inc	63
Fear, Capt. James L., Chief, Telecommunications Management Division, Office of Operations, U.S. Coast Guard	20
Fitzgerald, Edward P., American Institute of Merchant Shipping	90
Hinchman, Walter R., Chief, Common Carrier Bureau, Federal Communi- cations Commission	78
Lamb, Capt. Cecil H., director of vessel operations, Prudential Lines, Inc., on behalf of Council of American-Flag Ship Operators (CASO)	25
McKenna, John, vice president, marine services, RCA Global Communica- tions, Inc	63
Naleszkiewicz, Wladimir, representing William Fishman, National Tele- communications and Information Administration, Department of Com- merce	67
O'Reilly, Thomas J., Washington counsel, Hawaiian Telephone Co	100
Pitkin, Marvin, Assistant Administrator for Commercial Development, Maritime Administration, Department of Commerce	21
Skall, Greg, counsel, National Telecommunications and Information Ad- ministration, Department of Commerce	67
Strichartz, Harvey, technical director, American Radio Association	26
White, Howard A., senior vice president and general counsel, ITT World Communications, Inc	35
Additional material submitted for the record by—	
American Telephone & Telegraph Co., statement of Richard B. Nichols, vice president, overseas, Long Lines Department	76
Commerce, Department of, statement of William L. Fishman, National Telecommunications and Information Administration	70
Federal Communications Commission, Common Carrier Bureau, analysis of H.R. 11209	85
ITT World Communications, Inc., suggested amendments to H.R. 11209	41
Letter submitted for the record by TRT Telecommunications Corp	129

SECRET

1. The purpose of this document is to provide information regarding the activities of the [redacted] in the [redacted] area. This information is being provided for your information and is not to be distributed outside of your organization.

2. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

3. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

4. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

5. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

6. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

7. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

8. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

9. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

10. The [redacted] has been observed in the [redacted] area, and it is believed that they are engaged in activities that are contrary to the interests of the United States. It is requested that you remain vigilant and report any further observations to the appropriate authorities.

INTERNATIONAL MARITIME SATELLITE ACT

TUESDAY, APRIL 4, 1978

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

The subcommittee met at 9:40 a.m., pursuant to notice, in room 2123, Rayburn House Office Building, Hon. Lionel Van Deerlin, chairman, presiding.

Mr. VAN DEERLIN. This morning the Subcommittee on Communications begins hearings on legislation dealing with the role of the United States an international system of maritime satellite telecommunications. The bills before us, H.R. 9647, introduced at the request of the administration, and H.R. 11209, and alternative proposal offered by Mr. Staggers, Mr. Frey, and myself, are the outcome of a planning process which began in 1972. Both bills reflect a commitment to developing a satellite system that effectively meets the needs of international commerce and the demands of maritime trading.

The time has come for the United States to make some basic decisions about the future of international maritime satellite services. The Europeans and others appear ready to proceed without us, albeit reluctantly, if we drag our feet much longer, yet we must carefully weigh the impact of our decisions on U.S. communications policy as a whole. It is especially important that what we do with regard to Inmarsat be consistent with our objectives in revising the Communications Act, the major task before this subcommittee.

While there are some differences between the administration's position and the bill worked out by the subcommittee staff, everyone seems to agree on the need for a U.S. commitment to an international system, and to designate the entity which will represent the American interests operationally. I hope our hearings will help resolve both of these points.

Our friends in Europe and elsewhere are understandably chagrined at the slow pace of the policymaking process in the United States. It is a problem they have recently confronted also in planning for undersea cable and satellite facilities. However, our process involves a partnership between Government and the private sector which is unique. Although some delay is inevitable, I can promise that this subcommittee will continue to look for ways to streamline that policymaking process.

[The text of H.R. 11209 follows:]

95TH CONGRESS
2D SESSION

H. R. 11209

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 28, 1978

Mr. STAGGERS (for himself, Mr. VAN DEERLIN, Mr. MURPHY of New York, Mr. BIAGGI, Mr. DEVINE, and Mr. FREY) introduced the following bill; which was referred jointly to the Committees on Interstate and Foreign Commerce and Merchant Marine and Fisheries

A BILL

To provide for the establishment, ownership, operation, and governmental oversight and regulation of international maritime satellite telecommunications services.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 SHORT TITLE

4 SECTION 1. This Act may be cited as the "International
5 Maritime Telecommunications Satellite Act".

6 DECLARATION OF POLICY AND PURPOSE

7 SEC. 2. (a) The Congress hereby declares that it is the
8 policy of this Act to provide for the participation of the
9 United States in the International Maritime Satellite Organi-
10 zation or another satellite telecommunications agency which

★I—O

1 shall develop and operate a global maritime mobile telecom-
2 munications system. Such system shall have facilities and
3 services which will serve the maritime commercial and safety
4 needs of the United States and foreign countries.

5 (b) It is the purpose of this Act to provide that the
6 participation of the United States in the organization or
7 agency specified in subsection (a) shall be through the Com-
8 munications Satellite Corporation, which constitutes a private
9 entity operating for profit, and which is not an agency or
10 establishment of the Federal Government.

11 DESIGNATED OPERATING ENTITY

12 SEC. 3. (a) (1) (A) Subject to the provisions of para-
13 graph (2), the Communications Satellite Corporation may
14 participate as the designated operating entity of the United
15 States in—

16 (i) the International Maritime Satellite Organiza-
17 tion; or

18 (ii) any other agency designed to provide inter-
19 national maritime satellite telecommunications services.

20 (B) The corporation is hereby authorized to sign the
21 operating agreement or other pertinent instruments of the
22 Organization, or of the satellite telecommunications agency,
23 as the designated operating entity of the United States.

24 (2) (A) Except as provided in subparagraph (C), the

1 corporation may not participate in any satellite telecommuni-
2 cations agency under paragraph (1) (A) (ii) unless—

3 (i) (I) in the case of participation which may be
4 undertaken only pursuant to a treaty or executive agree-
5 ment, such treaty or executive agreement is in effect; or

6 (II) in any case in which participation does not
7 require any treaty or executive agreement, the Presi-
8 dent does not disapprove such participation during the
9 period of 60 calendar days after the corporation notifies
10 the President of such proposed participation; and

11 (ii) the Congress does not disapprove such partici-
12 pation under paragraph (3).

13 (B) Any disapproval by the President under subpara-
14 graph (A) (i) (II) shall be published in the Federal
15 Register as soon as practicable after the date of such dis-
16 approval.

17 (C) The requirements of subparagraph (A) shall not
18 apply to any participation of the corporation in a satellite
19 telecommunications agency if—

20 (i) such participation takes effect before Septem-
21 ber 4, 1979;

22 (ii) the corporation intends to participate in the
23 Organization after the Organization has begun its opera-
24 tions; and

1 (iii) such participation in the satellite telecommuni-
2 cations agency is in the nature of an interim operating
3 arrangement remaining in effect only until the corpora-
4 tion begins its participation in the Organization.

5 (3) (A) In any case in which the corporation pro-
6 poses to participate in a satellite telecommunications
7 agency under paragraph (1) (A) (ii), and such partic-
8 ipation is subject to the requirements of paragraph
9 (2) (A), the corporation shall submit a statement to
10 each House of the Congress which shall include notice
11 of such proposed participation, together with such other
12 information as the corporation considers appropriate. If
13 such participation is subject to disapproval by the Presi-
14 dent under paragraph (2) (A) (i) (II), such statement
15 may not be submitted before the end of the period speci-
16 fied in paragraph (2) (A) (i) (II).

17 (B) Such proposed participation may take effect,
18 if it otherwise may take effect under paragraph (2)
19 (A) (i), unless both Houses of the Congress, during
20 the period of 60 calendar days of continuous session
21 following submission of the statement specified in sub-
22 paragraph (A), pass a concurrent resolution the matter
23 after the resolving clause of which reads as follows:
24 "The Congress hereby disapproves the proposal sub-

mitted by the Communications Satellite Corporation
on , 19 .” (The blank space shall be filled
with the date of submission of the proposal to the
Congress.)

(C) If both Houses of the Congress do not pass
such a concurrent resolution during such period, such
proposal of the corporation shall not be effective before
the end of such period.

(D) For purposes of this paragraph—

(i) continuity of session of the Congress is
broken only by adjournment sine die; and

(ii) the days on which either House is not in
session because of an adjournment of more than 3
days to a day certain are excluded in the computation
of the 60-day period.

(b) The corporation—

(1) (A) subject to the provisions of subsection (d),
may establish, own, and operate satellite earth terminal
stations; and

(B) shall interconnect such stations, and the mari-
time mobile satellite telecommunications provided by
such stations, with the facilities and services of United
States domestic common carriers, international common
carriers, and private communications systems, other than

1 any common carrier, system, or other entity in which
2 the corporation has any ownership interest, as authorized
3 by the Commission; and

4 (2) (A) may establish, own, and operate the United
5 States share of the jointly owned international space
6 segment and associated ancillary facilities; and

7 (B) shall interconnect such facilities, and the
8 maritime mobile satellite telecommunications services
9 provided by such facilities, with the facilities and
10 services of foreign correspondents.

11 (c) The corporation shall be responsible for fulfilling
12 any financial obligation placed upon the corporation as a
13 signatory to the operating agreement or other pertinent in-
14 struments, and any other financial obligation which may be
15 placed upon the corporation as the result of a convention
16 or other instrument establishing the Organization or the satel-
17 lite telecommunications agency, as the case may be. The cor-
18 poration shall be the sole United States representative in the
19 managing body of the Organization or the satellite tele-
20 communications agency, as the case may be.

21 (d) (1) (A) (i) The corporation shall be the sole oper-
22 ator of any satellite earth terminal station in the United
23 States. Except as provided in clause (ii) and paragraph
24 (2), the corporation shall own not more than 50 percent
25 of the assets of any such station.

1 (ii) The corporation shall be entitled to own any por-
2 tion of the percentage of the assets of any satellite earth ter-
3 minal station which is not allocated by the Commission under
4 subparagraph (B), except that the Commission shall retain
5 the authority to allocate such percentage at any time during
6 the operation of the station involved.

7 (B) The Commission may authorize domestic common
8 carriers, international common carriers, and private com-
9 munications systems, other than any common carrier, sys-
10 tem, or other entity in which the corporation has any own-
11 ership interest, to own not more than 50 percent of the
12 assets of any satellite earth terminal station if such carriers
13 or systems are authorized to interconnect with such station.

14 (2) Any person, including any government or govern-
15 ment agency, may be the sole owner of a satellite earth
16 terminal station if such person, government, or government
17 agency uses, or permits or otherwise authorizes the use of,
18 such station for the exclusive purpose of training personnel
19 in the use of equipment associated with the operation of such
20 station, or in carrying out experimentation relating to mari-
21 time satellite telecommunications services.

22 (e) The Commission shall determine the operational
23 arrangements under which the corporation shall interconnect
24 its satellite earth terminal station facilities and services with
25 United States domestic common carriers, international com-

1 mon carriers, and private communications systems, other than
2 any common carrier, system, or other entity in which the
3 corporation has any ownership interest, for the purpose of
4 extending maritime mobile satellite telecommunications serv-
5 ices within the United States. Such determination shall be
6 made by the Commission no later than 6 months after the
7 date of the enactment of this Act, and the Commission shall
8 transmit a report relating to such determination to the
9 Congress.

10 (f) Notwithstanding any provision of State law, the
11 articles of incorporation of the corporation shall provide for
12 the continued ability of the board of directors of the corpora-
13 tion to transact business under such circumstances of national
14 emergency as the President or his delegate may determine
15 would not permit a prompt meeting of the number of direc-
16 tors otherwise required to transact business.

17 IMPLEMENTATION OF POLICY

18 SEC. 4. (a) The President shall—

19 (1) exercise such supervision over, and provide for
20 the issuance of such instructions to, the corporation in
21 connection with its relationships and activities with
22 foreign governments and international entities and other
23 organizations (including the Organization or the satellite
24 telecommunications agency, as the case may be) as may
25 be necessary to ensure that such relationships and activi-

1 ties are consistent with the national interest and foreign
2 policy of the United States;

3 (2) coordinate the activities of Federal agencies
4 with responsibilities in the field of telecommunications
5 (other than the Commission), so as to ensure that there
6 is full and effective compliance with the provisions of
7 this Act;

8 (3) take all necessary steps to ensure the availabil-
9 ity and appropriate utilization of the telecommunications
10 services provided by the Organization or by the satellite
11 telecommunications agency, as the case may be, for gen-
12 eral governmental purposes, except in any case in which
13 a separate telecommunications system is required to meet
14 unique governmental needs or is otherwise required in
15 the national interest; and

16 (4) exercise his authority in a manner which seeks
17 to obtain coordinated and efficient use of the electro-
18 magnetic spectrum and orbital space, and to ensure the
19 technical compatibility of the space segment with exist-
20 ing communications facilities in the United States and
21 in foreign countries.

22 (b) The Commission shall—

23 (1) institute such proceedings as may be necessary
24 to carry out the provisions of section 3 (b) and section
25 3 (e) ;

1 (2) make recommendations to the President for
2 the purpose of assisting the President in issuing instruc-
3 tions to the corporation under subsection (a) (1) ;

4 (3) grant such authorizations as may be necessary
5 under title II and title III of the Communications Act
6 of 1934 to enable the corporation—

7 (A) to provide to the public, space segment
8 channels of communication obtained from the Orga-
9 nization or from the satellite telecommunications
10 agency, as the case may be; and

11 (B) to construct and operate such satellite
12 earth terminal stations in the United States as may
13 be necessary to provide sufficient access to the space
14 segment;

15 (4) establish procedures to provide for the continu-
16 ing review of the telecommunications activities of the
17 corporation as the United States signatory to the operat-
18 ing agreement or other pertinent instruments;

19 (5) establish rules and procedures under which the
20 Commission—

21 (A) in determining whether to modify any
22 license for public maritime coast station services to
23 provide for the addition of radio frequencies, shall
24 not take into account any impact which the provi-
25 sion of maritime satellite telecommunications serv-

1 ices may have upon the provision of public maritime
2 coast station services; and

3 (B) in determining whether to modify any
4 license for maritime satellite telecommunications
5 services to provide for the addition of frequencies,
6 shall not take into account any impact which the
7 provision of public maritime coast station services
8 may have upon the provision of maritime satellite
9 telecommunications services; and

10 (6) prescribe such rules as may be necessary to
11 carry out the provisions of this Act.

12 STUDY OF STRUCTURE AND ACTIVITIES OF
13 COMMUNICATIONS SATELLITE CORPORATION

14 SEC. 5. (a) The Commission shall conduct a study of
15 the corporate structure and operating activities of the cor-
16 poration, with a view toward determining whether any
17 changes are required to ensure that the corporation is able to
18 effectively fulfill its obligations and carry out its functions
19 under this Act, the Communications Act of 1934, and the
20 Communications Satellite Act of 1962.

21 (b) The Commission shall transmit a report to the
22 Congress no later than 6 months after the date of the enact-
23 ment of this Act relating to the study of the corporation
24 conducted under subsection (a). Such report shall contain
25 a detailed statement of the findings and conclusions of such

1 study, any action taken by the Commission related to such
2 findings and conclusions, and any recommendations of the
3 Commission for such legislative or other action as the Com-
4 mission considers necessary or appropriate.

5 STUDY OF PUBLIC MARITIME COAST STATION SERVICES

6 SEC. 6. (a) The Commission shall conduct a study of
7 public maritime coast station services, with particular em-
8 phasis on high seas services, with a view toward determining
9 whether the rules and regulations of the Commission and the
10 assignment of licenses and radio frequencies in effect on the
11 date of the enactment of this Act should be subject to any
12 alteration in order to establish a systematic approach for the
13 provision of modern and effective maritime telecommunica-
14 tions systems.

15 (b) The Commission shall transmit a report to the Con-
16 gress no later than 6 months after the date of the enactment
17 of this Act relating to the study of public maritime coast
18 station services conducted under subsection (a). Such re-
19 port shall contain a detailed statement of the findings and
20 conclusions of such study, any action taken by the Com-
21 mission related to such findings and conclusions, and any
22 recommendations of the Commission for such legislative or
23 other action as the Commission considers necessary or
24 appropriate.

DEFINITIONS

SEC. 7. For purposes of this Act—

(1) the term “Commission” means the Federal Communications Commission;

(2) the term “common carrier” has the meaning given it in section 3 (h) of the Communications Act of 1934;

(3) the term “corporation” means the Communications Satellite Corporation incorporated on February 1, 1963, under section 301 of the Communications Satellite Act of 1962;

(4) the term “foreign correspondent” means an entity designated by any foreign country to be the signatory of the operating agreement or any other pertinent instrument of the Organization or the satellite telecommunications agency, as the case may be;

(5) the term “operating agreement” means the operating agreement relating to the Organization;

(6) the term “Organization” means the International Maritime Satellite Organization (INMARSAT);

(7) the term “satellite earth terminal station” means a complex of communications equipment located on land, operationally interconnected with one or more terrestrial communications systems, and capable of trans-

1 mitting telecommunications to, or receiving telecom-
2 munications from, the space segment;

3 (8) the term "satellite telecommunications agency"
4 means any agency referred to in section 3 (a) (1) (A)
5 (ii) in which the corporation participates as the desig-
6 nated operating entity of the United States;

7 (9) the term "space segment" means any satellite
8 maintained under the authority of the Organization, or
9 the satellite telecommunications agency, as the case may
10 be, and the tracking, telemetry, command, control, mon-
11 itoring, and related facilities and equipment required to
12 support the operation of such satellite; and

13 (10) the term "State" means the several States,
14 the District of Columbia, the Commonwealth of Puerto
15 Rico, Guam, the Virgin Islands, the Trust Territory of
16 the Pacific Islands, and any other territory or possession
17 of the United States.

Mr. VAN DEERLIN. Our first witnesses make up a panel of five: Joel W. Biller, Deputy Assistant Secretary for Commercial Affairs and Telecommunications at the State Department; Harvey Strichartz, technical director for the American Radio Association; Cecil Lamb, director of vessel operations for Prudential Lines, Inc.; Capt. James L. Fear, who is the Chief of Telecommunications for the Office of Operations at Coast Guard Headquarters; and Marvin Pitkin from the Office of Research and Development in the U.S. Commerce Department's Marine Administration.

Mr. Biller, will you lead off?

STATEMENT OF JOEL W. BILLER, DEPUTY ASSISTANT SECRETARY FOR COMMERCIAL AND TELECOMMUNICATIONS AFFAIRS, BUREAU OF ECONOMIC AND BUSINESS AFFAIRS, DEPARTMENT OF STATE

Mr. BILLER. Thank you, Mr. Chairman.

Mr. Chairman, I have submitted my statement in advance, as requested by the staff, and if it could be made a part of the record, I would limit myself to a brief summary of the main points of that statement.

Mr. VAN DEERLIN. Your offer is very appealing. Your formal statement will be made a part of the record.

Mr. BILLER. Thank you, Mr. Chairman.

Mr. Chairman, the State Department supports the enactment of legislation which will enable the United States to join Inmarsat. Beginning in 1975, after extensive consultation with parties in both the public and private sectors, the U.S. Government participated in negotiations with some 40-odd countries which resulted in 1976 in the opening for signature of agreements for the establishment of Inmarsat.

We were motivated in our negotiations by the necessity to provide a means by which maritime communications could be improved and adequate communications for safety at sea and distress signals could be insured. This could be done, in our view, only by taking advantage of satellite technology. Satellite technology by its very nature requires for effective and economic operation the kind of international cooperation which can be assured only by the establishment of an international cooperative entity.

While all of the countries which participated in the Inmarsat negotiations shared these goals, there was considerable divergence of views with regard to a number of important elements, including the form of the organization and certain substantive telecommunications issues. Some of the principal difficulties stemmed from the special requirements that the United States insisted upon during the course of the negotiations.

First: Because of the unique reliance of the United States on commercial telecommunications facilities, we insisted that Inmarsat be set up so it would be possible for members to be represented by private as well as governmental entities. Second: We insisted that the agreements include provisions to insure that Inmarsat be run on the basis of sound economic and technical criteria rather than on any other basis such as an arbitrary or politically based division of benefits among the members.

On both of these points, Mr. Chairman, we achieved success. The final agreements—a governmental agreement to which the U.S. Government would be a party and an operating agreement to which a U.S. designated entity would be a party—are consistent with these principles. Having achieved our objectives during the negotiations, the Department of State strongly supports the passage of legislation which would permit U.S. participation in Inmarsat.

H.R. 9647, introduced last fall, would accomplish this, and the Department supports that bill. If, however, Mr. Chairman, legislation should be passed on the basis of H.R. 11209 rather than on the basis of H.R. 9647, we believe that H.R. 11209 should contain an explicit requirement that the President aid in the planning and development of the Inmarsat system and in services which are developed pursuant to the Inmarsat Convention, particularly in view of the Government's obligations with respect to safety of life at sea. Also, in view of the capability of the satellite system to improve handling of safety and distress messages, we think there is a definite need for Presidential oversight in respect to system planning and service offerings.

Thank you, Mr. Chairman.

[Mr. Biller's prepared statement follows:]

STATEMENT BY JOEL W. BILLER, DEPUTY ASSISTANT SECRETARY OF STATE FOR
COMMERCIAL AND TELECOMMUNICATIONS AFFAIRS

Mr. Chairman, I am pleased to appear on behalf of the Department of State to testify on legislation concerning the provision of maritime telecommunications satellite services. The efficient operation of world shipping and the safety and welfare of life at sea require an adequate standard of ship-to-shore communications service. The incorporation of satellite technology into existing facilities would permit an improved quality of service. For this reason the Department of State supports legislation to permit U.S. participation in an international cooperative effort.

The proposed legislation would (1) permit the United States to join the International Maritime Satellite Organization (INMARSAT), (2) designate an entity, to be the United States Signatory to the INMARSAT Operating Agreement, and (3) make that entity subject to Executive Branch oversight. These are the State Department's three principal requirements with respect to enabling legislation.

I would like to recount briefly the essential elements in the negotiation of the INMARSAT Agreements and to report the actions the United States has taken with respect to the Agreements. Thereafter I will elaborate on certain foreign policy and legal considerations.

BACKGROUND

In 1972 the Intergovernmental Maritime Consultative Organization (IMCO) established a Panel of Experts (POE) to examine the creation of an international maritime satellite system. The U.S. participated with some twenty other countries in this study. At its Fifth and Final Meeting in September 1974, the POE completed a report which included an examination of the operational requirements of a global maritime satellite system, and its basic technical parameters; and economic assessment of the system; and a draft agreement creating an international organization to provide a maritime satellite capability.

Although there was broad agreement within the United States on the desirability of improving maritime communications through use of satellites, the U.S. entered a reservation with respect to the entire report. The reservation was prompted by concerns over fundamental aspects of the Panel's work, including the limited nature of the economic analysis, shortcomings in the study of the operational aspects of system performance, and inadequacies and inconsistencies in the proposed draft agreement. There were no reservations from other POE participants. The POE Report was the primary documentation for a Plenipotentiary Conference, convened under IMCO auspices in April, 1975.

The Department decided, in conjunction with other concerned agencies and in consultation with representatives of labor, and the maritime and communications

industries, that the U.S. should attend this Conference. Among the considerations taken into account were the Coast Guards's belief that satellite communications would materially augment handling of safety and distress messages, thereby lessening the risk of loss of life at sea; the Maritime Administration's interest, shared by shipowners, in improved public correspondence as a means of strengthening the competitive position of U.S. vessels in international trade; and the agreement of the U.S. common carriers which provide maritime communications service that the incorporation of satellite technology into their existing facilities would permit an improved quality of service.

Additionally there was concern, given the keen interest in maritime satellite communications apparent during the course of the POE's work, over the possibility that a satellite system might be established without U.S. participation. European efforts directed toward development and deployment of an experimental maritime communications satellite known as MAROTS were well known. In the event MAROTS were deployed operationally, we could not be assured of U.S. participation in decisions with respect to system design and operation, non-discriminatory access to the facilities by U.S. shipping, or substantial procurement of spacecraft and sub-systems in the U.S.

Thus, the U.S. decided to support in principle an international cooperative effort to provide a maritime satellite capability and an international organization whose purpose would be to provide such a capability, provided that certain fundamental U.S. requirements regarding the satellite system and the proposed organization were met.

The fundamental requirements in the U.S. position were as follows:

1. Because of longstanding policy in this country to utilize commercial telecommunications facilities and services to the maximum extent feasible, the INMARSAT agreement would have to permit a member government to designate an entity which, on behalf of that government could assume full financial, technical and operational responsibility, without a government guarantee. We believed the most suitable method for delineating unambiguously the responsibilities and obligations of the government on the one hand and its designated entity on the other would be by having two parallel agreements—an intergovernmental agreement and an operating agreement—which taken together would comprise the basis for the establishment of the new international organizations.

2. In order to ensure that facilities and services to be made available by the new international organization would be sufficient, reliable and reasonably priced, provision had to be made for the establishment, with due regard for accepted commercial principles, of an organization in which decisions would be made on the basis of sound technical and economic judgment. Thus,

- (a) Real operating authority had to be vested in a council whose membership would comprise the largest investors; each investor's vote in the council would be weighted according to its investment. A corollary requirement was that a member's investment had to be proportional to its utilization of the system. It was our position that effective utilization of a satellite system could be achieved only if a participant's investment and operating decisions were directly proportional to its actual use of the system.

- (b) The criteria for the award of procurement contracts has to be the best combination of price, quality and delivery time. Only in the circumstance where two or more bids were equally attractive under these criteria could we support the award of contracts on any other basis.

- (c) The organization had to have the widest latitude with regard to the service capabilities of the space segment, so as to permit members to be responsive to a wide range of service requirements.

- (d) Access to the satellites had to be open to the ships of all nations.

The 1975 Conference was able to agree that improved maritime communications required a worldwide maritime satellite system and an international intergovernmental organization to manage that system. Initially there was little support from other countries for the institutional requirements which the U.S. considered fundamental. The possibility that technical, operating and financial responsibilities might be assumed by a private commercial firm, and procurement criteria which did not embody the concept of production-sharing, were especially difficult issues. However, the other Conference participants wanted U.S. participation, and they ultimately accepted all U.S. requirements. The Conference thereafter established an Inter-Sessional Working Group (ISWG) to draft texts of the agreements.

The ISWG held three sessions, and in its report to the Second Session of the Conference, held in London during February 1976, was able to inform the Conference that it had made substantial progress in drafting texts for an intergovernmental

tal agreement, henceforth to be called a Convention, and an Operating Agreement. The texts were fully consistent with the principal arrangements just noted.

The Second Session reached agreement on most outstanding issues on which the ISWG had not been able to come to agreement. A Third Session, held in London in September 1976, was required to complete the negotiations.

The Final Act, Convention and Operating Agreement were opened for signature September 3, 1976. The U.S. urged that signature of the latter two instruments be deferred to permit states to compare the texts in the four languages in which they are issued, and to permit the Depositary, which is the Secretary General of IMCO, to rectify any errors that might be found. However, the Conference voted to open the Convention and Operating Agreement immediately for signature. Several delegations thought this might provide some momentum in establishing the INMARSAT Organization. The United States signed the Final Act, which is only a record of the Conference's proceedings, but did not sign either the Convention or Operating Agreement.

Subsequently, we did compare the French, Spanish and Russian texts with the English text and found a number of substantive discrepancies. We have informed the Depositary, and he has undertaken rectification procedures in accordance with normal international practice. Even assuming the passage of enabling legislation, we do not propose to sign the Convention until we are satisfied that the texts of both Agreements conform in all languages; similarly, we would not expect the U.S. designated entity to sign the Operating Agreement until the texts conformed.

The Agreements establish a period of thirty-four months after their opening for signature, during which time states whose investors represent 95 percent of the initial investment shares in the Organization must complete requisite membership requirements. These requirements involve signature of the convention, not subject to ratification, acceptance or approval, and signature of the Operating Agreement by these states or their designated entities. The United States, with 17 percent would have the largest initial investment share. In order that the period prior to entry into force be used constructively, the Conference established a Preparatory Committee to work on a consultative basis on technical, economic and institutional questions incident to the establishment of a satellite system and its management. The Preparatory Committee held its first meeting in January 1977, and panels studying technical, economic and institutional questions have met three times. Further meetings will be held in June and July of this year, and a report to governments will be issued at the end of the year. The U.S. is participating in these consultations.

To date, four countries have completed all membership requirements: Kuwait, New Zealand, Japan and Egypt. They account, in toto, for 10.42 percent of the initial investment shares.

FOREIGN POLICY AND LEGAL CONSIDERATIONS

One major consideration behind our 1975 decision to participate in the negotiations looking toward the establishment of a maritime satellite communications system, i.e., the concern that a European owned and operated system might preempt a role for the United States, was later overtaken by deployment of a maritime communications satellite system by a group of U.S. companies (MARISAT). We still believe, that U.S. participation in an international joint undertaking is in the national interest. It is likely that if the U.S. declines to participate in INMARSAT, there will be considerable pressure within Europe to deploy MAROTS satellites operationally. A second maritime satellite system would be needlessly wasteful of available radio spectrum and limited orbital locations. We believe a responsible approach dictates U.S. support for a joint and unified enterprise to avoid duplicative requirements and the squandering of scarce resources.

Regardless of whether a separate European effort is mounted, the nature of satellite technology is such that a truly global and commercially successful system requires earth stations in Europe and North America, in addition to the Far East. In the event that European countries chose to withhold permission to construct earth stations to access MARISAT satellites, U.S. customer requirements for, and the MARISAT partners' objective of, an economic and global system would be frustrated.

Rather than pursue uneconomical, fragmented efforts, a better satellite system can be established more quickly if the energies of Europe, the United States and other countries are harnessed in a joint effort.

Finally, failure to enact the legislative basis to permit U.S. participation in INMARSAT could give rise to speculation that the U.S. had been intentionally misleading Conference participants as to its true intentions, namely, to use the

period of negotiation and consultations as a cover during which the U.S. would establish its own MARISAT system.

A decision not to permit participation in INMARSAT, following our failure to implement after a lengthy period of negotiation and the signature of a memorandum of understanding, the joint program of experimentation and evaluation using an aeronautical satellite capability with Europe and Canada, would lend credence to the argument that the U.S. is really not interested in cooperative international efforts to exploit space for peaceful purposes.

With regard to whether new legislation is necessary for the U.S. to join INMARSAT or whether authority exists under existing legislation, the Department believes that new legislation which would specifically authorize the Government to become a Party to the INMARSAT Convention is required. It is our view that the Communications Satellite Act of 1962 contemplated only the establishment of a single commercial communications satellite system, INTELSAT. We do not believe it provides sufficient authority for participation in, and acceptance of obligations under, the INMARSAT Convention.

Further, we believe that because a private entity will, as Signatory to the Operating Agreement, undertake financial, technical and operating responsibilities on behalf of the U.S., there should be Executive Branch oversight of that entity to ensure that U.S. Government policy objectives are suitably represented in meetings of Signatories. Legislation, in our view, is required to ensure this oversight, and the Department of State supports the Administration bill, H.R. 9647, introduced last Fall as providing the requisite authority.

If legislation is based on H.R. 11209, rather than on the Administration bill, we believe one change in H.R. 11209 is especially necessary. H.R. 11209 contains no explicit requirement that the President aid in the planning and development of the INMARSAT system, and in services which are developed pursuant to the INMARSAT Convention. Particularly in view of the Government's obligations with respect to the safety of life at sea, and in view of the capability of a satellite system to improve handling of safety and distress messages, we think there is a definite need for Presidential oversight in respect to system planning and service offerings.

CONCLUSION

In view of the fact that good communications are essential for the efficient operation of world shipping and for the safety and welfare of those at sea, and taking into account the difficulty in recent years of maintaining an adequate standard of ship-to-shore communications service using existing techniques, the State Department supports new legislation which would establish a legal basis for the U.S. Government to become a Party to the INMARSAT Convention, and designate, subject to appropriate Executive Branch oversight, an entity to be the United States Signatory to the INMARSAT Operating Agreement.

Mr. VAN DEERLIN. Thank you, Mr. Biller. Shall we go right down the line then, Captain, you being the next.

STATEMENT OF CAPT. JAMES L. FEAR, CHIEF, TELECOMMUNICATIONS MANAGEMENT DIVISION, OFFICE OF OPERATIONS, U.S. COAST GUARD HEADQUARTERS

Captain FEAR. Thank you, Mr. Chairman.

You have my short statement for the record. I will not read all of it. We recognize that the primary role of Inmarsat will be public correspondence, and that it is a business enterprise. However, we strongly believe that consideration should be given to providing a capability to enhance the safety of life at sea. We therefore support the inclusion of safety services in any kind of satellite communication service established by Inmarsat.

Considering this legislation, care should be taken not to preclude the safety services. In particular, we feel the following safety service capability should be included in the Inmarsat system: (1) Automatic distress alerting. (2) The capability of handling a number of traffic priorities with immediate priority access for distressed traffic. (3) The capability of handling low power emergency position

indicating radio beacons through the space segment. (4) Broadcast of meteorological, hydrographic, and oceanographic information.

We recognize that the legislation being considered at this time need not address specific safety services. The extent of safety services to be provided by Inmarsat can be determined by technical efforts, as long as they are not prohibited by this legislation. Thank you, Mr. Chairman.

[Captain Fear's prepared statement follows:]

STATEMENT OF CAPT. JAMES L. FEAR, CHIEF, TELECOMMUNICATIONS MANAGEMENT DIVISION, U.S. COAST GUARD

Mr. Chairman and members of the subcommittee, I am Capt. James L. Fear, Chief of the Telecommunications Management Division, U.S. Coast Guard.

Thank you for the opportunity to discuss and provide comments on the legislation to provide for the establishment, ownership, operation, and Governmental oversight and regulation of International Maritime Satellite Telecommunication Services.

The world maritime community has been interested for some time in applying the capabilities offered by satellites to its communication needs, and Inmarsat offers the possibility for a significant enhancement of maritime communications. We recognize that the primary role of Inmarsat will be public correspondence and that it is a business enterprise, however we strongly believe that consideration should be given to providing a capability to enhance the safety of life at sea.

We therefore support the inclusion of safety services in any type of satellite communication system established by Inmarsat. In considering this legislation, care should be taken not to preclude these safety services. In particular, we feel the following safety service capabilities should be included in the Inmarsat System:

1. Automatic distress alerting (switch or button on the shipboard terminal).
2. The capability of handling a number of traffic priorities with immediate priority access for distress traffic.
3. The capability of handling low power emergency position indicating radio beacons (EPIRBS) through the space segment.
4. Broadcasts of meteorological, hydrographic and oceanographic information (reports, forecasts, warnings).

We recognize that the legislation being considered at this time need not address specific safety services. The extent of safety services to be provided by Inmarsat can be determined by technical efforts as long as they are not prohibited by this legislation.

Thank you again for the opportunity to provide comments on this important legislation.

That, Mr. Chairman, completes my formal presentation. I will be happy to answer any questions you may have or to provide any material desired for the record.

Mr. VAN DEERLIN. Thank you, Captain.

Mr. Pitkin?

STATEMENT OF MARVIN PITKIN, ASSISTANT ADMINISTRATOR FOR COMMERCIAL DEVELOPMENT, MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. PITKIN. Thank you, Mr. Chairman.

Like the others, I have a prepared statement which will be submitted to your subcommittee. With your permission, I will try to extract some of the highlights. The subject of satellite communications has been of high interest to those of us in the Maritime Administration since 1969. At that time, we conducted an assessment of American technology to identify the possible applications to improve the safety and productivity of the U.S. fleet. We identified satellite communications as one such program which offered high potential benefits to the U.S. fleet operators, and as a consequence we initiated a research program in this area.

We sought to extend to the U.S. fleet the high quality real time communications services now provided between locations ashore,

and moreover, to bring into use by the same companies the new ship management techniques made feasible by the advanced communications. I will not go into any details of our program, other than to state, it started in 1969, as I mentioned, and it is continuing still. It is in the final stage of commercial evaluation, but as a result of these studies and experiments and our general role as promoter of the American merchant marine, the Maritime Administration concludes and approves with the general thrust of the legislative action proposed in H.R. 11209 to provide U.S. participation in Inmarsat, although along with others in the administration we would prefer the administration bill, H.R. 9647. Our agency interest and support for the proposed legislation is derived from the fact that our development program indicates that a significant increase in merchant fleet productivity, efficiency, and safety can be achieved through the international application of L-band satellite communications to a vessel at sea.

Time, of course, does not permit a discussion of all of our findings, and I would like to illustrate our conclusion with a single incident. Last October, an American ship was sailing off the coast of South America when it had an engine failure resulting in complete engine stoppage. The nearest oceangoing tug was several thousand miles away, but the ship was equipped with a satellite communications system.

As a result, the ship's crew was able to get into continuous communication ashore. Sufficient information was provided to the crew regarding the correct procedures to reinstate power. After some 12 hours, repairs were effected which enabled the vessel to make the port, and once again the ship utilized the communications services to order the required spare parts to enable continued operation.

The company estimates that three-quarters of a million dollars was saved in that single incident.

We find many other areas in which the system has been used very successfully. We have had improved fleet scheduling, particularly in areas such as weather routing, where the system can be used to reduce transit time and save us a very expensive fuel bill at sea. Satellite communications can be applied to an area we call fleet management to provide information for maintenance planning and scheduled overhauls and the like. Its use in emergency situations has just been noted, and it is obvious in our mind that it is superior to conventional communications, and in high-priority distress situations.

We have used it, for example, to divert vessels from ports in Lebanon which were threatened by military action, and from certain Black Sea ports threatened by impending earthquakes. We use the system over a wide range of fleet operation. One company, for example, uses it to monitor trim, stability, and stress levels during loading and discharge at foreign ports, using computer programs here in the United States. Others use it for payroll facsimile, transmission of manifest, and numerous other ways to simplify paperwork and improve operations at sea.

In addition to its direct benefits, we believe that the satellite service could further greatly alleviate the current and projected spectrum congestion in HF assignments in the 3- to 30-megahertz

area for single site band voice and narrow band printer applications.

The United States has a particular problem in the HF spectral area, since it enjoys HF channel allocations of approximately 56 percent of the spectrum between 3 and 30 megahertz. Increasing use of the HF spectrum by independent and underdeveloped nations places a greater demand on what is becoming a scarce medium for communications, and we further recognize that other cognizant government organizations are affecting integrated coordination, which recognized the one-nation, one-vote structure of the ITU.

This, of course, could result in a problem that could best be solved by the satellite systems of the future, and we believe that the existing Marisat system and its anticipated follow-on, Inmarsat, provides for the accommodation and transition of overflow traffic from the HF region to the satellite outband region.

Finally, we conclude that such satellite service in its mercantile aspects would be beneficial to the American fleet in specific and to the world fleet in general. It is further clear that size, cost, and complexity of present ship L-band terminals will result in the initial installations and first use on the larger, higher productivity, and/or the special purpose vessels of our fleet. In these cases our studies and experiments even now indicate that management benefits will justify the higher costs of the equipment and the procedures in operation. We also believe that the thrust of the future technological development will be to reduce service cost in the L-band region and to reduce the size and cost of ship terminals. These are reasonable assumptions and could result in further extension of the market for satellite services to smaller vessels.

To conclude, we believe that future maritime high sea communications will be provided by an appropriate mix of both HF and satellite services. We endorse fully the concept of U.S. participation in Inmarsat, and we further recommend that appropriate and timely legislative action, preferably as proposed by the bill supported by the administration, be taken to enable U.S. instruments to participate in the creation of Inmarsat.

This completes my testimony, Mr. Chairman.

[Mr. Pitkin's prepared statement follows:]

STATEMENT OF MARVIN PITKIN, ASSISTANT ADMINISTRATOR FOR COMMERCIAL DEVELOPMENT, MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Subcommittee, I am Marvin Pitkin, Assistant Administrator for Commercial Development for the U.S. Maritime Administration. I appreciate the opportunity to testify before this Committee with regard to H.R. 11209, a bill to provide for the establishment, ownership, operation, and governmental oversight and regulation of international maritime satellite telecommunications services.

The subject of satellite telecommunications services has been of high interest to the Maritime Administration since 1969. At that time the U.S. Maritime Administration performed an assessment to identify the possible application of advanced U.S. technology to improve the productivity and safety of the U.S. maritime fleet. Satellite communications were identified as one such program which offered high potential cost benefits to U.S. fleet operators, and as a consequence, a research program was initiated in this area. This program subsequently comprised several phases and continues through this date.

The objectives of the MarAd R&D program were threefold: First, to extend to U.S. ships the high quality, real-time communication services now provided between

locations ashore; secondly, to enable continuous, accurate ship location information to be available for use both by ship and shore stations; and thirdly, to bring into use by U.S. companies new ship management techniques that utilize the advanced technology provided by the satellite services.

The first phase was completed in June of 1971 and resulted in definition of desirable satellite communications concepts, an assessment of preliminary cost benefits and a program to reach the previously stated objectives. During Phase I we also conducted at-sea tests at L-Band frequencies, which were subsequently assigned internationally for this purpose. These tests proved successful and established that this frequency band would prove effective.

In Phase II, equipment was put aboard nine (9) U.S. flag test ships, and an experimental Maritime Coordination Center was built at the national Maritime Research Center at Kings Point. A five month operational test using two NASA Advanced Technology Satellites (ATS-1 and ATS-3) was conducted. During this at-sea test period, more than 600 ship-days of testing provided for the transmission of 5,000 messages. U.S. shipping companies conducted 125 experiments using advanced communication and navigation techniques. The test employed C-Band frequencies since only that band was available on these satellites.

ATS-5 and ATS-6 experiments were available to MarAd for Phase III for 300 hours during the August 1974 through May 1975 time period. Because of ATS-6's particular antenna characteristics, coverage was limited to ships in the North Atlantic Ocean. Two ships participated in the tests. Significant technical data on both communications and navigation were obtained to enable definitive understanding of the future system capabilities. Concurrently, a series of fleet management tests provided preliminary benefit data.

The MarAd program is considered to have been one element in the decision of the U.S. companies to initiate maritime satellite service (MARISAT) in advance of international planning.

In Phase IV—Commercial Satellite Experiments—up to ten U.S. flag vessels participated jointly with MarAd in operational use of the MARISAT system. The experimental Maritime Coordination Center was also continued in operation.

As a result of these studies and experiments, and in our general role as promoter of the U.S. merchant marine, the Maritime Administration concurs with the general thrust of the legislative action proposed in H.R. 11209 to provide for U.S. participation in Inmarsat, although we prefer the Administration bill, H.R. 9647. We note the differences between H.R. 11209 and the version advocated by the Administration, and we believe that the testimony of the Office of Telecommunications Policy will deal with this matter more directly. Our Agency interest and support for the proposed legislation is derived from the fact that our development program indicates a significant increase in merchant fleet productivity, efficiency and safety can be achieved through international application of L-Band satellite communications to mercantile vessel operations at-sea. In addition, such satellite service would greatly alleviate the current and projected spectrum congestion in HF assignments (3-30 megahertz) for singleside band voice and narrow band teleprinter applications. The U.S. and other developed nations have a particular problem in the High Frequency (HF 3 to 30 MHz) spectrum space. Increasing use of the High Frequency spectrum by underdeveloped nations places a greater demand on what is becoming a scarce medium for communication. We recognize that for the 1979 General World Administrative Radio Conference, other cognizant government agencies are effecting innovative coordination recognizing the one nation-one vote structure of the ITU.

In summary, then, we believe the existing Marisat system and its anticipated follow-on Inmarsat system provides for the accommodation and transition of overflow traffic from the HF region to the Satellite L-Band region. We believe that such satellite service would be beneficial to the American fleet and to world fleets in general. It would greatly facilitate the flow of traffic between nations and the productivity of the concerned merchant marine. It is further clear that the size, cost and complexity of present ship L-Band terminals will result in initial installations and use on the larger, high-productivity or special purpose vessels. In these cases, our studies indicate that management benefits will justify the higher cost of the equipment, procurement and operation. We also believe that the thrust of future technological development for service cost reduction in the L-Band region and reduction in size and cost of ship terminals is a reasonable assumption and should further extend the market for satellite services to smaller vessels. Conversely, we can expect that forthcoming restrictions in available HF spectrum will result in pressures to increase HF communications costs to the user. Accordingly, future maritime high seas communications will be provided by an appropriate mix of HF and satellite services.

We therefore endorse the concept of U.S. participation in Inmarsat. We further recommend that appropriate, timely legislative action, preferably as proposed by the bill supported by the Administration (H.R. 9647), be taken to enable U.S. action in instruments to create Inmarsat.

Mr. VAN DEERLIN. Mr. Lamb.

STATEMENT OF CAPT. CECIL H. LAMB, DIRECTOR OF VESSEL OPERATIONS, PRUDENTIAL LINES, INC. ON BEHALF OF COUNCIL OF AMERICAN-FLAG SHIP OPERATORS (CASO)

Captain LAMB. Thank you, Mr. Chairman, members of the committee.

I am Capt. Cecil H. Lamb, director of vessel operations, Prudential Lines, Inc. Prudential Lines is a member of the Council of American-Flag Ship Operators, CASO, for which I am testifying today. CASO was organized effective January 1, 1978, by eight major U.S.-flag liner operators to more effectively promote a U.S. built, manned, and owned merchant marine. The 168 vessels operated by CASO members in the foreign trade of the United States were all built in U.S. shipyards since World War II. This varied fleet of container, LASH barge, RO/RO and break bulk ships is the world's most modern and efficient.

We appreciate this opportunity to testify in support of the proposed International Maritime Telecommunications Satellite Act.

I have had an opportunity to review the testimony of Mr. Edward Fitzgerald for the American Institute of Merchant Shipping, and since we generally support his position, I will not take the committee's time to repeat details of H.R. 11209.

The inadequacy of conventional radio communications between vessels and their corporate headquarters has been documented in exhaustive testimony before our Congress and at international forums. The Inmarsat program was developed to remedy this problem. We believe it is a practical and commercially effective solution which the United States should support.

Since 1976, my company has participated in the prototype Marisat system and has had satellite communications equipment on four of our LASH vessels which operate from the east coast of the United States to the Mediterranean Sea area and Venezuela. These modern barge carrying ships with their necessary equipment represent capital investments of about \$70 million each. The total cost of operating these and similar large efficient vessels is roughly \$2,000 an hour.

At the present time, it requires over 12 hours on the average to transmit nonemergency messages over conventional equipment from a corporate headquarters to a distant ship. Delays in communications are sometimes measured in days rather than hours. This can occur because of the fact that ships normally cannot use their long-distance transmitting equipment in port and many countries, particularly the developing nations, have inadequate shoreside communications facilities. In addition, conventional radio communications are quite susceptible to disruption by weather and other natural phenomena. For instance, it was only because of the availability of our satellite communications capability that we were able to reroute a vessel to and from Romania during an earthquake in that country and thus save many days of ship operating time.

The cost of existing Marisat satellite communication capability is high. However, our experience has clearly demonstrated that the cost is well worthwhile because direct, and virtually instantaneous, voice to voice communication with the vessels permits operational efficiency. These efficiencies are essential when you realize that 12 hours of a modern ship's time represents a cost of about \$25,000.

As the Inmarsat system becomes operational, the Marisat system will be phased out. However, it must be kept in mind that Marisat is presently an operating system upon which our member companies and many others rely for communications purposes. Thus, it is essential that the Marisat service not be disrupted until the Inmarsat service is fully available to replace it. We would urge that your committee so instruct officials of Comsat, Marisat, and others in your committee report. We should also note that there is and has been for some time a push toward reducing the number of coastal maritime telecommunications facilities. This is a matter of significant concern to our member companies. We therefore urge that support for this bill not be viewed in any way as support for the diminution of coastal telecommunications facilities and that the committee in its report emphasize this. It is absolutely necessary to prevent any further derogation of the existing high seas and/or coastal maritime radio systems on which virtually all vessels, large or small, private or commercial, rely for operational and safety communications.

H.R. 11209 provides that the satellite communications service provided by Inmarsat may connect directly with a private communications system operated by a steamship carrier or may connect with such private system through an international communications common carrier. We strongly support this optional approach. There is absolutely no reason to require that a private communications system incur the added cost of using an international common carrier to connect with Inmarsat. Conversely, there is no reason to bar private communications systems from using international common carriers where they find it economically and operationally desirable to do so.

Mr. Chairman, this concludes my prepared remarks. Thank you for inviting us to appear and we will be pleased to answer any questions you or other members of the committee may have. Thank you.

Mr. VAN DEERLIN. Thank you. Mr. Strichartz?

STATEMENT OF HARVEY STRICHARTZ, TECHNICAL DIRECTOR, AMERICAN RADIO ASSOCIATION

Mr. STRICHARTZ. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee. We have participated in satellite activities since 1969, when we made financial and manpower commitments to the first experiment on the S.S. *Santa Lucia*. There we used a taxicab transmitter to transmit to a satellite and there we first established its feasibility, as part of the Mar Ad test. I will attempt in 8 minutes to summarize my observations from 8 years of activity, so I am asking that my prepared text be entered into the record. I will use it for the basis of general comment.

Our prepared text identifies the interests of the AFL-CIO Maritime Committee, the ARA and ROU which are the two radio officer unions aboard U.S.-flag ships. I would like to put some of the things that have been said and will be said into perspective, a perspective that the committee sorely needs.

It is not necessary to demean the existing terrestrial telecommunications system in order to advance the satellite system. We have to recognize that the terrestrial system constitutes a vital resource, which is very important for many reasons, because although satellites are good, they are not perfect, and they are not exclusive. There are, as we know, satellite killers. There are also natural hazards in addition to manmade hazards. There are factors such as interference. There are factors such as the eclipse effect. There will be a long phase-in period during which satellite facilities will go from being very expensive, as at present, to what we will expect to be moderate cost, but at no time can the world expect that all the vessels on the open sea will be satellite equipped.

The terrestrial telecommunications facilities do not have killers. There is interference which can be man made, but it cannot block out all of the frequencies. Safety has been well served. It can be better served, and it should be. The terrestrial system will be on most ships for a very long time, and on some ships forever. Other ships will have both terrestrial and satellite facilities.

In any event, we believe both terrestrial and satellite facilities should be served, and our statement addressed these matters. We spoke of them last September. In our statement we request six changes in the legislation which will be useful, and the changes are explained in our statement. They are summarized on page 8.

Briefly, working, you might say, backward, the last of our suggestions is that the Commission's report on the coastal stations be made in a 24-month time frame, because that much time will be necessary for a constructive and in-depth study. During that period, we are asking that the Commission be barred from any further dismantling of the coastal radio system. As Captain Lamb said, the shipowners do not want to see it further dismantled. At the same time, they do want the satellite system to move forward.

Our amendments are all directed to H.R. 11209, which in substance we support, without taking a position on who shall be the entity. We do not feel that labor should say which corporation or consortium of corporations shall act as the U.S. entity.

The one thing that we want to caution against is placing the U.S. Government's full faith and credit behind the financial activities of Inmarsat, and we explain in our statement why we come to that conclusion. I can assure you it is the right conclusion from a great deal of observation on the panel of experts economic working group. We ask that the language in section 3(c) be maintained and strengthened.

Last September, we asked for language that would permit the use of satellite Earth station in our training facilities. We note there is language. We ask a small clarification in the language which enables training facilities to use satellite Earth stations to train in its use. This could be interpreted to include it maintenance, because if something is not maintained in operable condi-

tion, it cannot be use; however, we would like it clarified by the use of the words, "in its use and maintenance."

We have asked that other small modifications be made that would clarify the intent of the legislation. We want also to state that the masters, mates, and pilots, the deck officers, are very much interested in radio determination. We would hope that the report would not contain anything in the legislative history which would bar the use of radio determination, and that instead there would be language that would encourage radio determination facilities being included in the first phase of Inmarsat.

That substantially is our position. We are in your hands. You have our statement, and we thank you for your attention this morning.

[Mr. Strichartz' prepared statement follows:]

STATEMENT OF THE AMERICAN RADIO ASSOCIATION, AFL-CIO, ON ITS OWN BEHALF AND IN BEHALF OF RADIO OFFICERS UNION, AFL-CIO AND OF THE AFL-CIO MARITIME COMMITTEE CONSISTING OF NATIONAL MARITIME UNION, AFL-CIO; UNITED STEEL WORKERS OF AMERICA, AFL-CIO; AND AMERICAN RADIO ASSOCIATION, AFL-CIO

Mr. Chairman and members of the subcommittee: 1. I am Harvey Strichartz, Technical Director of the American Radio Association, AFL-CIO. I appear here today for the ARA and for the Radio Officers Union of the United Telegraph Workers, AFL-CIO. The members of the ARA and ROU are Radio Officers and Radio Electronic Officers serving aboard approximately 92 percent of the ocean-going vessels of the United States Merchant Marine. This statement is also made on behalf of the AFL-CIO Maritime Committee, whose members are listed on the cover. ARA and ROU share with other ship officers and crew members, and with all of the American people, a deep interest in the advancement of maritime telecommunications technology, in both terrestrial and satellite modes, to enable our U.S. Flag vessels to operate safely and efficiently.

2. The further interest of ARA and ROU may be summarized in the fact that our Radio Officers and Radio Electronic Officers, serving on the vessels of the steamship companies operating the abovementioned 92 percent of the U.S. Merchant Marine with which we have contractual relationships, constitute the personnel who have been designated, in those contracts, to operate, maintain and repair all radiocommunications equipment, and to maintain and repair all radionavigation devices. We have appended to this statement (as Appendix A), the contract provisions relating to the performance of these duties.

3. Over the past seven years, since 1971, I have participated in the U.S. Working Groups that prepared the U.S. Positions for the IMCO Panel of Experts on Maritime Satellites, and for the Conference of Governments to Establish an International Maritime Satellite Organization (INMARSAT), and have attended sessions of both the Panel and the Conference as a member of the U.S. Delegation.

4. Basic telecommunications policy of the United States was originally set forth by the Congress in the Communications Act of 1934, as amended. In Section 1, its purpose is stated to be to make available a rapid, efficient nationwide and worldwide radiocommunication service, with adequate facilities at reasonable charges, for the purpose of national defense and for the purpose of safety of life at sea. In Section 102(a) of the Communications Satellite Act of 1964, the Congress declared it to be the policy of the United States to pursue these purposes through satellite communications as well. Now, in H.R. 11209, being considered here today, Section 2, the Declaration of Policy and Purpose, designates an entity for participation by the United States in INMARSAT or a similar agency. We respectfully urge that clarity and precision be served by amending Section 2(a) to read:

- 7 Sec. 2. (a) The Congress hereby declares that it is the
- 8 policy of this Act to provide for the participation of the
- 9 United States in the International Maritime Satellite Organi-
- 10 zation or another satellite telecommunications agency which
- 1 shall develop and operate a global maritime mobile satellite telecom-
- 2 munications system. Such system shall have facilities and
- 3 services which will serve the maritime commercial and safety

4 needs of the United States and foreign countries.

5. The purpose of inserting the word "satellite" in line 1 is to clarify the fact that the global system does not embrace all maritime mobile telecommunications but only those that involve use of satellite techniques. The removal of the article, "the" from line 3 is simply to clarify the fact that not all of the maritime commercial and safety needs of the United States will be served by the facilities and services of INMARSAT, but only some, those that are through INMARSAT satellite telecommunications system. In short, the amendment is designed to avoid an ambiguity that might encourage the notion that satellite techniques can satisfy all of the needs of the ships for telecommunications and safety. Unfortunately, though the people in this room may know better, the fact that there are worldwide terrestrial telecommunications facilities serving the maritime community is being ignored in some quarters. I will go into this in more detail in discussing the text of Sections 4 and 6, on Public Coast Stations, later in this statement (at paragraph 10-18, below.)

6. We would like to make clear that we are not taking a position on the controversial issue as to who, what corporation or consortium, shall be the designated entity. I would like, however, to note that during Sessions of the Panel and of the Conference to establish INMARSAT, the problem of United States participation through a designated private entity, such as is proposed in H.R. 11209, was the subject of much discussion and negotiation. Efforts were made to get the United States to participate in such a way as to commit the full faith and credit of the U.S. behind the finances of INMARSAT. Frankly, it is my belief that these efforts were made because the prospects that INMARSAT will be economically self supporting, either soon or even in the remote future, are dim indeed. Section VI, the Economic Assessment that appears in the Report to the Conference by the Panel of Experts, embodies exercises in truly wishful thinking. Assumptions were adopted that most people would consider unrealistic, on the basis of which the INMARSAT system might be projected as breaking even in 7, 14 or perhaps 24 years. By way of illustrating this point, apart from noting an overly optimistic prediction of the market for satellite communication by ships which the Report projects, I cite three dubious assumptions used:

First, an inflation factor of 4% per year was assumed. Yes, a 4 percent a year inflation factor.

Second, the cost of money was assumed to be 10%, although such investment capital generally costs from 15 to 18 percent, at the minimum.

Third, an effort was made to show a break-even point on an assumption that the capital to start up was not to be repaid; if this were so, how would capital equipment be replaced, when it becomes necessary?

7. Citing all of these facts is not done in the spirit of gloom and doom, but simply to support the concept of the Bill, as stated in Section 3(c), that the "the corporation shall be responsible for fulfilling any financial obligations . . ." etc. This language would seem to make clear that the corporation, as the United States designated entity, and not the Government of the United States, shall meet these obligations. Since the United States share of financial participation is considerable, it is important that the U.S. not be committed to meet any obligations, either directly or indirectly. Hopefully, this language would be retained in the Bill, or even strengthened, and this intent would be stated in the Report on this Bill, to become a clear and firm part of its legislative history.

8. During the Hearings held by this Subcommittee September 12, 1977, on earlier drafts of an INMARSAT entity bill, we requested that language be included in such a bill to authorize the use of a satellite earth terminal station for the exclusive purpose of training personnel. We are pleased to note that Section 3(d)(2) of H.R. 11209 includes such language, as we had requested. In the interest of complete clarity, we earnestly request that the text be amended in the following manner:

14 (2) Any person, including any government or govern-
 15 ment agency, may be the sole owner of a satellite earth
 16 terminal station if such person, government, or government
 17 agency uses, or permits or otherwise authorizes the use of,
 18 such station for the exclusive purpose of training personnel
 19 in the use and maintenance of equipment associated with the operation of such
 20 station, or in carrying out experimentation relating to mari-
 21 time satellite telecommunication services.

9. Insertion of the words "and maintenance" on line 19 would clarify the fact that training of personnel in the use of equipment associated with the operation of such station includes training in the necessary on-board preventive and corrective maintenance to ensure that the equipment will be operationally available at all times

during the voyage. For our Radio Officer and Radio Electronic Officers to be given both "hands on" and "hands off" training in INMARSAT ship terminal maintenance, as we explained last September, the ability to provide such training requires that our training facilities be authorized to have a satellite earth terminal station for the exclusive purpose of training personnel.

10. As we said above, in Paragraph 6 of this Statement, the fact that there are worldwide terrestrial telecommunication facilities now serving the maritime community, and serving it well, is being ignored in some quarters. I would like now to go into detail on this matter, in discussing Sections 4 and 6 of the proposed Bill.

11. At the outset, we wish to indicate our firm support for the development of maritime satellite communication facilities to augment the existing high seas maritime telecommunications medium and high frequency system, by providing supplementation of such MF and Hf services. However, the Congress should not allow development of satellite facilities to become the basis for diminishing existing terrestrial facilities, nor for the failure to continue to improve them. The 5 to 20 year timeframe for the introduction of maritime satellite facilities underscores the need to maintain and improve the existing terrestrial system facilities.

12. The existing terrestrial maritime mobile telecommunications system is comprised of highly reliable radiotelegraph equipment, operated and maintained by Radio Officers and Radio Electronic Officers (who are both skilled telegraphers and technicians). This system boasts a long and honorable history of saving lives and property at sea, as well as serving to make ship operations more efficient. Its salient features have been the ability to get through interference and atmospheric, the inherent reliability of the equipment and its repairability at sea. These features have been combined to produce a communication system of singular effectiveness, whose facilities have been employed in safety, operational and public correspondence, which serve to keep the system exercised.

13. Whatever improvements maritime satellite communications offer, such improvements are not so great, however, as to induce the mariner to accept satellite facilities at the expense of diminishing existing terrestrial facilities. Yet this is precisely what is threatened.

14. When this Subcommittee discussed an earlier draft of an Inmarsat entity bill, on September 12, 1977, language similar to Section 6 was considered. It was then noted that the FCC had been considering public maritime coast station service as part of its Docket 19544. The Commission has now issued a Final Order in this Docket, released on February 27, 1978. The FCC sustained its previous finding that the record clearly demonstrates the overall unsatisfactory quality of services currently being rendered by public coast radiotelegraph stations, and that the procedures used by them cause inefficient utilization of those facilities and result in unreasonable delays to ship stations in the exchange of traffic; the Commission had previously noted the inadequacy of operator staffing and the resultant degradation of services. Its earlier Order had made improvements a precondition of closure. Despite the fact that nothing had been done to upgrade or improve the coast stations, their facilities and their staffing, the FCC adopted a most unfortunate Final Order in this Docket, approving the closure of three Coast Stations: WSC at Tuckerton, N.J., WAX at Hialeah, Fla. and WSF at New York, N.Y. The Docket also offers the prospect that five additional stations might be permitted by the FCC to close later, leaving only three large and three small stations in operation to provide coast radiotelegraph service from Atlantic, Pacific and Gulf of Mexico coasts of the United States.

15. The final Order contains much tortured logic and errors of both commission and omission, but pertinent here is the fact that the international Radio Carriers have been attempting to justify applications to close public coast station necessary in the public interest, on the basis of claims that traffic would be diverted from terrestrial coast stations to satellite facilities. RCA for example projected a decrease of 25% or higher during the first year of Marisat operation, although in fact FCC reports RCA submitted for the first six months of 1977 showed the totality of RCA's stations increasing both words handled and revenue. "Nonetheless," the Commission states, "we recognize the need for evaluation of the effects the Marisat and follow-on maritime satellite systems may have on PRCT station operations..." This underscores the need to amend Section 4 (b) (5) by adding a new subsection (C) reading:

(c) in determining whether to permit the closure of any public coast radiotelegraph station, shall not take into account any impact which the provision of maritime satellite telecommunications service may have upon the provision of public coast radiotelegraph services.

16. This additional text is necessary to ensure that the Commission does not in the future use the advent of satellite facilities as a basis for reducing the terrestrial

maritime telecommunications facilities which are so necessary for the safety of human life and the efficiency of U.S. shipping; these facilities also constitute a prime resource necessary for national defense.

17. We ask that the Subcommittee take cognizance of reductions of the U.S. public coast radio station facilities have been permitted by the FCC, and that further sharp reductions have been projected, ostensibly on the basis of improvements that will be considered by the Commission under a new Docket 78-67, (released on February 27, 1978, simultaneously with the issuance of the Final Order in the public coast station Docket 19544.) To ensure that there is no deleterious action taken to dismantle further the public coast station facilities during the period of the study proposed in Section 6, we urgently request the addition of a new Subsection 6 (c), reading as follows:

(c) The actions by the Commission referred to in (b) above shall not include authorization for closure of any public coast radiotelegraph station. Should the Commission recommend such closure, it shall submit such recommendation to the Congress, and take no steps to implement such authorization of closure until the Congress has voted approval.

18. We request also that the time for submission of the Commission's report be changed from the 6 months proposed in Section 6 (b) to 24 months, as was originally suggested in Section 5 (b) of the September 1977 draft. Accordingly, amendment of Section 6 (b) by substituting "2 years" for the "6 months" therein, is requested.

19. In summary, we urge the Subcommittee to: (a) amend Section 2 (a), in the manner set forth in paragraph 4; (b) maintain the language and sense of Section 3 (c), or possible strengthen it; include clear language in the Report of the bill clarifying its intent; (c) amend Section 3 (d) (2) in the manner set forth in paragraph 8; (d) amend Section 4 (b) (5) by adding the new subsection (C) as set forth in paragraph 15; (e) amend Section 6 by adding a new subsection (c), as set forth in paragraph 17; (f) amend Section 6 (b) changing "six months" to "24 months." Thank you for your attention and for the opportunity to appear before you today, I hope we have been helpful.

Appendix A

ARA AND ROU CONTRACT PROVISION RE OPERATION/MAINTENANCE/REPAIRS (COMMON TO ALL AGREEMENTS)

(b) The Union shall have complete jurisdiction over all work involved in the operation and/or maintenance and repair of all radio and/or electronic communications or other devices as described in Section 2 and Section 22.

(c) The duties and jurisdiction of the Radio Officer and/or Radio Electronics Officer shall not be assigned to any person or persons, licensed or unlicensed on board the vessel except in the case of emergency involving safety of life and/or property. Such duties and jurisdiction include operation, maintenance and repair on any device which obtains signals, writing, images, sound of intelligence of any nature by radio and/or electronic communications from a point external to the vessel and which utilizes such data in its operation, and any device which transmits by radio and/or electronic communications to a point external from the vessel such data, signals, writing, images, sound or intelligence of any nature which it processes or generates. This includes but is not limited to radio transmitters and receivers, including radio-telephone, radio-facsimile, radioteletype, Radar, Loran, Sonar, electronic depth sounders, radio direction finders, radio navigation devices utilizing satellite communications, communications computers and electronic navigation computers, or any other such devices, provided however, that nothing contained in this Agreement shall be construed to include in the jurisdiction and/or duties of the Radio Officers and/or Radio Electronics Officers the operation of navigational devices or equipment, including but not limited to satellite navigational devices, Radar, Loran, electronic depth sounder, sonar, decca, radio direction finders and electronic navigation computers, on which excepted devices the jurisdiction and work duties of Radio Officers and/or Radio Electronics Officers is limited to maintenance and repair.

(d) The Company certifies and agrees that it has not assigned, and will not under any agreement with any other licensed or unlicensed maritime union, assign the maintenance and repair of electronic navigational or external communications equipment, including communications computers and navigational computers with their related servo-mechanisms of any kind, to any other personnel under such agreement. The Company further certifies and agrees that maintenance and repair of such equipment is under the complete and sole jurisdiction of the Radio Officer and/or Radio Electronics Officers.

(e) To assure proper operation and maintenance of the above mentioned equipment, the Union and the Company agree that *all persons* who operate and/or maintain and repair such equipment shall be holders of a valid first or second class Radiotelegraph Operator's license, and as applicable of such additional certification by ARA TIME to operate and/or maintain and repair said equipment described in Section 2 and Section 22.

(f) The Union shall have jurisdiction, regardless of where located, over the equipment as set forth above, and all read out equipment which I related to any equipment, functions and duties under the jurisdiction of the Union.

Section 22(a) Radio Officers and/or Radio Electronics Officers shall perform all duties incident to the operation and maintenance of all radio and/or electronic external communications devices on vessels operated by the Company. All radio and/or electronic external communications devices, described in Sections 2 and 3 including Radiotelephone, Radio Facsimile, Radio Teletype, communications computers or any other such devices, when carried shall be located only in the Radio Room and shall be operated, maintained and repaired only by the Radio Officer and/or Radio Electronics Officer. (Navigation computers and other electronic navigational equipment shall be located in or in the vicinity of the Radio Room including bridge, but regardless of location shall be maintained and repaired only by the Radio Officer and/or Radio Electronics Officer.)

(b) Radio Officers and/or Radio Electronics Officers shall not be required to perform any duties other than those required for the operation and maintenance and repair of the vessel's licensed radio station and other equipment and devices as outlined in Sections 2, 3 and 22(a) except in an emergency involving the safety of life and/or property. Emergency shall be defined to mean a bonafide distress situation.

Radio Officers and/or Radio Electronics Officers may also be required to maintain and make repairs to the Radio Compass when the services of Radio Compass experts are not available; provided that under such circumstances, they shall not be held responsible for the efficiency or accuracy of the Radio Compass.

Radio-Electronics Officers may be required to maintain and make repairs to other electronic devices, carried, pursuant to the provisions of Section 23(b)21, provided that the necessary tools, instruments and spare parts are carried.

AUTOMATION

Section 51. The Company agrees that plans for automation of existing or future vessels shall not involve a manning scale of less than one Radio Officer or Radio Electronics Officer on freight vessels and not less than the manning scales provided in this Agreement on passenger ships. On the contrary, rather than removing Radio Officers and/or Radio Electronics Officers from any vessel, the needs of automation require that such men, trained by the ARA and ARA-PMA Time Programs, will be needed aboard automated vessels to perform the duties set forth in this Agreement.

SAFETY AT SEA

Section 52. In the interest and for the purpose of promoting safety of life and property at sea, and in the interest of National Defense, the Company agrees that all freight vessels owned or operated by the Company which have a gross tonnage of 1600 or more and all passenger vessels owned or operated by the Company irrespective of size shall be equipped with properly authorized licensed radiotelegraph and/or radiotelephone stations and shall be manned with Radio Officers and/or Radio Electronics Officers duly certified by the Federal Communications Commission to act as commercial first- or second-class radiotelegraph operators and that all such vessels shall remain so equipped and manned throughout the life of this Agreement.

This section only applies to self-propelled craft, and is intended to cover oceangoing vessels engaged in coastwise, inter-coastal, nearby foreign, and foreign voyages.

When any of the equipment in the jurisdiction of the Union is operating improperly or is inoperative and requires repairs, said repairs shall not be delayed until reaching port if the necessary spare parts are available and the Radio Officer or Radio Electronics Officer has a Radar Endorsement, if radar equipment is involved and is qualified otherwise.

When repairs are being done to the ship's licensed radio station, including the radio direction finder, ship's radar or other equipment in the jurisdiction of the Radio Officer or Radio Electronics Officer, a Radio Officer or Radio Electronics Officer who is required to supervise such repairs between the hours of 8 a.m. to 3 p.m., Monday to Friday, shall not be dismissed, while such repairs are being performed and until they are completed, provided that he may be dismissed at or after 8 p.m.

ADDENDUM 1

RULES ON RADIOTELEPHONE OPERATION

To be posted in Radio Room and on Bridge on vessels equipped with radiotelephone.

Operation of Radiotelephone equipment shall be in accordance with the following rules which both the Company and the Union agree do not supersede, but are in accordance with the terms of the collective bargaining Agreement between them relating to such operation.

1. *Repair and maintenance at sea*—Only the ship Radio Officer and/or Radio Electronics Officer shall be assigned to or perform duties necessary for maintenance, repair and operation of Radiotelephone equipment at sea, (Section 22(a)).

2. *Operation*—(a) Radio Officers and/or Radio Electronics Officers shall perform all duties incident to the operation, maintenance and repair 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 and/or Radio Electronics Officer. (Section 3(b) and 22(a)).

ADDENDUM 3

(m) The parties recognize that VHF and other types of communications for: (1) meteorology, (2) data transmission, (3) oceanographic, (4) radiofacsimile, (5) printer, (6) navigation, and (7) public or other correspondence to and from vessels via satellite relay will be tested shortly, and jointly state their agreement and understanding that pursuant to and subject to Section 3 of the parties' agreement all phases and steps of such communications as prove to be feasible to or from the vessel shall be performed only by Radio Officers and/or Radio Electronics Officers, and no other personnel, notwithstanding any of the provisions made herein.

(e) All radio and/or electronic communications equipment other than the portable units described in 2. (a) above shall be located only in the Radio Room and shall be operated, maintained and repaired only by the Radio Officer or Radio Electronics Officer. The portable equipment described in 2. (a) above shall be *maintained and repaired* only by Radio Officers and/or Radio Electronics Officers.

ADDENDUM 4

7. Maintenance and repair of all the equipment referred to in this Addendum No. 4 shall continue to be performed only by the Radio Officer or Radio Electronics Officer.

8.a. Maintaining inventory of spare parts and requisitioning of spare parts as may be required for the ship's Licensed Radio Station, Radio Teletype, Loran, collision course computers associated with Radar and any other equipment in the maintenance responsibility of the Radio Officer or Radio Electronics Officer, and preventative maintenance thereof,

3. * * * shall be performed at sea on a weekly basis, (procedures shall be formulated by the ARA TIME Program and agreed by the Union and the Companies) * * *

b. Preventative maintenance shall be deemed to be those procedures performed on a normally functioning device, to maintain it in such normally functioning condition, and may include, as applicable, regular inspection, cleaning, tightening, lubricating and testing of such devices, including spares, as well as alignment, calibration, adjustment (at frequencies appropriate to the particular device), and any other necessary procedures.

c. Repairs shall be deemed to be those procedures performed on a non-functioning of malfunctioning device, to restore it to normal functioning condition, and may include any of the procedures listed in (b) above when performed on a nonfunctioning or malfunctioning unit.

Mr. VAN DEERLIN. Thank you, Mr. Strichartz.

We are privileged to have as the ranking majority member of the subcommittee, Jack Murphy of New York, who is also the chair-

man of the Merchant Marine and Fisheries Committee, whose jurisdiction, of course, overlaps somewhat in this matter.

Mr. Murphy, have you any comments or questions for the panel?

Mr. MURPHY. Thank you, Mr. Chairman. I have no questions. The Merchant Marine Committee held a full day's hearing about 2 weeks ago on this same subject and these same gentleman were present, and made outstanding presentations, and we look forward to the rest of the hearing with the Commerce Committee.

Mr. VAN DEERLIN. Hearing it twice should make you twice as competent to deal with the problems.

Mr. VAN DEERLIN. Mr. Marks?

Mr. MARKS. Thank you, Mr. Chairman.

I do have a question for Mr. Biller, if I may.

Mr. Biller, on, I believe it is page 8 of your testimony, you mentioned there that the United States, with 17 percent, would have the largest initial share. Could you perhaps translate that for me, that percentage, into a dollar figure?

Mr. BILLER. The initial capitalization, Mr. Marks, will be \$200 million, so that 17 percent would be \$34 million.

Mr. MARKS. Then, again, on page 9, you mentioned that U.S. participation in international joint undertakings is, in fact, in your opinion, in the national interest. Can you tell me if you support any such international undertaking other than Inmarsat?

Mr. BILLER. We believe, Mr. Marks, that we have negotiated an agreement which is the best form for the international undertaking. I would hesitate to say that it is the only form, but it is certainly the best we have been able to devise, and I think it will best serve our purpose.

Mr. MARKS. Is it likely that any other international undertaking will come about in your opinion? For instance, do you believe that Intelsat will offer an international maritime satellite service?

Mr. BILLER. I think, Mr. Chairman, that Intelsat has considered that. I would hesitate to put any sort of qualification on the likelihood. I believe that the Inmarsat agreements will best be able to serve the purpose of providing satellite maritime communications. If the Inmarsat agreements enter into force, I do not see that there will be any other international organization that would be able to serve the purpose as well, and therefore Inmarsat would be the principal or sole organization.

Mr. MARKS. Thank you, Mr. Biller. I have no further questions. Thank you.

Mr. VAN DEERLIN. Mr. Moorhead?

Mr. MOORHEAD. I have no questions at this time, but I do wish to thank you gentlemen for coming this morning.

Mr. VAN DEERLIN. The minority counsel, Mr. Coleman.

Mr. COLEMAN. Thank you, Mr. Chairman.

Mr. Biller, on the first page of your statement, you mentioned prerequisites of the Department of State in supporting legislation to permit U.S. participation in Inmarsat, a designated entity, be a signatory and make that entity subject to executive branch oversight.

On page 11 of your statement, you state you support the administration bill, but go on to say with one conditional change is necessary in the subcommittee bill, H.R. 11209. Assuming that the

amendment which now appears on page 10 of the committee print is adopted, would you support H.R. 11209?

Mr. BILLER. We would see the committee bill with the change as meeting the objectives we have stated.

Mr. COLEMAN. Fine.

Mr. VAN DEERLIN. Committee counsel, Mr. Moir.

Mr. MOIR. Just one follow-on. I believe that change appears in the committee print. Does that mean you haven't seen it? It was mailed to you.

Mr. BILLER. I have not seen the change. I have heard that one was made.

Mr. MOIR. It is a verbatim of the same language of which you approve in H.R. 9647.

Mr. BILLER. Yes.

Mr. VAN DEERLIN. We are grateful to the five of you for leading off our testimony this morning. Our second panel consists of Howard A. White, senior vice president and general counsel for ITT World Communications; Dr. Joseph Charyk, president of Comsat; Frank DeRose, vice president, general counsel of RCA Global; Dr. Wladimir Naleszkiewicz, representing William Fishman, International Communications for OTP; Martin W. Bercovici, counsel for the Mobile Marine Radio, Inc.; E. E. Carr, director of the overseas division for A.T. & T. long lines; Walter Hinchman, Chief, Common Carrier Bureau, with the FCC; Edward Fitzgerald, representing the American Institute of Merchant Shipping, telecommunications management division; Robert Conn, executive vice president and counsel for Western Union International; and Thomas O'Reilly, Washington counsel for Hawaiian Telephone Co.

We will stick to the order of the listing in calling upon the witnesses, so the first will be Mr. Howard White of ITT World Communications.

STATEMENT OF HOWARD A. WHITE, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, ITT WORLD COMMUNICATIONS, INC.

Mr. WHITE. Mr. Chairman, we appreciate this opportunity to participate in the hearings of this subcommittee on H.R. 11209 which would establish a U.S.-designated entity for participation on behalf of the United States in the Inmarsat program.

Assuming that our entire statement will be included in the record, I will try to summarize by reading only portions thereof.

At the present time, ITT operates six public coast stations in the United States. We have also been a participant and investor in the Marisat program which provides maritime telex and other services to ships equipped to handle such communications. We have been an active participant in the ongoing negotiations looking toward the establishment of a second generation Marisat system, either as a wholly owned U.S. system or as a joint venture with a number of foreign telecommunications entities, and we have actively participated since 1973 as a member of the official U.S. delegations in the negotiation of the Inmarsat convention and operating agreement.

With respect to H.R. 11209, except through part ownership of Earth stations, the House bill would summarily foreclose all carriers other than Comsat from participation in the maritime satellite services technology, a communications medium which is nearly

certain to dominate maritime communications during the 1980's and beyond. This bill would award Comsat an exclusive franchise for the provision of space segment services.

If this bill were passed as presently written, ITT Worldcom and other traditional maritime carriers would probably be left in the position of providing a domestic landline connection between our gateway subscribers and Inmarsat Earth station facilities. We would also be left with the burden of maintaining increasingly unprofitable public coast stations as more and more traffic is siphoned off by the satellite medium.

Frankly, Mr. Chairman, we see no basis for the highly favored status which this bill would grant to Comsat. Comsat General has unquestionably been a leader in the development of Maritime Satellite Communication through its role in the Marisat program. It has never offered maritime services via public coast stations. Indeed, Comsat General has consistently rejected any participation on its part in the provision of these very essential public coast station maritime services. The initial judgment of the FCC that maritime satellite services should be open to participation by all maritime common carriers should not in our opinion be reversed without sound reasons for granting an exclusive franchise to Comsat and rejecting the express desires of other maritime carriers to utilize satellite as well as HF technologies.

In view of the strong interest expressed both in testimony before you today and through participation in the Marisat program on the part of a number of maritime common carriers for participation in this Inmarsat program, we urge that H.R. 11209 be amended to permit participation by all interested maritime carriers, including Comsat General, in space segment services.

In support of our proposal that all maritime common carriers should be permitted to participate in the Inmarsat program, we have drafted amendments to H.R. 11209 to accomplish this end. The amended version of the bill is appended to our written testimony.

Among other changes, we propose deletion of references to Comsat as the entity designated to represent the U.S. in Inmarsat and to substitute therefore a new corporation which would be funded by interested maritime common carriers. That new entity would be permitted to provide service directly to the public. Thus, maritime satellite services would be provided by the new corporation through interconnections with existing domestic and international common carriers pursuant to appropriate divisions of tools, and through interconnection with private users as well.

Such services would be offered pursuant to authorizations granted by the FCC and in accordance with tariffs filed with the FCC.

Finally, the new corporation would be the sole owner of all Inmarsat earth stations located in the United States. I would observe that the new corporation which our proposed amendment would authorize will still retain the benefit of participation by Comsat General as a maritime carrier, most likely as a major investor in that corporation.

Additionally, to the extent that the United State is successful in negotiation with other Inmarsat participants, it can also be expected that Comsat General will be designated as the system manager

for Inmarsat, ITT Worldcom knows of no reason why Comsat General should not be the choice of this corporation for system manager, and we would expect to support its election.

I believe it is also important to bring to your attention the fact that the new corporation which we have proposed as the Inmarsat designated entity is substantively identical to the structural form currently being considered by the participants in the second generation Marisat negotiations, the structural form which has received the support of all participants to those negotiations, including Comsat General.

In addition to the basic question of fairness of granting to Comsat a monopoly franchise for maritime satellite services, to the exclusion of the several maritime common carriers which have provided maritime services to the public for a half century before Comsat entered the field, I would urge the committee to take note of the multiplicity of roles which Comsat has assumed. The designation of that carrier as the Inmarsat designated entity can only exacerbate the current or potential problems associated with its conflicting interests.

At the present time, Comsat is engaged as the U.S.-designated entity for the Intelsat system, as the systems manager for the Intelsat system, as the owner of a system of domestic communications satellites, which are leased to the American Telephone & Telegraph Co., as a one-third partner in Satellite Business Systems, a U.S. domestic satellite system licensee, as the developer of a regional satellite system serving a number of Arab countries, and as a substantial investor in the Marisat system.

As between its Intelsat role and its involvement in the several domestic satellite systems in the United States and the regional system in the Middle East, there appear to be substantial possibilities for conflicting allegiances on the part of Comsat, and in the maritime communications realm there have been repeated suggestions that Intelsat intends to propose a maritime capability for its next generation of Intelsat satellites which may or may not be used by the Inmarsat system.

Obviously, Comsat will be placed in the position of having to determine whether its allegiance to Intelsat or Inmarsat should govern its actions in such a situation. While the new corporation which we have proposed as the Inmarsat-designated entity will obviously not completely remove Comsat from the decisional process, it will eliminate that carrier's ability to make such decisions unilaterally, and will provide an important measure of checks and balances which would largely eliminate problems which could arise from unexpected conflicts of interest on Comsat's part.

In sum, Mr. Chairman, rather than a selection by this subcommittee of the most recent entrant to the field of maritime common carrier communications services for a monopoly franchise over all future maritime services via the satellite medium, I believe that we have demonstrated here the soundness and fairness of amendments to H.R. 11209 which would establish a new common carrier-owned corporation as the Inmarsat-designated entity.

I would, of course, be pleased to answer any questions that you may have.

[Mr. White's prepared statement follows:]

STATEMENT OF HOWARD A. WHITE, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, ITT WORLD COMMUNICATIONS INC.

Mr. Chairman, we appreciate this opportunity to participate in the hearings of this Subcommittee on HR 11209, which would establish a U.S. designated entity for participation on behalf of the United States in the global INMARSAT program.

I am Howard A. White, Senior Vice President and General Counsel of ITT World Communications Inc., commonly known as ITT Worldcom. I am accompanied today by Mr John B. McKinney, who is Executive Vice President and General Manager of ITT Worldcom.

ITT Worldcom, and its predecessor companies have been engaged in the provision of maritime service to the public for over 50 years. Throughout that period we have provided telegraph-type service to maritime users from FCC-licensed public coast stations. At the present time we operate two public coast stations on the Atlantic coast (although we have recently been authorized by the FCC to close one of those stations as fundamentally redundant), one station on the Gulf coast and three stations on the Pacific coast. We have also been a participant and investor in the MARISAT program which provides maritime telex and other services to ships equipped to handle such communications. We have been an active participant in the ongoing negotiations looking toward the establishment of a Second Generation MARISAT System, either as a wholly owned U.S. system or as a joint venture with a number of foreign telecommunications entities. And we have actively participated, since 1973, as a member of the official U.S. delegations in the negotiation of the INMARSAT Convention and Operating Agreement.

In addition to ITT Worldcom, a number of other carriers, notably RCA Global Communications and TRT Telecommunications, have a long history of providing maritime, telegraph-type services via public coast stations. Similarly, maritime telephone service has long been provided by the American Telephone and Telegraph company via its public coast stations. A few years ago, Western Union International, an international record carrier, started providing maritime, telegraph type services through its participation in the MARISAT program.

Notwithstanding the long history of public maritime service by the aforementioned U.S. common carriers and a number of smaller independent public coast station operators, the House Bill designated HR 11209 would summarily foreclose all of those carriers from any participation in maritime services via the new satellite technology, a communications medium which is nearly certain to dominate maritime communications during the 1980's and beyond. Instead, this Bill would award to the Communications Satellite Corporation (Comsat) an exclusive franchise for the provision of maritime communications services via that satellite medium. If this bill were passed as presently written, ITT Worldcom and other traditional maritime carriers would be left in the position of providing a domestic landline connection between our gateway subscribers and an INMARSAT earth station facility, plus the burden of maintaining increasingly unprofitable public coast stations as more and more traffic is siphoned off by the satellite medium.

Frankly, Mr. Chairman, we see no basis for the highly favored status which this Bill would grant to Comsat. While Comsat's subsidiary, Comsat General, has unquestionably been a leader in the development of maritime satellite communication through its role in the MARISAT program, it has never offered maritime services via public coast stations. Indeed Comsat General has consistently rejected any participation on its part in the provision of those very essential public coast station maritime services. Even its entry into the maritime service three years ago was the result of a fortuitous contract which it obtained from the U.S. Navy for the provision of a satellite communications service to Navy ships. Because the satellites which it purchased to meet the Navy requirements had a communications capacity somewhat in excess of that necessary to satisfy those Navy requirements, Comsat General was able to propose a commercial service, using that spare capacity, that would otherwise have been unfeasible.

Indeed Comsat General sought at the outset of the MARISAT program to create for itself a monopoly in the provision of maritime satellite services. However, in response to protests by several of the existing maritime carriers, the FCC determined that such a monopoly would not be in the public interest and required Comsat General to permit participation in that MARISAT program by existing maritime common carriers. As a result of this FCC determination, ITT Worldcom, RCA Global Communications and Western Union International each filed applications to participate in this program and entered into negotiations with Comsat General looking toward the establishment of institutional and operational arrangements for the MARISAT system. Although the percentage investments on the part of these three carriers were significantly lower than the Comsat General invest-

ment, this reflected a judgment, at least on ITT Worldcom's part, that Comsat General had seriously misallocated costs between the Navy service and the commercial service, in the contract which it had negotiated with the Navy, with the result that the market for such commercial service was too small to cover the cost attributed to those services, a judgment which experience has subsequently confirmed.

The initial judgment of the FCC that maritime satellite services should be open to participation by all maritime common carriers should not be reversed without sound reasons for granting an exclusive franchise to Comsat and rejecting the expressed desires of other maritime carrier to utilize satellite as well as HF technologies.

In view of the strong interest—expressed both in testimony before you today and through participation in the MARISAT program—on the part of a number of maritime common carriers for participation in this INMARSAT program, we urge that HR 11209 be amended to permit participation by all interested maritime carriers, including Comsat General.

In support of our proposal that all maritime common carriers should be permitted to participate in the INMARSAT program, we have drafted amendments to HR 11209 to accomplish this end. The amended version of the Bill is appended to my written testimony. Among other changes, we proposed deletion of references to the Communications Satellite Corporation as the entity designated to represent the U.S. in INMARSAT, and to substitute therefor a new corporation which would be funded by interested maritime common carriers. That new entity would be permitted to provide service directly to the public. Thus, maritime satellite services would be provided by the new corporation through interconnections with existing domestic and international common carriers, pursuant to appropriate divisions of tolls, and with private users. Such services would be offered pursuant to authorization granted by the FCC, and in accordance with tariffs filed with the FCC. Finally, the new corporation would be the sole owner of all INMARSAT earth stations located in the United States. (Parenthetically I would observe that the provision in the existing HR 11209 that other interested carriers and/or users may own up to 50 percent of those earth stations would simply assure Comsat permanent control over all aspects of the U.S. involvement in INMARSAT. We favor a less than 50 percent role for each carrier participant, unless a larger share is required to fully finance the total U.S. investment.)

I would observe that the new corporation, which our proposed amendment would authorize, will still retain the benefit of participation by Comsat General as a maritime carrier, most likely as a major investor in that corporation. Additionally, to the extent the U.S. is successful in negotiations with other INMARSAT participants, it can also be expected that Comsat General will be designated as the system manager for INMARSAT. ITT Worldcom knows of no reason why Comsat General should not be the choice of this new corporation for system manager, and we would expect to support its election.

I believe that it is also important to bring to your attention the fact that the new corporation which we have proposed as the Inmarsat designated entity is substantively identical to the structural form currently being considered by the participants in the Second Generation Marisat negotiations, a structural form which has received the support of all participants to those negotiations, including Comsat General.

In addition to the basic question of the fairness of granting to Comsat a monopoly franchise for maritime satellite services, to the exclusion of the several maritime common carriers which have provided maritime services to the public for a half century before Comsat entered the field, I would urge the Committee to take note of the multiplicity of roles which Comsat has assumed. The designation of that carrier as the Inmarsat designated entity can only exacerbate the current or potential problems associated with its conflicting interests.

At the present time, Comsat is engaged as the U.S. designated entity for the Intelsat system, as the system manager for the Intelsat system, as the owner of a system of domestic communications satellites which are leased to the American Telephone and Telegraph Company, as a one-third partner in Satellite Business Systems, a U.S. domestic satellite system designed primarily for computer-to-computer data transfer, as the developer of a regional satellite system serving a number of Arab countries, and as a substantial investor in the Marisat system. As between its Intelsat role and its involvement in the several domestic satellite systems in the United States and the regional system in the Middle East, there appear to be substantial possibilities for conflicting allegiances on the part of Comsat. And, in the maritime communications realm, here have been repeated suggestions that Intelsat intends to propose a maritime capability for its next generation of Intelsat satellites,

which may or may not be used by the Inmarsat system. Obviously, Comsat will be placed in the position of having to determine whether its allegiance to Intelsat or Inmarsat should govern its actions in such a situation. (I note parenthetically that Intelsat recently sent to the Inmarsat Preparatory Committee a paper describing how Intelsat could provide the Inmarsat space segment).

While the new corporation which we have proposed as the Inmarsat designated entity will obviously not completely remove Comsat from the decisional process, it will eliminate that carrier's ability to make such decisions unilaterally and will provide an important measure of checks and balances which should largely eliminate problems which could arise from expected conflicts of interest on Comsat's part.

While the focus of our proposed amendment has been upon a new corporation comprised of maritime common carrier investors to function as the Inmarsat designated entity, we have suggested three other amendments, the purpose for which may not be obvious on their face. Therefore, I would like to briefly comment on those amendments.

In Section 3(b)(2)(B) we have proposed a modification to reflect interconnection of the Inmarsat space segment with terminals aboard ships or other marine structures rather than with "foreign correspondents". We are unaware of any direct point-to-point communication contemplated for the Inmarsat system between a U.S. earth station and a "foreign correspondent"; and we are persuaded that the intent of the provision in question was to address communications via the Inmarsat system with vessels in the marine environment. The specific choice of words in our suggested amendment is intended to conform the language in this Bill to the Inmarsat Convention. That Convention defines "ships" as a vessel of any type including platforms not permanently moored, and then says that "the Inmarsat space segment shall be open for use by ships of all nations * * *" (Article 7(1)). The Convention also permits the Inmarsat Council to "permit access to the Inmarsat space segment by earth stations located on structures operating in the marine environment other than ships" provided such services does not interfere with service to ships.

In Section 3(e) we have suggested an amendment which would conform the interconnection practice under this Bill to be established practice under Section 201 of the Communications Act of 1934, as amended. To this end we have proposed language which would cause the corporation to seek voluntary agreements with interconnecting common carriers as to the operational and financial terms of such interconnection, and, failing such voluntary agreement, our proposed amendment would authorize the Commission to act under Section 201 of the Communications Act to prescribe appropriate terms and conditions governing interconnections.

In Section 5(a) we have added language which would specify that one of the questions to be considered by the FCC, in the study of public maritime coast station services required by this section, is that of whether those public coast stations services should ultimately be integrated with the maritime satellite services into a single operating entity. We believe this to be a matter of singular importance in view of the expected continuing need for such public coast station services during a period when the traffic base for those public coast stations will, with near certainty, be continually declining, as more and more traffic is diverted to the satellite medium.

In sum, Mr. Chairman, rather than a selection by this Subcommittee of the most recent entrant to the field of maritime common carrier communications services for a monopoly franchise over all future maritime services via the satellite medium, I believe that we have demonstrated here the soundness and fairness of amendments to HR 11209 which would establish a new common carrier-owned corporation as the Inmarsat designated entity.

Please be assured Mr. Chairman, that ITT Worldcom stands ready and willing to cooperate with this Subcommittee in its further efforts toward the development of legislation for the designation of a United States entity to participate in the Inmarsat program.

Thank you.

95TH CONGRESS
2D SESSION

H. R. 11209

(As Amended)

IN THE HOUSE OF REPRESENTATIVES

[Additions shown by underlining]

[Deletions shown with slash (/)]

A BILL

To provide for the establishment, ownership, operation, and governmental oversight and regulation of international maritime satellite telecommunications services.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

SHORT TITLE

SECTION 1. This Act may be cited as the "International Maritime Telecommunications Satellite Act".

SEC. 2. (a) The Congress hereby declares that it is the policy of this Act to provide for the participation of the United States in the International Maritime Satellite Organization or another satellite telecommunications agency which shall develop and operate a global maritime mobile telecommunications system. Such system shall have

facilities and services which will serve the maritime commercial and safety needs of the United States and foreign countries.

(b) It is the purpose of this Act to provide that the participation of the United States in the organization or agency specified in subsection (a) shall be through the corporation established pursuant to Sec. 3(a)(1). ~~Communications Satellite Corporation which constitutes a private entity operating for profit, and which is not an agency or establishment of the Federal Government.~~

DESIGNATED OPERATING ENTITY

SEC. 3. (a) (1) (A) There is hereby authorized to be created in the United States a maritime telecommunications corporation for profit which shall not be an agency or establishment of the Federal Government. The corporation shall be subject to the provisions of this Act.

(B) The corporation shall be wholly owned by United States common carriers who are specifically authorized by the Federal Communications Commission to own shares of stock in the corporation, upon a finding by the Commission that any such ownership will be consistent with the public convenience, interest, and necessity.

(C) Except as provided in subparagraph (D), no United States common carrier specified in subparagraph (B) may own more than 49 percent of any shares of nonassessable capital stock issued by the corporation under subparagraph (E).

(D) The Commission may permit any United States common carrier to own more than 49 percent of such shares if the Commission determines that such permission is necessary to ensure the sale of all such shares issued by the corporation.

(E) The corporation may issue and have outstanding, in such amounts as it may determine, shares of stock which may be purchased, owned, or held only by common carriers in accordance with subparagraph (B).

(2)(A) Subject to the provisions of paragraph (3), the corporation ~~Communications Satellite Corporation~~ may participate as the designated operating entity of the United States in --

(i) the International Maritime Satellite Organization;

or

(ii) any other agency designed to provide international maritime satellite telecommunications services.

(B) The corporation is hereby authorized to sign the operating agreement or other pertinent instruments of the Organization, or of the

satellite telecommunications agency, as the designated operating entity of the United States.

(3)(A) Except as provided in subparagraph (C), the corporation may not participate in any satellite telecommunications agency under paragraph (2) (A) (ii) unless --

(i) (I) in the case of participation which may be undertaken only pursuant to a treaty or executive agreement, such treaty or executive agreement is in effect; or

(II) in any case in which participation does not require any treaty or executive agreement, the President does not disapprove such participation during the period of 60 calendar days after the corporation notifies the President of such proposed participation; and

(ii) the Congress does not disapprove such participation under paragraph (3).

(B) Any disapproval by the President under subparagraph (A) (i) (II) shall be published in the Federal Register as soon as practicable after the date of such disapproval.

(C) The requirements of subparagraph (A) shall not apply to any participation of the corporation in a satellite telecommunications agency if --

(i) such participation takes effect before September 4, 1979;

(ii) the corporation intends to participate in the Organization after the Organization has begun its operations; and

(iii) such participation in the satellite telecommunications agency is in the nature of an interim operating arrangement remaining in effect only until the corporation begins its participation in the Organization.

(4) (A) In any case in which the corporation proposes to participate in a satellite telecommunications agency under paragraph (2) (A) (ii), and such participation is subject to the requirements of paragraph (3) (A), the corporation shall submit a statement to each House of the Congress which shall include notice of such proposed participation, together with such other information as the corporation considers appropriate. If such participation is subject to disapproval by the President under paragraph (3) (A) (i) (II), such statement may not be submitted before the end of the period specified in paragraph (3) (A) (i) (II).

(B) Such proposed participation may take effect, if it otherwise may take effect under paragraph (3) (A) (i), unless both Houses of the Congress, during the period of 60 calendar days of continuous session following submission of the statement specified in sub-

paragraph (A), pass a concurrent resolution the matter after the resolving clause of which reads as follows: "The Congress hereby disapproves the proposal submitted by the corporation authorized to be established by the International Maritime Telecommunications Satellite Act ~~Communications Satellite Corporation~~ on , 19 . " (The blank space shall be filled with the date of submission of the proposal to the Congress.)

(C) If both Houses of the Congress do not pass such a concurrent resolution during such period, such proposal of the corporation shall not be effective before the end of such period.

(D) For purposes of this paragraph --

(i) continuity of session of the Congress is broken only by adjournment sine die; and

(ii) the days on which either House is not in session because of an adjournment of more than 3 days to a day certain are excluded in the computation of the 60-day period.

(b) The corporation --

(1) (A) subject to the provisions of subsection (d), may establish, own, and operate satellite earth terminal stations; and

(B) shall interconnect such stations, and the maritime mobile satellite telecommunications provided by such stations, with the facilities ~~and services~~ of United States domestic common carriers, international common carriers and private users, ~~private communications~~

~~systems, other than any common carrier system, or other entity in which~~
~~the corporation has any ownership interest,~~ as authorized by the
 Commission, provided, however, that the communications lines connect-
ing the facilities of such private users to such stations shall be obtained
by and at the expense of such users; and

(2) (A) may establish, own, and operate the United States
 share of the jointly owned international space segment and associated
 ancillary facilities; and

(B) shall interconnect such facilities, and the maritime mobile
 satellite telecommunications services provided by such facilities, with
terminals aboard ships or on structures operating in the marine environ-
ment. ~~the facilities and services of foreign correspondents.~~

(c) The corporation shall be responsible for fulfilling any financial
 obligation placed upon the corporation as a signatory to the operating
 agreement or other pertinent instruments, and any other financial
 obligation which may be placed upon the corporation as the result of
 a convention or other instrument establishing the Organization or the
 satellite telecommunications agency, as the case may be. The
 corporation shall be the sole United States representative in the
 managing body of the Organization or the satellite telecommunications
 agency, as the case may be.

(d) (1) (A) (i) Except as provided in paragraph (2), the corporation shall be the sole owner and operator of any satellite earth terminal station in the United States which provides access to the space segment. *Except*

as provided in clause (ii) and paragraph (2) / the corporation shall own / not more than 50 percent of the assets of any such station /

Any / The corporation shall be entitled to own any portion of the net earnings of the assets of any satellite earth terminal station which is / not allocated by the Commission under subparagraph (B) / except that the Commission shall retain the authority to allocate such percentages of any / time during the operation of the station as needed.

(B) / The Commission may authorize domestic communication / inter- national communication carriers / and private communications systems / other / than any common carrier / system / to other entity in which the corporation has any ownership interest to own not more than 50 percent of the assets of any satellite earth terminal station if such carriers or systems are authorized to interconnect with such station.

(2) Any person including any government or government agency, may be the sole owner of a satellite earth terminal station if such person, government, or government agency uses, or permits or otherwise authorizes the use of, such station for the exclusive purpose

of training personnel in the use of equipment associated with the operation of such station, or in carrying out experimentation relating to maritime satellite telecommunications services.

(e) The corporation shall undertake to reach agreement with interested international and domestic common carriers upon the financial and operational arrangements under which the corporation shall interconnect its satellite earth terminal station facilities with United States domestic common carriers and international common carriers. In the event that no such agreement can be reached, the Commission shall prescribe, pursuant to section 201 of the Communications Act of 1934, as amended, (47 USC 201) ~~determine~~ the financial and operational arrangements under which the corporation shall interconnect its satellite earth terminal station facilities and services with such United States domestic common carriers and international common carriers ~~and private communications systems or other carrier system, or other entity, to which the corporation has any ownership interest~~ for the purpose of extending maritime mobile satellite telecommunications services within the United States. Such prescription ~~determination~~ shall be made by the Commission

no later than 6 months after the date of formal request, by any party to such prior negotiations, for such Commission action. ~~the enactment of this Act, and the Commission shall transmit a report relating to such determination to the Congress.~~

(f) Notwithstanding any provision of State law, the articles of incorporation of the corporation shall provide for the continued ability of the board of directors of the corporation to transact business under such circumstances of national emergency as the President or his delegate may determine would not permit a prompt meeting of the number of directors otherwise required to transact business.

IMPLEMENTATION OF POLICY

SEC. 4. (a) The President shall --

(1) exercise such supervision over, and provide for the issuance of such instructions to, the corporation in connection with its relationships and activities with foreign governments and international entities and other organizations (including the Organization or the satellite telecommunications agency, as the case may be) as may be necessary to ensure that such relationships and activities are consistent with the national interest and foreign policy of the United States.

(2) coordinate the activities of Federal agencies with responsibilities in the field of telecommunications (other than the Commission), so as to ensure that there is full and effective compliance with the provisions of this Act;

(3) take all necessary steps to ensure the availability and appropriate utilization of the telecommunications services provided by the Organization or by the satellite telecommunications agency, as the case may be, for general governmental purposes, except in any case in which a separate telecommunications system is required to meet unique governmental needs or is otherwise required in the national interest; and

(4) exercise his authority in a manner which seeks to obtain coordinated and efficient use of the electromagnetic spectrum and orbital space, and to ensure the technical compatibility of the space segment with existing communications facilities in the United States and in foreign countries.

(b) The Commission shall --

(1) institute such proceedings as may be necessary to carry out the provisions of section 3(b) and section 3(e);

(2) make recommendations to the President for the purpose of assisting the President in issuing instructions to the corporation under subsection

(a) (1), which recommendations shall be a matter of public record and available for inspection by any interested person;

(3) grant such authorizations as may be necessary under title II and title III of the Communications Act of 1934 to enable the corporation --

(A) to provide to the public maritime telecommunications services, in accordance with section 3(b)(1)(B), space/segment channels of communication obtained from the Organization or from the satellite telecommunications agency, as the case may be, and

(B) to construct and operate such satellite earth terminal stations in the United States as may be necessary to provide sufficient access to the space segment;

(4) establish procedures to provide for the continuing review of the telecommunications activities of the corporation as the United States signatory to the operating agreement or other pertinent instruments;

(5) establish rules and procedures under which the Commission --

(A) in determining whether to modify any license for public maritime coast station services to provide for the addition of radio frequencies, shall not take into account any impact which

the provision of maritime satellite telecommunications services may have upon the provision of public maritime coast station services; and

(B) in determining whether to modify any license for maritime satellite telecommunications services to provide for the addition of frequencies, shall not take into account any impact which the provision of public maritime coast station services may have upon the provision of maritime satellite telecommunications services; and

(6) prescribe such rules as may be necessary to carry out the provisions of this Act.

STUDY OF STRUCTURE AND ACTIVITIES OF COMMUNICATIONS SATELLITE CORPORATION

SEC. 5. (a) The Commission shall conduct a study of the corporate structure and operating activities of the corporation, with a view toward determining whether any changes are required to ensure that the corporation is able to effectively fulfill its obligations and

carry out its functions under this Act, the Communications Act of 1934, and the Communications Satellite Act of 1962.

(b) The Commission shall transmit a report to the Congress no later than 6 months after the date of the enactment of this Act

relating to the study of the corporation conducted under subsection

(a). Such report shall contain a detailed statement of the findings and conclusions of such study, any action taken by the Commission related to such findings and conclusions, and any recommendations of the Commission for such legislative or other action as the Commission considers necessary or appropriate.

STUDY OF PUBLIC MARITIME COAST STATION SERVICES

SEC. 5 (a) The Commission shall conduct a study of public maritime coast station services, with particular emphasis on high seas services, with a view toward determining whether the rules and regulations of the Commission and the assignment of licenses and radio frequencies in effect on the date of the enactment of this Act should be subject to any alteration in order to establish a systematic approach for the provision of modern and effective maritime telecommunications systems. The Commission shall make specific inquiry into whether the establishment of such a systematic approach shall include the acquisition by the corporation of the licenses, assets and facilities of public maritime coast stations.

(b) The Commission shall transmit a report to the Congress no later than 6 months after the date of the enactment of this Act relating to the study of public maritime coast station services conducted under subsection (a). Such report shall contain a detailed statement of the findings and conclusions of such study, any action taken by the Commission related to such findings and conclusions, and any recommendations of the Commission for such legislative or other action as the Commission considers necessary or appropriate.

DEFINITIONS

SEC. 7. For purposes of this Act --

- (1) the term "Commission" means the Federal Communications Commission;
- (2) the term "common carrier" has the meaning given it in section 3 (h) of the Communications Act of 1934;
- (3) the term "corporation" means the maritime telecommunications corporation authorized to be created under section 3(a)(1)(A) of the Communications Act of 1934.
- (4) the term "foreign correspondent" means an entity designated by any foreign country to be the signatory of the operating agreement or any other pertinent instrument of the Organization or the satellite telecommunications agency in the case of any;
- (5) the term "operating agreement" means the operating agreement relating to the Organization;
- (6) the term "Organization" means the International Maritime Satellite Organization (INMARSAT);
- (7) the term "satellite earth terminal station" means a complex of communications equipment located on land, operationally interconnected with one or more terrestrial communications systems, and capable of transmitting telecommunications to, or receiving telecommunications from, the space segment;

(8) the term "satellite telecommunications agency" means any agency referred to in section 3(a) (1) (A) (ii) in which the corporation participates as the designated operating entity of the United States;

(9) the term "space segment" means any satellite maintained under the authority of the Organization, or the satellite telecommunications agency, as the case may be, and the tracking, telemetry, command, control, monitoring, and related facilities and equipment required to support the operation of such satellite; and

(10) the term "State" means the several States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands, the Trust Territory of the Pacific Islands, and any other territory or possession of the United States.

Mr. VAN DEERLIN. Thank you, Mr. White.

I suppose we will, as we did before, defer questions until everyone on the panel has spoken. I would raise only the point concerning your testimony. On page 7, you do seem to suggest that the bill under consideration, H.R. 11209, extends a monopoly franchise on the provision of services which I think a reading of the bill does not support, but we will get to that later, perhaps.

Mr. WHITE. I would be pleased to answer that when you are ready, sir.

Mr. VAN DEERLIN. Dr. Charyk?

**STATEMENT OF JOSEPH V. CHARYK, PH. D., PRESIDENT,
COMMUNICATIONS SATELLITE CORP. (COMSAT).**

Mr. CHARYK. Thank you, Mr. Chairman.

With your permission, I would like to submit my statement for the record and to make a series of comments on the essential elements of that testimony.

Comsat is most pleased that this committee has introduced a bill which will permit the development of commercial maritime communications satellite services to proceed on a sound basis. We think the clarification of the organizational arrangements and the designation of the U.S. entity is critical at this point.

As you know, we have in operation now, a Marisat system which has been growing steadily. We have satellites over three ocean areas. There are, at the present time, 106 ships equipped with terminals to operate with the Marisat system. The original system of satellites has at best a 5-year lifetime. The marketing effort is now critically dependent upon being able to convince the customer that he can look ahead to continuity of service. Continuity of service, in turn, means that plans must be completed for a follow-on system of satellites and ultimately an Inmarsat set of satellites.

We do not believe it is now possible for an Inmarsat organization to come into being and have its own set of satellites in the available time frame before the demise of the Marisat satellites. This means that interim arrangements are going to have to be made to ensure continuity of service between the present Marisat system and an ultimate Inmarsat system. It is critically important, in our judgment, that the United States play a significant role in developing the nature of this interim system and the characteristics of the ultimate Inmarsat system. The United States must play a leading role in both the interim and the Inmarsat system.

This clearly is not possible unless, first of all, the United States has decided it is committed to the Inmarsat system and has designated its participant. We believe that on the whole, H.R. 11209 establishes a sound basis for U.S. participation in appropriate international arrangements for the conduct of global maritime satellite communications. We appreciate the confidence placed in Comsat by this bill, and we welcome the challenge. We feel it establishes a basis for prompt, effective decisionmaking. We do not think that this kind of a business can be run through a committee operation. It requires a clear designation. This bill makes the responsibility clear; we think this is the way this business must proceed, since it will have to be conducted in a vigorous manner and on an international scale of some magnitude.

Many of the the arguments that we hear today about this question are restatements of the same old arguments we heard way back in 1962, when the United States was deciding the manner in which it should proceed to develop a global communications satellite system. At that time we heard all of the same arguments, and then a decision was made to establish a new organization which turned out to be Comsat. The carriers were offered a 50 percent ownership in that organization. Most of them originally subscribed. Many of them subsequently have sold their shares at a substantial profit, but the principles that went into that decision we think were sound. The decisions that the Congress made at that time were sound.

We enunciated at that time a U.S. policy. We declared that it was the purpose of the United States to establish, to take a leadership role in creating a global communications satellite system, and a new entity was designated to do that job. We think that the results speak for themselves.

In the 15-year period since the system came into being, 101 nations have become involved in the Intelsat system. The traffic is growing at between 20 and 25 percent per year. It is undoubtedly the most successful commercial international joint venture ever undertaken. We have 101 nations participating. We have not a nickel of the taxpayers' money in the system. The system operates at a profit, and each country makes its appropriate financial contribution.

Fundamentally we have no financial delinquents. I think the reasons for that are twofold. First of all, is the fact that communications satellites can offer a unique and important service. Second, with the U.S. determination to exert a leadership role and to establish a sound foundation through that leadership role, we were able to move out and develop the necessary arrangements, set in motion the necessary decisions, and take the necessary actions. The result is the most successful—international joint venture system of its type ever evolved.

We are at a crossroads now in the maritime system. I think the United States has lagged in developing the cause of maritime satellite communications. The leadership role is now frankly in other hands. There is a meeting that is to take place in Europe next week, largely at the initiative of other countries. The United States will not participate in that meeting. It will not participate because the United States has not made a decision yet as to whether it will participate in Inmarsat, and if so, who will be representing the United States.

I think that this is most unfortunate, because the kinds of decisions that will be made undoubtedly will be in the direction of using probably European made satellites, possibly European launch vehicles. As a matter of fact, the Soviet Union has made a suggestion that it might launch the interim set of satellites. In the meantime, the United States is not even represented in these kinds of discussions, because the participating entity decision has not been made. So, I think it is a very important matter and I think this committee should be applauded for its initiative in introducing this legislation, and I hope action can proceed on a vigorous basis.

We think that the bill on the whole sets a sound basis for the United States to move ahead. We have a reservation in the sense that we think the Earth station and the space segment should be a common responsibility. That is not precluded by the legislation, but it does leave a decision as to the Earth station ownership to the Federal Communications Commission. It means that there will have to be protracted proceedings, and we think the last thing we need at this stage of the game is further delay. We think it is important that if the venture is ultimately successful, that the investment that is made in the system and the money at risk will ultimately be recognized in the form of a reasonable return to the investors.

We think that that is a principle which is sound and probably should be reflected in the legislation. The fact that an important marketing job is required is rather critical. New kinds of services must be instituted. New kinds of arrangements must be made. New kinds of planning must be undertaken by the participating companies in order to take the maximum advantage of this new medium.

We think that the initiative for providing new kinds of services is a critical one. As we see it, this bill opens up the opportunity for everyone to participate in that aspect, but places the satellite facilities through participation in Inmarsat in a single entity. This establishes a sound basis for decisionmaking and for the execution of necessary decisions and for a strong U.S. voice in the international arena.

We strongly support the enactment of this legislation for the reasons I have indicated. We think it is most timely that a decision is made in this area so that the United States can move ahead in a vigorous role. We think that Comsat's experience in the Intelsat system over the past 17 years can be utilized to advantage in this new undertaking, and we think that the Earth station and space segment should be under a common responsibility, as it is in every other nation in the world, both in the Intelsat system and in the projected Inmarsat system. The participation in the space segment and the ownership in the shore stations will be in common hands in all participating nations with the possible exception of the United States. We see no reason for making that kind of an exception in this case.

Thank you, Mr. Chairman.

[Mr. Charyk's prepared statement follows:]

STATEMENT OF DR. JOSEPH V. CHARYK, PRESIDENT, COMMUNICATIONS SATELLITE CORP.

On behalf of the Communications Satellite Corporation (Comsat), we are pleased to have this opportunity to provide comments to the Subcommittee on Communications on H.R. 11209, a Bill to provide for the establishment, ownership, operation and governmental oversight and regulation of international maritime satellite telecommunications services.

The enactment of legislation as proposed by H.R. 11209 is most critical at this point. It would appear that a fully functioning INMARSAT system cannot possibly be in operation prior to the expiration of life of the present generation of MARISAT satellites. Comsat and COMSAT General have been engaged in the active consideration of several possible maritime satellite communications system concepts looking towards a second generation of maritime satellites. Since it is essential that some arrangement be made for an economically viable capability which can meet the market demands during this transitional phase, clarification of the organizational arrangements for the permanent solution through appropriate legislation is vital

now. Intermediate arrangements can then be pursued in a much more effective manner if they can be planned to mesh with INMARSAT plans and programs. The most effective leadership for such an intermediate solution would obviously result if these efforts were managed by the same entity that would be responsible for the U.S. participation in INMARSAT. Continuing uncertainty and ambiguity about U.S. participation in INMARSAT has inhibited the United States from assuming the kind of leadership role that it logically ought to play in developing plans for an international global maritime communications satellite activity. Speedy passage of appropriate authorizing legislation would cure this significant defect.

Based on our review of H.R. 11209, and subject of clarification of the intent of certain provisions, we believe that the Bill establishes a sound basis for future United States participation in appropriate international arrangements for the conduct of global maritime satellite communication. Comsat appreciates the confidence that is placed in it by the Bill's provisions, and welcomes the challenges that participation in this important field will offer.

The designation of Comsat as the U.S. entity in the international arrangements is a natural extension of the principle reflected in the Communications Satellite Act of 1962 and gives recognition to the leading role played by Comsat in contributing to the acknowledged success of the INTELSAT system. The approach of H.R. 11209 is also well founded in terms of the pivotal position which Comsat and its wholly owned subsidiary, COMSAT General Corporation, have exercised as the driving forces behind the development of maritime satellite communications.

Comsat has been heavily involved in the subject of international maritime satellite communications for many years. We have studied the technical, financial and operational considerations associated with this evolving sector of the communications industry in carrying out our functions as the United States signatory in INTELSAT and as INTELSAT's Manager.

Of even greater practical importance, COMSAT General Corporation, in 1973, designed and pioneered an advanced maritime satellite system concept for the provision of both communications capacity to the United States Navy and commercial maritime communications services to shipping and offshore users. This system, known as MARISAT, was deployed successfully in 1976. The MARISAT System consists of three in-orbit satellites located over the Atlantic, Pacific and Indian Oceans, together with ground communications and control facilities located in the United States and abroad. Commercial maritime satellite communications are now available in the Atlantic, Pacific and Western Indian Ocean regions and are expected to commence this summer in the entire Indian Ocean region through a shore station being constructed by the Japanese.

Although the Federal Communications Commission ("Commission") afforded all U.S. maritime carriers an opportunity to invest in equal shares in the MARISAT System with COMSAT General, only RCA, WUI and ITT came forward and subscribed to ownership shares totalling in the aggregate less than 14 percent. COMSAT General assumed an 86.29 percent ownership share of the MARISAT System and, accordingly, has shouldered 86.29 percent of both the capital costs and the O&M expenditures related to the MARISAT program. These costs and expenditures well exceed \$100 million and represent a major assumption of risk by COMSAT General. In addition, as MARISAT Manager, COMSAT General technical personnel established the MARISAT System, and COMSAT General operations personnel now operate its space and ground communications facilities.

We are proud of the stewardship entrusted to Comsat and COMSAT General for the development of maritime satellite communications. As stated in a letter from the President of the United States to the President of COMSAT General on the occasion of the launch of the first MARISAT satellite:

Today's launch of the world's first communications satellite dedicated to maritime use represents a significant step forward in bringing modern communications capabilities to our nation's naval and commercial shipping interests.

Our economy and our national defense are fundamentally dependent on our commercial and military maritime fleet which guards our shores and provides our most important vehicle for international trade and commerce. Until now, our maritime industry has had to tolerate slow and inefficient communications because of limitations of conventional technology. In an age where satellites have provided the ability for instantaneous global communications, it is both timely and appropriate that this new technology be made available to our maritime interests. It will surely result in more efficient and economical shipping operations, as well as savings in both lives and property.

The launch of this new satellite is representative of the genius and creativity of the American people. It is yet another example of our success in harnessing technology to improve our way of life. The information and experience gained from this

venture should be of great value to other nations as we begin to plan jointly for similar satellite services on an international basis.

I proudly applaud this new innovation in communications satellite technology. We firmly believe that the approach taken in H.R. 11209 is based on a pragmatic recognition of the effectiveness of authorizing a single entity to represent U.S. interests in an international organization providing satellite services. The success of the INTELSAT System, in our view, can be attributed in large measure to the ability of the United States to move rapidly and decisively through a single company, Comsat, in implementing United States policy objectives. We believe Comsat is the logical choice to discharge this responsibility in any international maritime satellite organization in light of our long experience in INTELSAT and based on the predominant role of COMSAT General in MARISAT.

Although Comsat strongly supports H.R. 11209, we have identified several problem areas in the legislation which we would like to outline briefly, in the expectation that they can be minimized or eliminated in the final Bill.

Our principal concern centers on the expectation that the volume of satellite communications traffic generated by the maritime community is estimated to produce a return that will fall short of the compensatory revenue requirement associated with a maritime satellite system dedicated exclusively to commercial use, at least during the start-up years of operation. The international owners of the maritime satellite system will be required to sink substantial capital, as well as O&M costs into the program. According to projections, these investments will not be reasonably compensated for several years until a mature stage of market development is achieved. This investment picture is the result of embarking upon a capital-intensive undertaking which involves the establishment of high cost dedicated satellite facilities to serve an embryonic market that must be built up gradually and can only be expanded as users are themselves persuaded to spend appreciable funds to acquire shipboard terminal equipment. These market characteristics obviously constitute an important factor that must be taken into account by a potential investor.

As a private company with shareholders, Comsat must, of course, make prudent investments. Over the past two years, in correspondence with the Commission, the Executive Branch and the staff of this Subcommittee, we have emphasized the importance of an advance satisfactory solution to the problem of insufficient earnings during the start-up years. The particular solution determined will, of course, be largely dependent on the ultimate regulatory framework devised for providing international maritime satellite communications services. At any rate, we believe the carrier investing in this project should be given adequate assurance that it will be afforded a reasonable opportunity to recover investment and to earn a fair rate of return on investment. Various solutions to this problem are possible. We believe it important for the Congress to address this problem in order to assure that a reasonable solution emerges.

A second major area which warrants clarification centers on the relationship between Comsat as space segment operator and those other companies authorized to extend Comsat's services inland through interconnection arrangements. In our view, H.R. 11209 provides that Comsat and the terrestrial carriers would stand in the traditional relationship of connecting or participating carriers from the provision of a through service. We believe this is a particularly sound approach in the commercial maritime satellite communications field where the marketing function is especially important due to the need to stimulate market demand in order to place maritime satellite communications on a viable economic footing. We firmly believe that this substantive responsibility for marketing maritime satellite communications, which Comsat is to exercise, is beneficial since Comsat will bear the appreciable investment risks associated with the space segment and will have the principal incentive to promote expanded public acceptance of maritime satellite communications services.

Another area which requires clarification relates to the nature of the services to be provided by the system. We refer to use in the Bill of the phrase "global maritime mobile telecommunications services" (emphasis supplied). This phrase raises the question of whether the Bill is broad enough to authorize the provision of services to fixed maritime stations, such as oil production platforms, and to aircraft. The Inmarsat arrangements retain flexibility to permit the provision of such services and we believe that the language of the Bill should allow Comsat to offer a scope of services of equal latitude.

We note further that Inmarsat or any other international agency may provide for the rendition of safety and radio-determination services via commercial satellite facilities. These services are non-compensatory in nature and have traditionally been offered under government sponsorship and responsibility. We believe that the

final Bill should address the question of responsibility for financial obligations related to safety and radio-determination services.

Our final major observation on H.R. 11209 is the provision in Section 5 for a study by the Commission of the corporate structure and operating activities of Comsat. We question the need for additional legislation on this matter. The Satellite Act of 1962 already provides ample authority for the Commission to study the activities of Comsat to assure the effective implementation of its responsibilities under that Act, and the Communications Act of 1934 provides the Commission with authority to inquire into the management and business conducted by carriers such as Comsat. Moreover, various other agencies of Government are vested under the Satellite Act an under this Bill with additional oversight responsibilities for Comsat's activities.

In addition, we note that the language of Section 5 would not only provide that the study would lead to findings, conclusions and recommendations to be contained in a report to the Congress, but also implicitly authorizes the Commission to take actions related to its findings and conclusions prior to any legislative action. We wonder if Congress intends specifically to authorize the Commission to direct potentially extensive changes in Comsat's corporate structure and activities in the absence of legislation.

Mr. Chairman, in closing I would like to reemphasize Comsat's strong support for H.R. 11209. We would welcome its enactment as a basis for initiative and action in this complicated but vital, area of satellite communications services. While we believe that the matters we have noted with concern require further consideration, Comsat is prepared to apply its full energies and its long experience in the field of satellite communications to this effort. Because we have already established and currently operate the only existing maritime satellite system, our future intentions are of crucial interest and importance to potential foreign participants in follow-on maritime systems. We have an opportunity now to continue our leadership. We urge the Congress to proceed with this legislation as expeditiously as possible toward that end.

Mr. VAN DEERLIN. All right. Mr. DeRosa?

STATEMENT OF FRANCIS J. DeROSA, VICE PRESIDENT AND GENERAL COUNSEL, RCA GLOBAL COMMUNICATIONS, INC., ACCOMPANIED BY JOHN McKENNA, VICE PRESIDENT OF MARINE SERVICES

Mr. DeROSA. Good morning.

Mr. Chairman, members of the subcommittee, my name is Frank DeRosa, and I am vice president and general counsel of RCA Global Communications. I am accompanied this morning by John McKenna, RCA Globcom's vice president of marine services. We have submitted a prepared statement, and I would like to highlight several of the points which we consider to be most significant.

We are concerned that the current legislation which vests exclusive control of future maritime satellite systems in Comsat will materially alter the structure of our industry by effectively excluding us from meaningful participation in the maritime satellite business we hope to establish and develop. We are also concerned by the effect this bill will have on existing maritime communications systems in which we have a significant investment.

We believe the primary responsibility for maritime satellite communications should be left in the hands of the U.S. maritime communications industry. We recommend that the proposed legislation be amended to substitute for Comsat as a designated entity in Inmarsat a partnership of U.S. entities now engaged in the provision of high seas maritime communications, or alternatively a new corporation to be owned by such entities. The mechanics of setting up such an organization can readily be worked out by the FCC, which we would expect would also exercise continuing juris-

diction over its activities pursuant to such guidelines as may be established by the Congress.

There is no need to turn to Comsat at this juncture to supply maritime satellite facilities and services. Comsat was not created to, nor should it probably be allowed to, preempt services traditionally provided to the public by existing segments of the communications industry. The existing carriers in this field have met the public's needs in the past and have shown a continuing interest in meeting those needs for the future.

Comsat, on the other hand, has never provided radio marine service, and has no present direct involvement in such service. There is simply no need whatsoever to look at Comsat to supply future maritime satellite services and facilities. Primary responsibility for maritime and satellite communications should be left in the hands of the U.S. maritime communications industry for the following additional reasons.

The maritime market is presently limited in size. It is not likely to increase appreciably in the years ahead. While public coast operations will have to be continued for many years to come, the ability therefore to maintain existing services will be directly affected by the passage of legislation excluding us from future maritime satellite programs. Pending establishment of Inmarsat maritime communications, the maritime community must be assured continued access to maritime satellite service to a system technically compatible with existing shipboard terminal equipment.

The designation of Comsat to represent the United States in Inmarsat could lead to a substantial conflict of interest with its present Intelsat duties, and as in the past, raises questions of cross-subsidy of non-Intelsat-related ventures.

Last, difficulty to date in effectively regulating Comsat has been a cause of concern both to this subcommittee and to the FCC. Giving Comsat a larger role to play prior to addressing this basic issue will only worsen the problem.

Without prejudice to our position set out above, under no circumstances should Comsat be given sole control of the U.S. share of Inmarsat, and also serve the public directly, bypassing the existing maritime carriers. Certainly there is no basis to warrant granting Comsat control of the essential facilities for maritime satellites, and also giving it a built-in competitive advantage by legislative fiat over the carriers which have traditionally supplied and supported the maritime service.

H.R. 11209 further does not appear to limit Comsat's role to that of a carrier's carrier. It appears to have dispensed with the policy of authorized user, thus Comsat is allowed to serve the large users directly, provided non-Comsat-owned facilities are employed to reach the earth stations. If Comsat is selected as a chosen instrument to serve as a designated U.S. entity, the bill should not alter existing industry arrangements by permitting Comsat to compete directly with the maritime carriers.

Permitting Comsat to serve the domestic maritime users directly or by means of interconnection with domestic carriers would disserve the public, since the existing marine carriers which supply the bulk of the nation's high seas maritime communications would still be providing high frequency service.

We expect, indeed, that such service will be required well past the year 2000. The present bill in fact represents a major restructuring of the marine industry, and indeed could threaten the structure of the entire international voice record industry. We accordingly urge you to amend the bill to provide for a partnership or a new corporation to be financed by existing maritime carriers to be the U.S.-designated entity in Inmarsat.

Such action would better serve the interests of the using public and, we believe, help assure the maintenance of a healthy, viable U.S. maritime communications industry.

Thank you.

[Mr. DeRosa's prepared statement follows:]

STATEMENT OF FRANCIS J. DEROSA

Mr. Chairman and members of the Subcommittee, my name is Francis J. DeRosa. I am Vice President and General Counsel of RCA Global Communications. I am accompanied today by John McKenna who is RCA Globcom's Vice President, Marine Services. I am pleased to be able to appear before you to present my Company's views on pending legislative proposals to govern U.S. participation in INMARSAT.

RCA Globcom has provided communications services between the U.S. and ships at sea for nearly sixty years by means of high frequency radio through public coast stations which we own and operate. It is also a member of the consortium of U.S. companies which financed and developed Marisat, the first commercial maritime satellite system. Marisat has been in operation since 1976 to meet requirements of the U.S. Navy and commercial shipping for satellite communications, together with other interested U.S. common carriers, we are now actively exploring plans to provide for a second generation Marisat system which is necessary to assure continuity of service to maritime users pending the establishment of INMARSAT. RCA Globcom participated in the INMARSAT planning meetings held in the United States under the auspices of the State Department and OTP and has been represented at every international INMARSAT conference since the program's inception. These activities and the expenditures we have already made in connection with them are indicative of our interest in the success of INMARSAT.

In light of our pioneering efforts in applying both radio and satellite technology to meet the needs of the public for maritime communications, we are concerned by H.R. 11209 which would turn over to COMSAT exclusive control of future maritime satellite systems. If enacted, this Bill would materially alter the structure of our industry and effectively exclude us from continued meaningful participation in the maritime satellite business we helped to establish and develop. RCA Globcom is also concerned by the effect this bill will have on existing maritime communications systems in which we have a significant investment.

RCA Globcom believes that primary responsibility for maritime satellite communications should properly be left in the hands of the U.S. maritime communications industry. We therefore strongly recommend that H.R. 11209 be amended to substitute for COMSAT as the designated entity in INMARSAT a partnership of U.S. entities now engaged in the provision of high seas maritime communications or, alternatively, a new corporation to be owned by such entities. The mechanics of setting up such an organization can readily be worked out by the FCC which would also exercise jurisdiction over its activities, pursuant to such guidelines as Congress may elect to establish.

We believe the new carrier-owned entity should operate both the U.S. share of the INMARSAT space segment and the associated U.S. earth stations as well as provide maritime satellite service to the public. We believe there are significant advantages in allowing the new entity to serve the public rather than to act as a "carrier's carrier" in terms of making this venture an attractive investment to industry given the limited size of the maritime market. We think this approach is preferable to that contained in the Administration draft Bill of September 9 as well as in H.R. 11209.

The U.S. maritime communications industry has the requisite skills, expertise and financial resources to participate in the planning and operation of INMARSAT on behalf of the U.S. and has provided tangible evidence of those abilities through the Marisat program. The existing carriers in this field have met the public's needs in the past and have shown a continuing interest in meeting those needs for the

future. Comsat, on the other hand, has never provided radiomarine service and has no direct present involvement in maritime satellite service. Under the circumstances, there simply is no need to look to COMSAT to supply future maritime satellite facilities and services.

To the maximum feasible extent, Congress should as a matter of policy encourage rather than discourage ownership by common carriers of the facilities which they use to serve the public. It is the carriers to which the end users look for total service responsibility. The public has received numerous benefits from the many improvements in both maritime and point-to-point communications resulting from the ongoing activities of our industry. For example, RCA Globcom not only offers telex service to ships at sea via both HF radio and Marisat but has extended the latest state-of-the-art service enhancements to the maritime telex service, such as store-and-forward capability and automatic retry of a busy number, which we introduced in the international point-to-point market.

COMSAT was not created to—nor should it properly be allowed to—preempt services traditionally provided to the public by existing segments of the communications industry. The Subcommittee should recognize that the situation which existed at the time COMSAT was originally formed was unique and no longer obtains. Satellite technology long ago emerged from its infancy and its uses today are widespread.

We see no persuasive public policy reason to mandate expansion of COMSAT's role into maritime satellite communications. To the contrary, we perceive compelling policy reasons, particularly in light of recent experience and announced FCC policy, for limiting rather than enlarging COMSAT's future participation in satellite projects outside of Intelsat.

First, the maritime market is presently limited in size and is not likely to increase appreciably in the years ahead. This is unlike the market for point-to-point communications which has been growing steadily. Public coast station operations will have to be continued by the maritime communications industry for many years to come and provision must be made this year for the next phase of the current Marisat program to avoid a gap in available satellite communications to the public. The ability to maintain existing services, as well as decisions to commit funding to new satellite programs by the industry, will be directly affected by the passage of legislation which would turn over to COMSAT control of the U.S. share of future commercial maritime satellite programs.

Second, the Subcommittee should take into account the fact that, pending the establishment of INMARSAT, the maritime community must be assured of continued access to maritime satellite service through a system which is technically compatible with existing ship-board terminal equipment. Measures should not be adopted now which could act as a deterrent to the industry from proceeding with plans for a follow-on to Marisat or create doubt in the mind of the public regarding the availability of maritime satellite service.

Third, the designation of COMSAT to represent the United States in INMARSAT could lead to a substantial conflict of interest with its present Intelsat duties. COMSAT today by statute is the sole U.S. representative in Intelsat and is the sole supplier of Intelsat space segment facilities used by the U.S. communications industry. COMSAT and Intelsat have proposed a system for INMARSAT which would involve the use of the Intelsat satellites. If COMSAT were named the designated entity to INMARSAT, it could use its position to favor a system associated with Intelsat, in which it already has a substantial vested interest rather than some other arrangement which might be more suitable for INMARSAT purposes.

In the past when similar questions arose with regard to COMSAT's involvement in non-Intelsat ventures including Marisat I the FCC sought to ensure that COMSAT retained adequate resources to meet its responsibilities as the designated entity for international communications facilities and services through its participation in Intelsat. It required COMSAT to form a separate corporate entity in order to limit the extent of liability and to insulate COMSAT from involvement in other ventures. The basic result the FCC was trying to achieve was to separate the various non-Intelsat satellite ventures of COMSAT and Comsat General and to ensure that COMSAT would at all times retain sufficient funds and capability to discharge fully its exclusive responsibilities to Intelsat imposed upon it by the Communications Satellite Act of 1962. The FCC was also particularly concerned that the various ventures of Comsat General should not be subsidized by COMSAT's exclusive Intelsat operations.

Finally, the difficulty to date in effectively regulating COMSAT has been a cause of concern both to this Subcommittee and to the FCC. Giving COMSAT a larger role to play prior to addressing this basic issue will, in our view, only exacerbate the

problem. We believe provision must be made for effective oversight of COMSAT before expanding its functions.

Without prejudice to our position set out above, under no circumstances should COMSAT be given sole control of the U.S. share of INMARSAT and also serve large users directly by-passing the existing carriers. There is no basis to grant COMSAT control of the essential facilities for maritime satellite communications and also give it a built-in competitive advantage by legislative fiat over the carriers which have traditionally supplied and supported the maritime service.

However, H.R. 11209 does not appear to limit COMSAT's role to that of a "carrier's carrier" and has dispensed with the concept of "authorized user". Thus, COMSAT is not prohibited from serving the public directly, provided non-COMSAT-owned facilities are employed to reach the earth station. To the contrary, H.R. 11209 allows COMSAT to interconnect directly both with "domestic common carriers" and "private communications systems". Although the latter term was not defined in H.R. 11209, we presume it is intended to make it possible for COMSAT to serve the corporate networks of large end users, such as those of the major oil companies which operate tanker fleets.

If COMSAT is selected as the chosen instrument to serve as the designated U.S. entity, the Bill must not alter existing industry arrangements by permitting COMSAT to compete with others not so favored. To permit COMSAT to serve the domestic market either directly or by means of an interconnection with domestic carriers by satellite communications would disserve the public since RCA Globcom, and other international record carriers, which supply the bulk of the nation's high seas maritime communications via HF radio, would still be providing HF service. These carriers will be required to continue to maintain such facilities for the foreseeable future. COMSAT should not be allowed to exploit a monopoly over the latest technology to the detriment of the existing industry.

In conclusion, RCA Globcom does not believe that the present Bill, which would vest exclusive control of maritime satellites in COMSAT, represents the preferred or even an acceptable way to proceed in this area. At a minimum, we believe it would be premature to make a binding decision to place the future of maritime satellite communications in the hands of COMSAT until the study of COMSAT's organization and structure and the companion study of the public coast stations called for in the Bill are completed and the data supplied subjected to critical evaluation. A decision which could have the effect of restructuring an existing industry providing vital public services should be made only on the basis of complete data on the total industry.

We accordingly urge you to amend the Bill to provide for a partnership or new corporation to be financed by existing maritime carriers to be the U.S. "designated entity" in INMARSAT. Such action will better serve the interest of the using public and help assure the maintenance of a healthy, viable U.S. maritime communications industry.

Thank you very much.

Mr. VAN DEERLIN. Thank you, Mr. DeRosa.
Dr. Naleszkiewicz?

**STATEMENT OF WLADIMIR NALESZKIEWICZ, REPRESENTING
WILLIAM FISHMAN, NATIONAL TELECOMMUNICATIONS AND
INFORMATION ADMINISTRATION, DEPARTMENT OF COM-
MERCE, ACCOMPANIED BY GREG SKALL, COUNSEL**

Mr. NALESZKIEWICZ. Thank you, Mr. Chairman.

My name is Wladimir Naleszkiewicz, and I am appearing today as a substitute for Mr. Fishman, who is scheduled to testify. Unfortunately, the rescheduling of this hearing made it impossible for Mr. Fishman to be here due to a prior commitment to serve as the U.S. representative to an international meeting of the OECD in Paris. However, with your permission, sir, I would like to offer Mr. Fishman's written testimony for the record, and to summarize it here only briefly. Thank you, sir.

Prior to reorganization of the Office of Telecommunications Policy as the National Telecommunication and Information Administration, NTIA, I served as a senior economist with the Interna-

tional Telecommunications with OTP, and I have been intimately involved with Inmarsat matters for many years. Accordingly, I will be happy to respond to any questions the subcommittee may have or be helpful in any other way.

I have with me Mr. Greg Skall, who served as acting general counsel of OTP prior to the reorganization, who has been active in the development of the administration's Inmarsat legislation and who has continued to perform similar duties at NTIA.

Mr. Chairman, as a number of speakers have indicated, there have been active international efforts to provide maritime satellite service communications to ships for a number of years. Finally, in 1976, there was an opening for signature of instruments which would provide for establishment of international maritime satellite organization, Inmarsat. These instruments, consisting of a convention to be signed by governments and an operating agreement to be signed by either governments or their designated operating entities, provide the institutional basis for development of a global maritime mobile satellite telecommunications system.

It is our view that the Congress should provide legislative authority for participation by the United States in the international maritime satellite organization, Inmarsat, by, one, authorizing the U.S. Government to sign the convention, and two, by designating a U.S.-private-sector entity who will be authorized but not required to sign the Inmarsat operating agreement.

Furthermore, this legislation should provide for structuring of the entity so as to ensure competition in the provision of economical and efficient service to the user. At the same time, we feel that legislation should provide an incentive for private sector capital investment.

Finally, in recognition of the Government's responsibilities, national interest considerations, and foreign policy aspects involved in an international maritime satellite system, the legislation should provide for appropriate U.S. governmental oversight of the designated private entity.

Mr. Chairman, there are currently two bills before the House dealing with the subject matter of today's hearing, H.R. 9647, introduced by Congressman Staggers at the request of the administration last fall, and H.R. 11209, introduced last month by Mr. Staggers for himself, yourself, and others. Both bills provide authority for the United States to participate in Inmarsat, although we have a preference for the somewhat more affirmative language of H.R. 9647. It is our view that a private corporation should be the U.S.-designated entity for Inmarsat.

We feel that sound business judgment should govern the development and operation of international maritime services. We recognize that there are a number of alternatives to be considered in the selection of such a private corporation. Basically, the corporation must serve two functions, one, domestically, to provide, so far as feasible, a competitive climate for the provision of maritime satellite services, and two, internationally, to provide a focal and unitary mechanism for U.S. participation in the Inmarsat council.

Such a solution was advocated by the administration in H.R. 9647. It calls for the creation of a new corporation to be owned

initially by certified common carriers in proportions to be determined by the Federal Communications Commission.

This approach avoids extending the Comsat existing statutory monopoly into a new field. It permits any carrier with a desire to do so to invest in the new service provided that the FCC can be satisfied that such investment is in the public interest. It also spreads among a number of private companies the decision whether or not to join Inmarsat, and it minimizes the conflicts of interest on the individual corporate level that any single existing corporation might have.

Under the administration's proposal, the FCC would retain plenary jurisdiction over ownership in the entity in the first instance, and could restructure such ownership as the public interest requires from time to time. We believe it to be appropriate for the legislation to lay out the basic nature of the entity, whole leaving to the FCC the details of the intercorporate and other relationships between the entity and its constituent owners.

For these reasons, we urge the subcommittee to adopt the designated entity approach set out in H.R. 9647, section 5.

Insofar as the governmental oversight is concerned, and since the U.S. Government accepts no financial and operational responsibility for provision of Inmarsat services, the entity's position as the U.S. participant in an international organization is rather delicate, but at the same time it has to reflect and to be responsive to national policy and governmental problems designed to carry out governmental responsibilities and obligations; for instance, the safety of life at sea.

While the entity will be a private corporation, there remains areas of substantial governmental interest. Accordingly, in addition to the provision of traditional full regulatory authority of the FCC, we believe that provision should be included for Presidential oversight and coordination to ensure that institutional arrangements and operation and procedures that are responsive to national interests and consistent with the foreign policy of the United States.

Mr. Chairman, I understand that the H.R. 11209 was somehow changed, and some amendments were made in that particular part of the bill. Unfortunately, the U.S. mail being what it is, we have not received it yet. The question of Presidential oversight, Mr. Chairman, is very important in our view, and I know the provisions exist in both bills. H.R. 11209, with the adjustments, as counsel explained, would probably take care of our concern.

Furthermore, we have a slight problem in the text. We would suggest that in H.R. 11209, should H.R. 11209 be the prevailing text, language appearing in section 4(a)(6) of H.R. 9647, conferring certain war powers on the President, as in section 606 of the Communications Act of 1934, be added, Mr. Chairman.

In summary, we believe the structure of the entity should be sufficiently defined by legislation to ensure an effective, unified U.S. position, be responsive to both government and non-government needs, encourage maximum private sector participation, and commercial competition, and provide effective maritime service at minimum possible cost to the user.

We believe that the most effective path to accomplishment of this goal is creation of an new private corporation whose sole function would be that of serving as the U.S. Inmarsat entity.

Mr. Chairman, the instruments creating Inmarsat must be signed by the United States and by the other foreign entities no later than July 3, 1979. In the absence of such action by that date, Inmarsat would not come into existence since the subscription to the U.S. investment share is required for Inmarsat's creation.

Therefore, we urge rapid passage of enabling legislation along the lines described above.

Finally, Mr. Chairman, may I say that although we continue to believe that H.R. 9647 is essentially sound, we would be happy to work with the subcommittee in developing any modifications to the bill that might be appropriate at this time. Should the H.R. 11209 be the text that the committee wishes to adopt as the basic text, we would appreciate an opportunity to work out with the subcommittee or its staff certain difficulties we see in the present language.

Some of this is relatively minor in the structure of that bill. [Mr. Fishman's prepared statement follows:]

STATEMENT BY WILLIAM L. FISHMAN, NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. Chairman: My name is William L. Fishman, and I served as Assistant Director of the Office of Telecommunications Policy for International Communications prior to the reorganization of that Office as the National Telecommunications and Information Administration (NTIA), within the Department of Commerce. I expect to have special responsibilities for international policy issues in NTIA. I appreciate the opportunity to testify on the subject of maritime satellite telecommunications service and specifically to comment on pending legislation dealing with that subject.

Active international efforts to provide maritime mobile satellite telecommunications services to ships have been underway for a number of years and culminated in 1976 in the opening for signature of instruments which would provide for establishment of the International Maritime Satellite Organization (INMARSAT). These instruments, consisting of a Convention, to be signed by governments and an Operating Agreement to be signed by either governments or their designated operating entities, provide the institutional basis for development of a global maritime mobile satellite telecommunications system.

Specifically, the INMARSAT organization will be charged with making provision for the space segment necessary for providing maritime telecommunications, thereby assisting in improving distress and safety of life at sea communications, efficiency in management of ships, maritime public correspondence services and radiodetermination capabilities. To that end, telecommunications services may be provided by satellite for ships and other structures operating in the marine environment. Such services are not presently available through the International Telecommunications Satellite Organization (INTELSAT).

It is our view that the Congress should provide legislative authority for participation by the United States in the International Maritime Satellite Organization (INMARSAT) by authorizing the U.S. Government to sign the Convention, and by designating a U.S. private sector entity who would be authorized, but not required, to sign the INMARSAT Operating Agreement.

Specifically, any such legislation should meet several objectives. First, it should provide authority for the U.S. to enter into and accept governmental responsibilities incident to the INMARSAT Convention. Second, it should include authority for a specific private sector entity to participate as the sole U.S. designated entity in INMARSAT and as signatory to the INMARSAT Operating Agreement. Third, it should provide for structuring of the entity so as to insure competition in the provision of economical and efficient service to users. At the same time, the legislation should provide incentive for private sector capital investment. Finally, in recognition of the governmental responsibilities, national interest considerations and foreign policy aspects involved in an international maritime satellite system,

legislation should provide for appropriate U.S. governmental oversight of the designated private entity.

There are currently two bills before the House dealing with the subject matter of today's hearing: H.R. 9647, introduced by Congressmen Staggers and Devine at the request of the Administration last Fall, and H.R. 11209, introduced last month by Mr. Staggers for himself and others. Both bills provide authority for the U.S. to participate in INMARSAT, although we have a preference for the somewhat more affirmative language of H.R. 9647.

It is our view that a private corporation should be the U.S. designated entity for INMARSAT. The objective of such designation is to ensure that U.S. telecommunications investment decisions in INMARSAT are made in the private sector, and that sound business judgments govern the development and operation of international maritime satellite services.

We recognize that there are a number of alternatives to be considered in selection of such a private corporation. Basically, the corporation must serve two functions: domestically, to provide so far as feasible a competitive climate for the provision of maritime satellite services, and internationally, to provide a focused, unitary mechanism for U.S. representation in the INMARSAT Council.

With these objectives in mind, it is our considered judgment that the most desirable solution lies in the creation of a new private corporation. Such a solution was advocated by the Administration in H.R. 9647. It calls for the creation of a new corporation, to be owned initially by certified common carriers in proportions to be determined by the Federal Communications Commission. This approach avoids extending the Communications Satellite Corporation's existing statutory monopoly into a new field, permits any carrier with a desire to do so to invest in the new service provided the FCC can be satisfied such investment is in the public interest, spreads among a number of private companies the decision whether or not to join INMARSAT, and minimizes conflicts of interest on the individual corporate level. Under the Administration's proposal, the FCC would retain plenary jurisdiction over ownership in the entity in the first instance and could restructure such ownership as the public interest requires from time to time.

We believe it to be appropriate for the legislation to lay out the basic nature of the entity, while leaving to the Federal Communications Commission the details of the incorporate and other relationships between the entity and its constituent owners, as well as determination of other issues. It is our belief that such matters are best left to the expertise of the regulatory agency operating within the broad policy framework of permitting all eligible carriers, and, after five years, non-carriers to participate in ownership. For these reasons, we urge the Subcommittee to adopt the designated entity approach set out in H.R. 9647, sec. 5. As the Communications Satellite Corporation would not therefore receive a monopoly grant of authority, it bears emphasis that under the Administration's approach, the FCC could authorize an appropriate ownership share for Comsat.

Insofar as governmental oversight is concerned, it must be recognized that the entity will be the United States participant in an international organization which is established through an intergovernmental agreement. Although the U.S. Government accepts no financial or operational responsibility for the provision of INMARSAT services, the entity's position as the U.S. participant in an international organization makes it essential that it be responsive to national policy and to governmental programs designed to carry out the government's responsibilities and obligations.

While the entity will be a private corporation, there nevertheless remain areas of substantial governmental interest, particularly in view of the government's statutory as well as traditional role in providing maritime safety communications and navigation services. Moreover, the organization, implementation and operation of international satellite systems require a high level of government-to-government cooperation and accord. The designated entity will be the U.S. signatory in an international organization, casting votes and making decisions along with representatives of participating foreign governments. The national interest and foreign policy implications inherent in this arrangement call for clearly defined executive branch responsibility.

Accordingly, in addition to the provision of traditional full regulatory authority of the Federal Communications Commission, we believe that provisions should be included for Presidential oversight and coordination to assure that institutional arrangements and operational procedures are responsive to the national interests and consistent with the foreign policy objectives and commitments of the United States. This Presidential oversight should, of course, encompass the views of the FCC with respect to the issues addressed. Both of the bills currently before this subcommittee address this issue and although we have a preference for the lan-

guage in H.R. 9647, we believe the text of section 4(a) of H.R. 11209 would be sufficient if amended to reflect two additions: (1) a Presidential oversight function in regard to the development and planning of the system, analogous to that is provided for in the Communications Satellite Act of 1962, Section 201(a) (1); (2) language appearing in sec. 4(a) (6) of H.R. 9647, conferring certain war powers on the President as in sec. 606 of the Communications Act of 1934.

In summary, we believe the structure of the entity should be sufficiently defined by legislation to insure an effective, unified U.S. position in INMARSAT, responsive to both government and nongovernment needs, while at the same time encouraging maximum private sector participation and commercial competition in providing an effective maritime service at minimum possible cost to users. We believe that the most effective path to accomplishment of this goal is creation of a new private corporation whose sole function would be that of serving as the U.S. INMARSAT entity.

The instruments creating INMARSAT must be signed by the U.S. no later than July 3, 1979. In the absence of such action by that date, INMARSAT would not come into existence since subscription to the U.S. investment share is required for INMARSAT's creation. Given the many steps which must be taken to formally designate an entity and to have it in turn formally adhere to the Operating Agreement, should it decide to do so, we urge rapid passage of enabling legislation along the lines described above. To that end, we support passage of H.R. 9647, which was introduced at the request of the Administration last fall. We recognize, of course, that numerous events have transpired in the intervening period and that additional information may be developed in the course of these hearings. Although we continue to believe H.R. 9647 is essentially sound, we would be happy to work with the Subcommittee in developing any modifications to the bill that might be appropriate at this time.

Finally, Mr. Chairman, may I say that should the Subcommittee nevertheless decide to adopt the approach set out in H.R. 11209, we would appreciate an opportunity to work out with the Subcommittee or its staff certain difficulties we see in the present language and structure of that bill.

STATEMENT OF MARTIN W. BERCOVICI, COUNSEL, MOBILE MARINE RADIO, INC.

Mr. BERCOVICI. Mr. Chairman, members of the subcommittee, we have prepared and submitted a written statement. I will not take the time this morning to go over that in detail. I would like to observe that we are an independent common carrier. By independent, we mean that Mobile Marine Radio renders maritime telecommunications services, both telephony and telegraphy, as its sale service; it does not render those services as an adjunct to point to point or other services. Our comments are addressed to the issue of assuring that the development of international maritime satellite services does not foreclose the competitive opportunities for the independent carriers.

We have addressed several issues presented by the bill in our written comments, and I will rely upon them. Additionally, we were fortunate enough to receive a copy of the proposed changes to the H.R. 11209 text, and I would like to comment on one aspect of those proposed changes. Namely, section 3(g) proposes that the international record carriers be allowed to pick up and deliver maritime traffic at any point in the United States, in other words, limit the gateway concept for the purpose of this traffic.

This would indeed provide a new competitive dimension in the domestic leg of the service. In part, there is a proceeding before the FCC today, dealing with the Graphnet applications on extending the domestic pick up and delivery in this regard.

There is one aspect or facet of this that is troubling to Mobile Marine Radio. That is that the international record carriers engage in a concept of bundling in terms of their tie line delivery networks

which they utilize in their gateways. Those tie line networks are used for both maritime and point to point traffic without differentiation, and the cost of that network is absorbed, as far as the user is concerned, in the country to country message charge, as long as the user contributes or sends a sufficient amount of traffic via that carrier.

From the standpoint of the independent carrier attempting to render service, this provides a substantial competitive disadvantage. In the amended bill it is essentially proposed to allow extension of this tie line network. The issue of tie line network and the access to it is presently before the Federal Communications Commission in two proceedings, one specifically dealing with the maritime services.

We would like to suggest that any provision allowing the international carriers to extend their tie line delivery systems be subject to those situations in which there is Commission approval, and furthermore, to such regulations as the Commission may prescribe—consistent with the present provisions of section 222(a)(5) of the Communications Act.

We appreciate your allowing us to appear here this morning.
[Mobile Marine Radio's prepared statement follows:]

STATEMENT OF MOBILE MARINE RADIO, INC.

Mobile Marine Radio, Inc. (MMR), respectfully submits its views and comments concerning H.R. 11209, the International Maritime Telecommunications Satellite Act.

Mobile Marine Radio is the licensee of public coast Station WLO at Mobile, Ala. Station WLO is a common carrier licensed by the Federal Communications Commission and provides local, regional and international ("high seas") telecommunications services to the maritime community. Station WLO renders both telephony and telegraphy services; and in the latter category, WLO operates telegram, teleprinter and facsimile services. Station WLO is the only United States carrier which renders both high seas telegraphy and high seas telephony services.

Under its present management, MMR has dedicated more than 30 years to the provision of maritime common carrier telecommunications services. We are, accordingly, vitally interested in all developments and improvements concerning maritime communications, including the development of international maritime satellite telecommunications services.

To the extent its interests are directly affected, MMR finds H.R. 11209 to be an appropriate vehicle to structure the maritime satellite entity and to regulate maritime telecommunications services. Three provisions of the bill are of particular interest, namely the approach to the designated operating entity set forth in Section 3, the duties of the Federal Communications Commission under the Section 4 policy implementation and the public coast station services study mandated by Section 6.

As to the designated entity, Section 3(b)(1)(B) of the bill affords an independent carrier such as Mobile Marine Radio the opportunity to interconnect, and thus have the opportunity to provide service through the satellite when desired, on an equal basis with all other carriers. It is doubtful that MMR would have this option if, as has been alternatively suggested, the operating entity were a consortium of carriers and participation in the consortium is a condition of interconnection. This is important to MMR in that, as an independent carrier, it does not have what effectively is a subscriber base of customers, as do the International Record Carriers, which customers take service through a private line delivery network that provides direct access between the public coast station of such carriers and the customer's facilities. By contrast, MMR must compete for traffic solely on the basis of the service it renders. Given that the carriers handling the predominate portion of international maritime traffic are AT&T (voice traffic), ITT, RCA and TRT (record traffic), we believe it is especially important that the Congress assure that the development of an International Maritime Telecommunications Satellite entity, where Congressional authority is required, does not foreclose competitive opportunities for the independent carriers.

Secondly, we concur with and support the policy set forth at Section 4(b)(5) of H.R. 11209. The user must be afforded the opportunity to choose whether he desires to utilize terrestrial or satellite services. This is particularly important inasmuch as the cost will be substantially greater for both facilities and service via the satellite than via terrestrial coast stations. Section 4(b)(5) so reflects that the satellite and terrestrial services shall be separately considered for regulatory purposes and assures that the FCC will not attempt to influence the user's decision by limiting the availability of service through terrestrial stations. To fully enforce the policy represented, we would further suggest that Section 4(b)(5)(A) encompass spectrum allocations as well as station frequency assignments since the latter is wholly dependent upon the former.

Finally, we find the public coast station study mandated by Section 6 of the bill to be highly appropriate. While perhaps from a philosophical standpoint regulated entities should never be satisfied with the regulation imposed, we nonetheless feel frustrated with the manner in which the Commission has approached its function to regulate maritime common carrier service. To illustrate, the Commission has recently concluded, after a span of approximately six years, its Inquiry Into Public Coast Station Operations,¹ and has proposed what it considers to be certain remedial measures in a Notice of Proposed Rule Making, Interconnection and Upgrading of Public Coast Facilities providing Radiotelegraph Services.² While these proceedings look toward improving services and promoting more efficient operation of maritime telegraphy coast stations, in a separate proceeding, Changes in Frequencies, Operating Procedures, Technical Standards and Other Criteria,³ the Commission has declined to require that ships be equipped to operate in an efficient manner. Thus, while coast stations are being required to upgrade services, they must at the same time operate at the level of the least efficient ship station. Each end of the circuit, coast station and ship, is an integral part of the total service; however, regulation of each seems to be subject to differing policies. Specifically, the commission is permitting the use of first generation ship teleprinter equipment rather than requiring that ships employing teleprinter utilize the modern, operationally efficient and spectrum-saving ARQ (Automatic Repeat Request) and ITU-FEC (Forward Error Correcting) installations. Moreover, the Commission prescribed multi-frequency manual watch on calling channels by coast stations, thereby imposing burdensome and inefficient staffing requirements upon commission licensees.

Aside from the policy determinations, even the basic necessities of regulatory requirements seem to evade appropriate Commission attention. With respect to both high seas telegraphy and telephony services the Commission has waited until the proverbial "eleventh hour" to implement the frequency changes emanating from the 1974 World Maritime Administrative Radio Conference. That Conference allowed some 3 years advance notice, yet the Commission waited until early June, 1977 to finalize its telegraphy rule making (still pending reconsideration) whereas the worldwide conversion dates was June 1, 1977; and with a January 1, 1978 conversion date for the telephony service, requisite frequency change orders were not issued until mid-November and December 30, 1977; and the rule making is still in mid-stream, with carriers operating under an interim frequency assignment plan. Section 6(a) of H.R. 11209 accordingly focuses appropriate and much needed attention upon development by the Commission of a coherent and effective approach to the regulation of maritime telecommunications services.

For the reasons set forth above, Mobile Marine Radio, Inc. supports the policies and provisions of H.R. 11209.

Respectfully submitted, Mobile Marine Radio, Inc., James L. Dezauche, Jr., Its President, 7700 Rinla Avenue, Mobile, Ala. 36619, Martin W. Bercovici, Esquire, Its Attorney, Keller and Heckman, 1150 Seventeenth Street NW., Suite 1000, Washington, D.C. 20036.

Mr. VAN DEERLIN. Thank you.

Next will be Mr. Carr, director of the Overseas Division of A.T. & T. Long Lines.

¹ Docket No. 19544 (43 Fed. Reg. 10344, Mar. 13, 1978).

² Gen. Docket No. 78-67 (43 Fed. Reg. 10414, Mar. 13, 1978).

³ Docket No. 20813, 42 Fed. Reg. 31000 (June 17, 1977), reconsideration pending.

STATEMENT OF E. E. CARR, DIRECTOR, OVERSEAS ADMINISTRATION, LONG LINES DEPARTMENT, AMERICAN TELEPHONE & TELEGRAPH CO.

Mr. CARR. Mr. Chairman, members of the subcommittee, my name is Ed Carr, and I am the director of overseas administration for A.T. & T Long Lines.

Mr. VAN DEERLIN. That is what I just said.

Mr. CARR. Not exactly, sir, but I will concede.

Mr. Richard B. Nichols, the vice president of A.T. & T. Long Lines for Overseas was originally scheduled to appear before your subcommittee, sir, but in view of the change in the date from March 21 to today, he was involved in a conflict which he could not change. So as a result, he has asked me to express his regrets for his inability to appear here today, and he has also asked me to appear in his place.

A statement has been prepared under Mr. Nichols' name and submitted to your staff, and I understand that it will be made a part of this record.

With that thought in mind, Mr. Chairman, I would propose to take perhaps 3 or 4 minutes to highlight some of the points in the A.T. & T. statement.

Shortly A.T. & T. will celebrate its fiftieth anniversary in providing communications services to ships on the high seas. Now, while our experience to date has been entirely with high frequency radio, we have no doubt that for certain types of maritime commerce, and in terms of its potential for improving navigational aids and safety on the high seas, satellite technology is the mode for the future. We support the promotion and development of this technology, and in fact, prior to the introduction of H.R. 11209, A.T. & T. committed to make a substantial investment in the second generation Marisat system.

However, for reasons that are detailed in the statement provided by Mr. Nichols, A.T. & T. cannot support H.R. 11209 as it is presently drafted. We believe that this particular bill will not effectively promote the commercial development of maritime satellite technology. The bill gives Comsat what seems to us to be total control of the new system to the virtual exclusion of all the other traditional maritime communications carriers, and it gives a significant portion of the market the option of dealing directly with Comsat.

Although carriers other than Comsat have the opportunity to invest, we can foresee no real incentive to make such an investment nor to participate in the marketing operations of the system. The purpose behind this legislation, as we have understood it, was simply to designate an entity to represent the United States in Inmarsat. However, this legislation as introduced goes far beyond that purpose. Indeed it seems to make radical changes in the existing industry structure. Despite the clear intent of Congress in framing the Satellite Act of 1962, that intent being that Comsat be a wholesaler of communications facilities, this bill makes Comsat the exclusive purveyor of maritime satellite communications services.

To compound the problem, late last Thursday evening, we received amendments to H.R. 11209 which go further, in our view, in

restructuring the industry in relation to Inmarsat operations. These amendments would redefine the role of the international record carriers under section 222 of the Communications Act, and these amendments would open Earth stations to as much as 100 percent ownership by connecting carriers and users.

While we have not had time to study completely the full effects of these amendments, our initial reaction is that they would create more problems than they are intended to solve, and in any event, the amendments do nothing to ameliorate our objections to the bill.

In the final analysis, Mr. Chairman, we believe that there really is no compelling reason to structure Inmarsat much differently from the parallel Intelsat system which has operated over the past 15 years reasonably well for both the carriers and the using public. Thank you, sir.

[Mr. Nichols' prepared statement follows:]

STATEMENT OF RICHARD B. NICHOLS, VICE-PRESIDENT, OVERSEAS, LONG LINES
DEPARTMENT, AMERICAN TELEPHONE & TELEGRAPH CO.

My name is Richard B. Nichols. I am Vice-President, Overseas Division, of AT&T's Long Lines Department. I appreciate the opportunity to testify before this Subcommittee today on H.R. 11209, which would designate COMSAT as the entity to represent the United States in the International Maritime Satellite Organization (INMARSAT).

My statement here today will first touch briefly on the developments to date in the ongoing efforts of this Subcommittee to provide a designate entity to represent the United States in the proposed INMARSAT venture. I will recap the previous statements made by AT&T to the Subcommittee and its staff in reference to earlier draft bills which have been considered, and then address the bill now before the Subcommittee. AT&T's conclusion is that H.R. 11209, as presently drafted, is not in the best interests of a viable maritime satellite communications service.

Going back as far as January, 1975, when AT&T filed its first comments to the Federal Communications Commission's Notice of Inquiry (Docket No. 20281), to investigate what form United States participation in INMARSAT should take, AT&T has consistently supported the general concept of designating an existing carrier as a carrier's carrier, with participating retail carriers investing and sharing in the operation of the system in a manner similar to the current arrangements for ownership and operation of the INTELSAT earth stations. That is, participating carriers would invest and participate in the operation of the system in proportion to their use of the system. AT&T is convinced that the best arrangement for INMARSAT service would be for authorized carriers to obtain their facilities from the carrier's carrier and then provide and market the service themselves.

The overriding concern of AT&T has always been to minimize the overhead of the designated entity in order that an economically viable system can be provided. In view of the limited market projected for maritime satellite communications in the near and middle term, every effort must be made to effect economies of operation and to protect insofar as possible the large investments of the participating carriers necessary to establish the system.

AT&T therefore has consistently supported the designation of COMSAT, with its existing expertise in international satellite communications, as the authorized United States entity for participation in INMARSAT, so long as participating carriers are provided a structured role to play in the formulation of U.S. policies, and a voice in the operation of the system, in proportion to their use of the system in providing communications services to the public. AT&T has previously suggested that such participation could be inexpensively and simply achieved through the creation of an owner's committee, composed of all carriers which have invested in the system, voting rights being based upon the carrier's respective economic interests.

Draft bills circulated for comment, prior to the Subcommittee hearings on September 12, 1977, have suggested two basic alternatives; COMSAT as the designated entity, and the creation of a new corporation owned by the carriers. However, a recurring theme in both alternatives has been the concept that large users of the services would also be permitted to invest in the system, thus bypassing the participating (and investing) carriers. AT&T has been opposed to this concept because the

carriers would have absolutely no incentive to promote the service. This would jeopardize the interest of the small user and cast doubt on the viability of the system as a whole. It has long been understood that the success of the venture depends to a large degree on the willingness of the carriers to put up a large part of the considerable investment required to initiate the system and aggressively market its services, despite the meager revenues which are projected for the foreseeable future.

Out of this history, H.R. 11209 has emerged. While an existing, experienced carrier would be the designated entity, i.e., COMSAT, a serious deficiency exists because the bill fails to provide other involved and investing carriers a sufficient role in maritime satellite communications. The designated corporation would have complete ownership, control and operation of the system. However, recognizing that investment dollars from others will still be required, other carriers, as well as owners of private communications systems which interconnect with INMARSAT, are allowed to invest in the earth stations only, but without any meaningful role to play whatsoever in the operation of the system. Their role is simply to put up the money. We respectfully submit that this is a short-sighted and unworkable approach.

The bill is silent on the specifics of just how the services will be provided to consumers by the designated entity and what limited role connecting carriers are to play. Carriers as well as consumers themselves are to interconnect directly with COMSAT, with access to channels of communication on the system presumably to be on a demand basis and not on any exclusive leased basis. Therefore, the significant portion of the projected market, those larger shipping concerns which perceive a need for satellite communications sufficient to motivate them to make the large investment necessary for multiple shipboard stations, may further create a private line system directly from their headquarters or selected offices to the appropriate INMARSAT earth station, paying COMSAT directly for the service. The smaller, occasional user would presumably access the system from the United States through an interconnected carrier, AT&T in the case of voice, and an international record carrier in the case of record services.

The most that can be said of H.R. 11209 is that it has the desired attributes of simplicity and economy of overhead. However, maritime satellite communications will not develop adequately under this bill so as to enable provision of quality service to a large cross section of the American people. The success of this new service requires that it be promoted and expanded as aggressively as possible. However, this bill in reality places the entire financial burden of constructing and developing the system on COMSAT, for although others may invest in the earth stations, there is absolutely no incentive to do so and no real protection given to that investment if made. Moreover, there is every incentive for COMSAT to focus upon the specialized needs of the large fleet operators who can be persuaded to directly connect to the system, with little emphasis upon the more generalized needs of the small users. This clearly would not serve the interest of the entire maritime community.

With other carriers foreclosed from any role in the operation of the system, and with the significant portion of the market able to deal directly with COMSAT, the success or failure of the service must then ultimately rest entirely with COMSAT. There would be no incentive for AT&T to invest or devote any marketing effort to maritime satellite communications under the scheme contemplated by this bill. There will simply be no encouragement to any common carrier, except COMSAT, to do so.

These serious public interest concerns can be easily met by designating COMSAT as a carrier's carrier. Retail carriers should be allowed to invest in the entire system in proportion to their usage and to play a meaningful role in the operation of the system. Only authorized common carriers should be allowed to connect, insuring that all users, large or small, will receive fair and equitable access.

In the final analysis, there is really no compelling reason to structure INMARSAT any differently than the parallel INTELSAT system, which has operated reasonably well for both carriers and the consuming public. By making the suggested modifications to provide for an investing carrier operating role and by utilizing the authorized user concept to eliminate discrimination between classes of user, the bill would then provide for an INTELSAT type arrangement, a system proven over the years to deliver quality international communications to the American public on an equitable basis.

In conclusion, it is AT&T's position that under the present provisions of H.R. 11209 there would be little or no incentive for AT&T to invest any money in the system or engage in the marketing of services beyond the routine provision of interconnecting facilities. However, the proposed changes discussed briefly here

would give us an incentive to invest and would make it much more likely that a comprehensive maritime satellite system will quickly evolve, to the ultimate benefit of all communications users.

Thank you again for the opportunity to comment on this important piece of legislation.

Mr. VAN DEERLIN. Thank you, Mr. Carr.

Next is Walter Hinchman from the FCC's Common Carrier Bureau.

STATEMENT OF WALTER R. HINCHMAN, CHIEF, COMMON CARRIER BUREAU, FEDERAL COMMUNICATIONS COMMISSION

Mr. HINCHMAN. Thank you, Mr. Chairman. I have submitted a written statement for the record which I will attempt to summarize. I would also like to note one significant change concerning the nature of the statement. On March 15, the Commission adopted a first report and order in docket 20281, the Commission proceeding dealing with the designation, structure, and regulation of those participating in Inmarsat.

This was adopted subject to various editorial changes required to reflect views expressed during the Commission's meeting. My written statement was based on the expectation that the final text would have been approved prior to these hearings. It now appears that a further Commission meeting will be needed before this text is released. Therefore, my statement will be changed to indicate that it reflects only the Common Carrier Bureau's analysis and recommendations rather than the final Commission action. Once the final text is approved, perhaps in 2 to 3 weeks, we will, of course, forward it to the subcommittee.

For a number of reasons, the Bureau believes that the public interest would best be served if a single corporate entity were designated to establish, own, and operate the satellite communications system which will be used to provide maritime satellite communications service, and to participate as the sole U.S. entity in any international joint venture for this purpose. We have also recommended that this entity operate as a participating carrier rather than a carrier's carrier, interconnecting with all existing or future net works which the Commission may authorize to pick up and deliver maritime communications traffic within the United States.

Finally, we have recommended that this single corporate entity should neither own or be owned by any carrier which continues to participate in the competitive pick up and delivery of this traffic within the United States, including the U.S. international gateway cities.

In making these recommendations, the Bureau's principal concern has been to determine those corporate structures and relationships which will best serve the public interest in the future offering of maritime satellite communications services. We have not attempted in this process to reward or penalize any existing carrier or to establish any equitable or other distribution of market share, revenues, or ownership.

Rather, we proceeded by examining each of the several functions necessarily performed in the offering of these services—that is, the domestic pickup and delivery function, the marketing function, the

satellite operation, the shipboard equipment operation, and the function of participating in international programs—both as they are now performed and as they will necessarily or most optimally in our view be performed in the future.

In most instances, maritime satellite communications services will simply be extensions of domestic and international fixed services. Many of these services are now offered on a competitive basis by a number of domestic and international carriers.

We believe that the public interest would best be served by insuring that each of these competing domestic and international carriers remain free to make their various service offerings available to those customers requiring maritime services as well, through interconnection with the maritime satellite communications system.

The operation of this maritime satellite communications system, on the other hand, is generally recognized as having sole source or monopolistic characteristics. Such satellite systems have very high start-up and operating costs, and the market for maritime communications service is very limited. There is thus little chance that duplicative or competitive systems could exist.

In fact, this is clearly a major motivating force behind the creation of an international joint venture for developing and operating such a system. We believe that these economic and operational realities should be recognized by designating a single corporate entity to establish, own, and operate both the U.S. shore stations and the U.S. share of the space segment of any maritime satellite communications system.

This corporate entity would, in our view, provide the communications service between the shore stations, space segment, and those ships with which parties within the United States wish to communicate. It would not provide the shipboard communications station as part of this communications service, since those stations typically will be used at different times to communicate with various nations, and traditionally have been a part of the ship's own complement of equipment provided by a variety of competing international equipment suppliers.

For a number of reasons, some relating to experiences with the Comsat Intelsat arrangement and others relating uniquely to maritime satellite communications services, we further believe a carrier's carrier mode would not be suitable in this instance. By isolating the satellite system operator from direct involvement in the retail marketplace, the carrier's carrier approach removes important incentives for cost minimization and efficient operation.

It also results in a layering of administrative and other operating expenses for the same operation by multiple carriers, which adds to the user's cost burden. If maritime satellite service is to be economically viable, very efficient use of the satellite system must be achieved, probably through on-demand sharing of the system capacity not only among U.S. users and carriers but among international participants as well. A carrier's carrier arrangement, which tends to emphasize long-term dedication of discrete capacity to particular carriers, is not, we believe, an efficient way in which to serve an occasional use market with high cost facilities.

The Bureau has therefore recommended a participating carrier arrangement, in which the satellite entity would retain total responsibility for the service from shore station to satellite to ship, and the competing carriers offering domestic and international pickup and delivery would retain total responsibility for that part of the overall service offering. This would enable and encourage the satellite entity to make the most efficient possible use of its facilities, both through appropriate bundling of traffic to and from the various domestic networks and ship stations and through on-demand utilization of satellite capacity coordinated with other international participants. It would also avoid duplication of administrative and operating expenses, which I referred to earlier.

Finally, there remains the question of ownership of the satellite entity. The Commission has not yet formally addressed this subject but expects to do so in a new rulemaking should the Congress not decide this question. The Bureau has recommended that the entity neither own nor be owned by any carrier which continues to participate in the competitive pickup and delivery function.

We believe the commingling of competitive and monopolistic activities would result in a number of public interest detriments. If a single one of the competitive suppliers were accorded monopoly status over the satellite system vital to all suppliers, the potential for favoritism and anticompetitive practices would clearly exist. If a selected group of competing carriers were allowed to own and control the satellite entity, there would be the threat of both market sharing among these carriers and anticompetitive practices by the entity against nonowner carriers and users.

Even if ownership were offered to all interconnecting carriers, either as an initial or continuing opportunity, the threat of market sharing or joint marketing as opposed to competitive marketing would remain. And all of these issues would necessarily be litigated and relitigated before the Commission and the courts, if our past experience is a guide.

The Commission has not explicitly considered H.R. 11209, the bill presently pending before the subcommittee. The Common Carrier Bureau has, however, prepared an analysis of this bill which points out the differences between the approach of H.R. 11209 and that embodied in our recommendations. It also notes some concerns regarding the specific language used in portions of the bill. I would like to submit this analysis for the record, if I may.

Briefly, there are three principal differences between our recommendations and the bill. First, the bill would designate a U.S. entity for the specific purpose of participating in Inmarsat or another maritime telecommunications satellite agency, while we would propose to designate an entity for the more general purpose of providing the satellite portion of U.S. Maritime satellite telecommunications services, whether these were provided solely by the U.S. entity or through any type of international arrangements or joint ventures. We believe this approach would provide the flexibility needed to deal with a number of contingencies, including various possibilities for interim service arrangements to follow the present Marisat system, and the possibility that Intelsat itself might become a supplier of maritime satellite services.

The second major difference is that the bill would specifically designate Comsat as the U.S. entity, while we propose to designate an entity through further rulemaking proceedings. This approach would permit the designation of a totally new entity, or Comsat, or another existing carrier should these carriers elect to withdraw from the competitive arena. It would also permit the designation of an entity owned by a consortium of carriers, if it were satisfactorily demonstrated in the course of the proceeding that this would best serve the public interest as compared with what we now believe are the advantages of a single independent corporate entity.

The third significant difference is that the bill provides for possible multiple ownership of the shore stations associated with the satellite system, while we have recommended that all ownership and operating rights and responsibilities for these stations be vested in the chosen entity. We believe that the entire satellite system must be operated as an integrated whole if it is to be efficient and economically viable, and that ownership of the shore stations by a multiplicity of owners would detract from their efficiency of operation while providing no compensating public interest benefits. Holding out the possibility that any of the authorized carriers could own the Earth station will result in comparative hearings on competing applications before the FCC.

Our experience with joint ownership of Earth stations in both the Intelsat and Marisat ventures has been that there is an excessive amount of nonproductive haggling within the regulatory forum among the joint owners, with few public interest benefits.

We are also concerned about what appears to be a substantial overlap between the authority and responsibility assigned to the President for this particular communications activity under H.R. 11209, and that which is generally assigned to the Commission under the act. This overlap, which is discussed in our analysis at some length, will inevitably result in confusion and uncertainty in attempting to regulate and instruct the entity in the public interest.

A final matter which I'd like to bring to the subcommittee's attention relates to the two studies the bill directs the Commission to perform. In both these studies, we will, of course, make our best effort to provide the Congress with valuable information and conclusions. However, our analysis of the study requirements leads us to believe that a reasonable period of time for the conclusion of both these studies is from 12 to 18 months. We also anticipate that four additional personnel will be required for each study and that the total cost of both would be approximately \$450,000.

In any case, we will attempt to organize these studies so as to make valuable recommendations to Congress, but the depth of our analysis and the quality of our conclusions will depend on the time and resources which we are able to dedicate to this task.

Mr. Chairman, while there are a number of specific language problems addressed in the Bureau's analysis of H.R. 11209, I believe this testimony summarizes the major differences between this bill and the Bureau's recommendations on this subject.

I will be pleased to answer any questions.

[Mr. Hinchman's prepared statement, and the analysis of H.R. 11209, follows:]

STATEMENT OF WALTER R. HINCHMAN, CHIEF, COMMON CARRIER BUREAU, FEDERAL COMMUNICATIONS COMMISSION

Good morning, Mr. Chairman and Members of the Subcommittee. I am Walter Hinchman, Chief of the Common Carrier Bureau of the Federal Communications Commission. I appear today for the particular purpose of describing the current status of FCC views and actions regarding the designation and regulation of a U.S. entity to provide international maritime satellite communications services. In many respects these views and actions are consistent with the apparent intent of H.R. 11209, although there are certain differences which I will discuss.

Before I begin I would like to comment on the nature of this statement. On March 15, the Commission adopted a first Report and Order in Docket 20281, subject to various editorial changes required to reflect views expressed during the Commission's meeting. We had hoped that the final text would have been approved prior to these hearings. It now appears that a further Commission meeting will be needed before this text is released. Therefore my statement reflects only the Common Carrier Bureau's analysis and recommendations, rather than the final Commission position. Once the final Commission text is approved, perhaps in two to three weeks, we will of course forward it to the Subcommittee.

Let me first note that the Commission has conducted no investigation and taken no position to date regarding the ultimate wisdom of U.S. participation in any international joint venture involving maritime satellite communications. We have provided staff experts to participate, under the aegis of the State Department, in certain international discussions and negotiations; and we have expressed certain views and concerns to the Department about the type of institutional arrangements which might be adopted for such an organization. We have not, however, carried out any independent analysis of the probable market demand for international maritime satellite services, their probable cost, the potential need for and source of any direct or indirect subsidies, or other issues concerning the economic viability of such an undertaking. While the development of information regarding these issues has been the subject of continuing discussions within an international working group since tentative agreement on an international organization (INMARSAT) was reached, there is as yet no final product from this effort which we could evaluate. The Commission has thus proceeded to address primarily operational and corporate structure issues as they are likely to affect the public interest, recognizing that the designated entity must ultimately decide whether the undertaking is commercially viable. The Commission is concerned, or course, that any economic risks taken by such an entity not be at the expense of other communications users, and we intend to ensure this through a further inquiry announced in our March 15 Order and through appropriate institutional or accounting safeguards.

To examine the issues concerning the functions and structure of a U.S. entity, the Commission on December 5, 1974, instituted a Notice of Inquiry in Docket 20281. This was followed by a supplemental notice on June 17, 1975, in which the Commission expressed certain preliminary views regarding the nature of such an entity and its relationship to existing U.S. carriers. On March 15, 1978, the Commission met to consider a First Report and Order in this Docket. The Bureau's recommendation to the Commission evaluates a number of alternative options for the organizational structure and operational arrangements of a U.S. entity, with particular regard for the interests of the maritime telecommunications user, and states the Bureau's preference among these options. The Order also announces a Rule Making proceeding for formal designation of the entity, and a Notice of Inquiry to consider the economic viability of maritime satellite communications service and issues concerning potential cross subsidization between maritime satellite services and other communications services that a designated entity may provide. That inquiry will also consider various arrangements for a follow-on to the existing MARISAT system, and the relationship of economic considerations and follow-on system arrangements to U.S. participation in any international maritime satellite organization.

For a number of reasons which I will discuss, the Bureau presently believes that the public interest would best be served if a single corporate entity were designated to establish, own, and operate the satellite communications system which will be used to provide maritime satellite communications service, and to participate as the sole U.S. entity in any international joint venture for this purpose. The Bureau also believes that this entity should operate as a participating carrier rather than a "carrier's carrier", interconnecting with all existing or future networks which the Commission may authorize to pick-up and deliver maritime communications traffic within the United States. Finally, the Bureau believes that this single corporate entity should neither own nor be owned by any carrier which continues to partici-

pate in the competitive pick-up and delivery of this traffic within the United States, including the U.S. international gateway cities.

In reaching these conclusions, the Bureau's principal concern has been to determine those corporate structures and relationships which will best serve the public interest in the future offering of maritime satellite communications services. The Bureau has not attempted in this process to reward or penalize any existing carrier or to establish any equitable or other distribution of market share, revenues or ownership. Rather, the Bureau has proceeded by examining each of the several functions necessarily performed in the offering of these services—that is, the domestic pick-up and delivery function, the marketing function, the satellite operation function, the shipboard equipment function, and the international participation function—as they are now performed and as they will necessarily or most optimally be performed in the future.

In most instances, maritime satellite communications services will simply be extensions of domestic and international fixed services. Many of these services are now offered on a competitive basis. Thus, the international record carriers (IRCs) offer Telex, telegraph, and data services from their authorized gateway cities, while AT&T offers telephone services via its domestic network and Western Union provides Telex, telegraph, and data services from hinterland locations. Several new carriers (e.g., MCI, SPC, Graphnet, Telenet, Tymenet, RCA Americom and others) provide a variety of specialized voice and data services via their domestic satellite and terrestrial networks. In some instances, these are interconnected with the international networks and services of overseas carriers. In the future, we anticipate that the domestic pick-up and delivery of specialized communications services will become even more competitive and innovative. We believe that the public interest would best be served by ensuring that each of these domestic networks remain free to make their various service offerings available to those customers requiring maritime services as well, through interconnection with the maritime satellite communications system.

The operation of this maritime satellite communications system, on the other hand, is generally recognized as having sole source or monopolistic characteristics. Such satellite systems have very high start-up and operating costs, and the market for maritime communications service is rather limited. There is thus little chance that duplicative or competitive systems could exist. In fact, this is clearly a major motivating force behind the creation of an international joint venture for developing and operating such a system. The Bureau believes that these economic and operational realities should be recognized by designating a single corporate entity to establish, own, and operate both the U.S. shore stations and the U.S. share of the space segment of any maritime satellite communications system in which the U.S. participates. In order that such an entity have the legal identity to properly represent the U.S. in any international joint venture, the Bureau also believes it must be a separate corporation rather than simply a consortium of separate U.S. carriers.

This corporate entity would, in the Bureau's view, provide the communications service between the shore stations, space segment, and those ships with which parties within the United States wish to communicate. It would not provide the shipboard communications station as part of this communications service, since those stations typically will be used at different times to communicate with various nations and traditionally have been a part of the ship's own complement of equipment, provided by a variety of competing international equipment suppliers.

The next question addressed by the Bureau concerned the manner in which this satellite communications service would be provided and used in offering service to the public—that is, whether the entity should operate as a "carrier's carrier" or in some other mode. As a "carrier's carrier", the entity would merely provide transmission capacity under some form of lease arrangement to those U.S. carriers authorized to offer maritime satellite communications services. The latter would then be responsible for providing end-to-end service between the U.S. customer and the ship. This would be similar to the manner in which Comsat presently provides satellite transmission capacity to the U.S. international service carriers for overseas communications.

For a number of reasons, some relating to experiences with the Comsat arrangement and others relating uniquely to maritime satellite communications services, the Bureau concluded that a "carrier's carrier" mode would not be suitable in this instance. By isolating the satellite system operator from direct involvement in the retail marketplace, we believe the "carrier's carrier" approach removes important incentives for cost minimization and efficient operation. It also results in a layering of administrative and other operating expenses for the same operation by multiple carrier, which adds to the user's cost burden. As I have noted, the maritime satellite communications market is likely to be limited, and the system costs will be substan-

tial. If maritime satellite service is to be economically viable, very efficient use of the satellite system must be achieved, probably through on-demand sharing of the system capacity not only among U.S. users and carriers but among international participants as well. A "carrier's carrier" arrangement, however, tends to emphasize long-term dedication of discrete capacity to particular carriers, which is not an efficient way in which to serve an occasional use market with high cost facilities.

The Bureau therefore favors a participating carrier arrangement, in which the satellite entity would retain total responsibility for the service from shore station to satellite to ship, and the competing carriers offering domestic pick-up and delivery would retain total responsibility for that part of the overall service offering. This would enable and encourage the satellite entity to make the most efficient possible use of its facilities, both through appropriate "bundling" of traffic to and from the various domestic networks and ship stations and through on-demand utilization of satellite capacity coordinated with other international participants. It would also avoid duplication of administrative and operating expenses, and provide the satellite entity a sense of responsibility in serving the ultimate consumer, even though this would be through interconnection with other carriers and the filing of joint or connecting tariffs.

Finally, there remains the question of ownership of the satellite entity. The Commission has not yet formally addressed this subject but expects to do so in a new rulemaking should the Congress not decide this question. The Bureau did, however, express a preference that the entity neither own nor be owned by any carrier which continues to participate in the competitive pick-up and delivery of maritime communications services within the United States or the U.S. international gateways. The Bureau believes the co-mingling of competitive and monopolistic activities would result in a number of public interest detriments. If a single one of the competitive suppliers were accorded monopoly status over the satellite system vital to all suppliers, the potential for favoritism and anti-competitive practices would exist. If a selected group of competing carriers—including perhaps Comsat, AT & T, and the international record carriers—were allowed to own and control the satellite entity, the threat of both collusion in market sharing among these carriers as well as anti-competitive practices by the entity against non-owners would arise. Even if ownership were offered to all interconnecting carriers, either as an initial or continuing opportunity, the threat of either market sharing or joint marketing as opposed to competitive marketing would remain. And, all of these issues would necessarily be litigated and relitigated before the Commission and the Courts, if past experience is a guide.

I believe that covers most of the principal issues dealt with in the Commission's March 15 meeting.

The Commission has not explicitly considered HR 11209, the bill presently pending before the Subcommittee. The Common Carrier Bureau has, however, prepared an analysis of this bill which points out the differences between the approach of HR 11209 and that embodied in the Bureau's recommendations, as well as some concerns regarding the specific language used in portions of the bill. I would like to submit this analysis for the Record, if I may. Briefly, there are three principal differences between the Bureau's recommendations and the bill. First, HR 11209 would designate a U.S. entity for the specific purpose of participating in INMAR-SAT or another maritime telecommunications satellite agency, while the Bureau would propose to designate an entity for the more general purpose of providing the satellite portion of U.S. maritime satellite telecommunications services, whether these were provided solely by the U.S. entity or through any type of international arrangement or joint ventures. The Bureau believes this approach would provide the flexibility needed to deal with a number of contingencies, including various possibilities for interim service arrangements to follow the present MARISAT system, and the possibility that INTELSAT might itself become a supplier of maritime satellite services.

The second major difference is that HR 11209 would specifically designate Comsat as the U.S. entity, while the Bureau proposes to designate an entity through further rulemaking proceedings. The Bureau has stated its preference for an entity free from direct or indirect control of or by carriers continuing to engage in competitive pick-up and delivery operations. However, the Bureau's approach would permit the designation of a totally new entity, or Comsat or another existing carrier should these carriers elect to withdraw from the competitive arena. It would also permit the designation of an entity owned by a consortium of carriers, if it were satisfactorily demonstrated in the course of the proceeding that this would best serve the public interest as compared with the stated advantages of a single independent corporate entity. The Commission obviously would not proceed with this rulemaking

should the Congress itself designate an entity, but these are the options it would consider were the choice left to the Commission.

Finally, H.R. 11209 provides for possible multiple ownership of the shore stations associated with the satellite system, while the Bureau would vest all ownership and operating rights and responsibilities for these stations in the chosen entity. The Bureau believes that the entire satellite system must be operated as an integrated whole if it is to be efficient and economically viable, and that multiple ownership of the shore stations would detract from their efficiency of operation while providing no compensating public interest benefits. The Bureau also believes the experience with joint ownership of earth stations in both the INTELSAT and MARISAT ventures, which resulted in an excessive amount of nonproductive haggling within the regulatory forum among the joint owners, demonstrates few public interest benefits. Accordingly, the Bureau would not at this point contemplate exercising the multiple ownership option were it included in HR 11209 and would prefer that it not be included to avoid future controversy and possible litigation.

A final matter which I'd like to bring to the Subcommittee's attention relates to the two studies that H.R. 11209 directs the Commission to perform. The bill instructs the FCC to perform a study of public maritime coast station services with a view toward whether any alterations in licenses and frequencies are necessary, and requires us to transmit a report within 6 months containing a detailed statement of the findings and conclusions of our study. The bill also requires the FCC to conduct a study of the corporate structure and operating activities of Comsat to determine whether it is able to fulfill its obligations under the Communications Act, the Communications Satellite Act and the new Maritime Satellite Act. This report, as well, is required to be transmitted to Congress within 6 months and should contain detailed findings and conclusions and recommendations for legislative or other actions.

In both these cases, we will, of course, make our best efforts to provide the Congress with valuable information and conclusions. However, in order for us to fulfill effectively our obligations under these sections of the bill, we would ask the Congress to consider providing the Commission with both additional time and resources. Our analysis of the study requirements indicates that a reasonable period of time for the conclusion of both these studies, which would be conducted simultaneously, is from twelve to eighteen months. We further anticipate that four additional personnel will be required for each study and that the total cost of both would be approximately \$450,000.

In any case, the Commission will attempt to organize these studies so as to make valuable recommendations to Congress. Nevertheless, the depth of our analysis and the quality of our conclusions will depend on the time and resources which we are able to dedicate to this task.

Mr. Chairman, while there are a number of specific language problems addressed in the Bureau's analysis of H.R. 11209, I believe this testimony summarizes the major differences between this bill and the Bureau's present thinking on this subject. If there are any questions concerning this statement or other aspects of the Bureau's views, I will be pleased to respond.

H.R. 11209: ANALYSIS BY THE COMMON CARRIER BUREAU, FEDERAL COMMUNICATIONS COMMISSION

1. H.R. 11209 (the "International Maritime Telecommunications Satellite Act") concerns the establishment, ownership, operation, and governmental oversight and regulation of international maritime satellite telecommunications services. Generally, the bill: (1) Provides for U.S. participation in the International Maritime Satellite Organization (INMARSAT) or "another satellite telecommunications agency"; (2) names the Communications Satellite Corporation (Comsat) as the U.S. designated operating entity in INMARSAT or another satellite telecommunications agency; and (3) provides for governmental oversight and regulation of Comsat as the U.S. entity. The purpose of this memorandum is to discuss the bill in relation to policy recommendations the Commission has adopted in Docket No. 20281.

2. The proposed legislation authorizes Comsat to join INMARSAT by signing the INMARSAT Operating Agreement on or before July 5, 1979. Should Comsat wish to participate in a satellite telecommunications agency other than INMARSAT, such participation is generally subject to Presidential and Congressional disapproval, provided that such participation takes effect before September 4, 1979 and Comsat intends to participate in INMARSAT. Comsat shall be responsible for all financial obligations placed on it as a Signatory to the INMARSAT Operating Agreement or like instrument of another satellite telecommunications agency. Also, Comsat shall establish, own, and operate satellite earth terminal stations and shall interconnect

them with the facilities and services of U.S. domestic carriers and international carriers and private communications systems, as authorized by the Commission. Any U.S. domestic carriers, international carriers, and private communications systems authorized by the Commission to interconnect with a satellite earth terminal station may own all or any portion of the assets of any such station.

3. The proposed legislation provides that the Commission shall institute such proceedings as may be necessary to authorize domestic carriers, international carriers and private communications systems to interconnect with satellite earth terminal stations, and shall determine the operational arrangements by which Comsat must implement such interconnection for the purposes of extending maritime mobile satellite telecommunications services. It also provides that the Commission shall (1) make recommendations to the President for issuing instructions to Comsat, (2) grant such authorizations under Titles II and III of the Communications Act of 1934 to enable Comsat to provide space segment channels of communications and construct and operate satellite earth terminal stations, (3) establish procedures for continuing review of the activities of Comsat as the U.S. designated entity in INMARSAT or another satellite telecommunications agency, and (4) establish rules and procedures concerning public coast station and maritime satellite license modification (regarding the addition of radio frequencies) that do not consider any impact the provision of maritime satellite services may have on the provision of public coast station services, and vice versa. Further, the bill requires the Commission to conduct studies of:

(1) The corporate structure and operating activities of Comsat, with a view toward determining whether any changes are required to ensure that the corporation is able to effectively fulfill its obligations and carry out its functions as provided under the bill and under the Communications Act of 1934 and the Communications Satellite Act of 1962;

(2) Public coast maritime coast station services, with particular emphasis on high seas services, with a view toward determining whether the rules and regulations of the Commission and the assignment of licensees and radio frequencies in effect should be subject to any alteration in order to establish a systematic approach for the provision of modern and effective maritime telecommunications systems.

For each study, the Commission is required to transmit a report to Congress no later than six months after the bill becomes law.

4. Finally, the bill provides that the President shall (1) exercise supervision and provide instructions to Comsat regarding U.S. national interest and foreign policy considerations; (2) coordinate the activities of all Federal agencies (except the Commission) to effect compliance with the provisions of the bill; (3) ensure the availability and oversee the utilization of maritime satellite services for governmental purposes; and (4) exercise his authority to obtain a coordinated and efficient use of the electromagnetic spectrum and orbital space to ensure technical compatibility of space segments with existing communications facilities.

DISCUSSION

5. The proposed legislation is consistent with the policy recommendations in the FCC's Report and Order in Docket No. 20281 in two major respects. First, it designates a single corporate operating entity, and second, it requires the entity to interconnect with U.S. domestic carriers, international carriers and private communications systems to extend maritime satellite services and mandates the Commission to determine the operational arrangements by which it implements such interconnection. For reasons stated in our Report and Order, we find that the U.S. designated entity should be a corporation which is not owned by existing maritime carriers or other competing common carriers and that it should function as a participating carrier providing maritime satellite services through interconnection of its facilities with the facilities provided by domestic carriers, international carriers, and private parties, as authorized by the Commission. We believe that the terms of the bill authorizing the Commission to determine the operational interconnection arrangements would enable it to require the entity to operate as a participating carrier for maritime satellite services.

6. However, the proposed legislation differs from the policy recommendations in the Report and Order in Docket No. 20281 in the following respects. First, the bill explicitly designates Comsat as the U.S. entity, whereas the Report and Order contemplates further rulemaking proceedings to determine whether Comsat, a completely new entity, another of the existing maritime carriers, or some other corporate structure should be designated. Second, the bill restricts the U.S. entity to participate in INMARSAT or its singular equivalent. The Report and Order concludes that a private commercial entity should be designated for the broad purpose

of serving as the operating entity in the U.S. responsible for the provision of all international maritime mobile satellite communications services, and should be the sole U.S. representative in any international arrangements regarding such services, including INMARSAT if the U.S. joins that organization. Although the bill allows Comsat to participate in "another satellite telecommunications agency," it is unclear what such an agency would be and whether U.S. participation in an international joint venture with other countries or an existing organization (i.e., INTEL-SAT) to provide maritime satellite services would be permitted.

7. Third, the bill allows ownership of satellite earth terminal stations among domestic common carriers, international common carriers, and private communications systems when such carriers or systems are authorized to interconnect with earth terminal stations. Our Report and Order recommends that the U.S. designated entity be the sole owner as well as sole operator of earth terminal stations. The bill's provision for multi-ownership raises a number of potential problems and unanswered questions:

(a) It is unclear how multi-carrier ownership of earth terminal stations would provide either operational or cost benefits to customers.

(b) It is unclear on what basis allocation should be made to which carriers and systems and in what amounts. It would require the establishment of procedures to determine what carriers and systems would be eligible to become owners and whether their investments in earth terminal stations would be in the public interest.

(c) Even though the designated U.S. entity is to operate earth terminal stations, it is unclear what effect multi-ownership would have on the operation of an earth terminal station. For example, would part ownership grant a measure of operational control, even though the designated U.S. entity is an operator?

(d) It is not entirely clear how the ownership of an earth terminal station is to be determined. Once an allocation is made, can the Commission no longer touch the portion allocated? Moreover, do the percentages remain constant regardless of additions or enhancements to an earth terminal station?

(e) However the preceding issues are decided, this provision of HR 11209 would likely result in protracted, repetitive regulatory proceedings and possibly litigation. It is not readily apparent that any public benefits are likely to be realized which would offset these regulatory costs and burdens.

8. In addition to the above, this bill raises the following significant concerns:

(a) The bill states that the President shall provide for issuance of instructions to Comsat in connection with its relationships and activities with foreign governments and international entities, to insure consistency with national interest and U.S. foreign policy. However, the bill is silent with regard to instructions to Comsat concerning matters not directly related to national interest or U.S. foreign policy (e.g., regulatory and technical telecommunications matters). While this bill allows the Commission to make recommendations to the President regarding national interest and foreign policy, it does not authorize the Commission to instruct Comsat (or advise the President on instructions) regarding regulatory matters (e.g., construction permits, operational plans, rates, etc.). Moreover, the authority given to the President appears overly broad, in that it appears to allow him to issue instructions to the designated U.S. entity regarding matters beyond those related strictly to national interest and foreign policy. We believe that this raises the question as to whether the President should have the authority to instruct the U.S. designated entity in matters relating to regulation. (See Appendix attached hereto.)

(b) This bill provides for presidential authority to disapprove the participation of the designated U.S. entity in an "agency" (other than INMARSAT) where such participation does not require any treaty or executive agreement. Again, we question whether the President should have disapproval power in a situation where the United States Government may not be involved. In other words, should the President have disapproval (veto) authority over a purely business arrangement between the Organization and one or more foreign communications entities where there is no intergovernmental convention, agreement, or treaty to which the United States is a party? (See generally, Appendix attached hereto.)¹

¹ The Communications Act of 1934, as amended, places responsibility for regulating such intercarrier arrangements as well as nongovernmental uses of the radio spectrum in the Commission. (See Appendix to Report and Order in Docket No. 20281). This bill, as written, would appear to remove this responsibility in this particular area from the regulatory agency established by the Congress to handle such matters generally, and place it with the President. We question whether such fragmentation of authority and responsibility is conducive to a rational industry structure or to a comprehensive, consistent regulatory program.

(c) While there are several references to the Communications Act of 1934 in this Bill, the applicability of the Communications Act to Comsat as the designated U.S. entity is not completely clear. There should be a provision stating which act would control in the event of any inconsistencies between the two.

(d) Even though the bill names Comsat as the designated U.S. entity to participate in INMARSAT or its singular equivalent, the applicability of the Communications Satellite Act of 1962 to Comsat in this role is not completely clear. There should be a provision which sets forth the applicability of the Communications Satellite Act and which act would control in the event of any inconsistencies between the two.

(e) The provisions of the bill which preclude the Commission from considering any impact of maritime satellite services may have on public coast station services, and vice versa, in determining whether to modify public coast station or maritime satellite licenses for the addition of frequencies is unclear, both as to intent and meaning.

9. The bill contains various words and phrases which pose potential problems. The following is a non-inclusive, representative listing of such words and phrases, accompanied by (in most cases) suggested changes:

(a) SEC 2(a): (page 1, line 8) The words "policy of this Act" should read "policy of the United States."

(Page 2, line 2) The words "or another satellite telecommunications agency" appears to restrict Comsat's participation to INMARSAT or its singular equivalent, but may not include participation in any other potential agencies or organizations. These words should be replaced by the words "or any other international maritime satellite telecommunications organization."

(Page 2, line 3) The words "shall develop and operate a global" appear too restrictive. These words should be replaced by "is established or empowered to develop and operate an international," which would comport with the remainder of the bill.

(b) SEC 2(b): (page 2, line 8) The word "organization" should be capitalized and read "Organization".

(c) SEC 3(a)(1)(A): (page 2, lines 14-18) These lines are where the designated entity is actually named and should be replaced by: "SEC. 3(a)(1)(A) The Communications Satellite Corporation is hereby named as the sole designated operating entity of the United States for participation in . . ."

(Page 2, line 21) The words "any other agency" should be replaced by the words "any other maritime satellite telecommunications organization."

(d) SEC 3(a)(1)(B): (page 2, lines 24-25) The word "pertinent" is too broad for the intent ascribed to the sentence. In order to comport with other language in the bill, the lines should be replaced by: "(B) Subject to the provisions of paragraph (2), the corporation may participate in, and is hereby authorized to sign the operating agreement or other like instruments of the Organization or any other maritime satellite telecommunications organization as the sole designated operating entity of the United States."

(e) SEC 3(a)(2)(A): (page 3, lines 9-13) These lines effectively abrogate the responsibility and authority of the Commission as discussed above. While we recognize a presidential role as being generally appropriate to the disapproval scheme envisioned by this Act, the language of these lines would, in effect, give the President a veto power in certain circumstances where the Commission's regulatory authority should control (e.g., an arrangement between Comsat and a foreign company or government where there is no treaty or executive agreement involved and the U.S. Government is not a party to the arrangement as in INMARSAT).

(f) SEC 3(a)(2)(C): (page 4, lines 1-2) These words should be replaced by "intends to participate in the Organization after the Organization establishes regular space segment."

(g) SEC 3(b)(2)(B): (page 6, lines 22-23) The words "the satellite telecommunications agency" should be replaced by the words "any other maritime satellite telecommunications organization."

(h) SEC 3(d)(1)(A): (page 7, lines 7-8) The words "of the assets" should be deleted.

(i) SEC 3(d)(1)(B): (pages 7-8, lines 24-25 and 1-6, respectively). These lines should be rewritten to reflect that we are only talking about the U.S. government and that the restrictive use of these stations is too broad. These lines should be replaced by: "(2) Any person, including the United States Government or government Agencies, May be the Owner or operator, or both, of any satellite earth terminal station operating in the international maritime mobile satellite service for experimental purpose provided that: (A) in the case of non-governmental operations, such stations shall be properly authorized to operate by means of a license issued by the commission, and (B) in the case of governmental operation, such stations shall be properly

authorized to operate by the Executive department charged with such responsibility." It is also noted that the term "person" should be appropriately defined.

(j) SEC 3(e): (page 8, lines 15-16). This line should be changed to read "services within the United States and beyond. The initial determination shall be." This change reflects the proper scope of service and eliminates the potential of limiting the Commission's determination to a "one-shot" deal.

(k) SEC 4(b)(1): (pages 20-22). There is no enumerated provision regarding allocation of satellite earth station ownership. Also, there is no enumerated provision concerning instructing the corporation regarding regulatory and technical matters.

(l) SEC 7: (page 15, lines 1-3). This definition should be amended to read: "(8) the term maritime satellite telecommunications organization means any organization or group, other than the Organization, established or empowered to provide international maritime satellite telecommunications services."

(Page 15) The definition of "person" should be added. This definition should read: "the term 'person' includes an individual, partnership, association, joint-stock company, trust, or corporation."

WALTER R. HINCHMAN.

APPENDIX

1. Section 4(a) is the only provision in the bill which deals with instructions to the corporation in its role as the designated entity. It clearly gives to the President—and to the President alone—authority to give instructions concerning the activities of the corporation to insure their consistency with the "national interests and foreign policy of the United States." The bill completely fails to provide authority to issue instructions necessary to effectuate the Commission's regulatory role. It can be argued that there is no need for Congress to provide express authority to issue instructions. For instance, the Communications Satellite Act contains no such express authority, but the Department of State, the Office of Telecommunications Policy and the Commission have jointly issued instructions to Comsat concerning those aspects of its role as designated entity which are of concern to the government. However, if express authority is provided to issue instructions in certain areas, as this bill would do, grave questions would arise as to such authority in other areas.

2. It is necessary that the government have authority to instruct the corporation in matters relating to regulation (e.g., construction permits, operational plans, rates, etc.), but we believe that authority should not be lodged in the President. To do so would, in effect, give the President veto power over Commission regulatory decisions, as in the case of certain Civil Aeronautic Board decisions. We do not believe there is any justification for such a drastic departure from the general practice of communications regulation.

3. In another respect the authority given to the President to issue instructions appears unnecessarily broad. Thus, the President is given authority to issue instructions to the corporation relating to the national interest and foreign policy not only in connection with its relationship with foreign governments, but also with respect to its relationships with international entities and other organizations (including the Organization or the satellite telecommunications agency). To the extent that the corporation may have relationships with foreign entities or organizations in which the United States Government is not involved (i.e., where the Government is not a party to a convention or other intergovernmental agreement), we question whether the President should have authority to instruct the corporation. In the case of INMARSAT, where the U.S. Government would be a party to the convention, Presidential instructions to the designated entity relating to the national interest and foreign policy would clearly be appropriate. We question whether this would be true if the corporation jointed with one or more foreign communications entities to establish a space segment without there being any inter-governmental convention or agreement to which the United States Government was a party. In the latter case, it would be a business arrangement between communications entities not calling for instructions from the executive branch. In addition, the language of the bill seems broad enough to authorize Presidential instructions even in those cases where the corporation might enter into routine operational agreements for the handling of traffic with foreign communications entities.

ADDENDUM

Further Common Carrier Bureau comments regarding the March 30, 1978 proposed amendments to H.R. 11209:

1. A new subsection (5) has been added to Section 4(a) giving increased authority to the President. It would authorize the President to "aid in the planning and development of the telecommunications system . . . and in the planning and development of services provided . . ." (emphasis added). While some of the language is taken from the Satellite Act, as we have previously noted it is doubtful that all of the Presidential powers provided by the Satellite Act can be justified with respect to maritime. Moreover, this added provision goes significantly beyond the powers given by the Satellite Act involving the President for the first time in the "services" to be provided by the new system. This injects the President for the first time into areas of day-to-day communication operations and policy (e.g., whether various types of services should be offered—data, slow-scan television, etc.), and appears to place him in direct conflict with the Commission's statutory authorities and responsibilities for such matters in general.

It can be argued that the President (and the Executive Branch) do have special interest in safety services (and perhaps in radio navigation). However, to the extent there is a special role in those areas, it should be specifically spelled out, rather than giving the President broad, unprecedented powers with respect to all communications services to be offered over the new system.

2. No apparent reason to single out maritime satellite service for exemption of provisions of Section 222 regarding IRCs operations in gateway cities.

Appears impractical that IRCs would expand operations beyond the present gateway cities for maritime satellite service only; particularly in the case where the IRCs would not provide the satellite link but only the domestic haul to the shore station. The IRC would become a domestic carrier for maritime satellite service.

Although limited to maritime satellite service (which again appears impractical that the IRC would find the costs involved in expanding service to the hinterland attractive for the limited volume of maritime satellite traffic) the language raises the basic questions involved in Commission proceedings in docket No. 19660—gateway cities and free direct access—and in Docket No. CC 78-96 concerning the extent of Western Union monopoly over domestic telegraph service.

The language leaves doubt as to the discretion the Commission would have under Section 214 to make the public interest findings on particular facilities and services proposed by the IRCs for interconnection.

3. Sec 3(d)(1) in the revised H.R. 11209 provides that any U.S. domestic common carrier, international common carrier, or private communications system authorized by the Commission to interconnect with the satellite earth terminal station may own all or any portion of assets of any such station. Comsat, as the designated entity, is entitled to own any portion of the assets of any satellite earth station which is not owned by any other person.

In addition to the problems we have already pointed out regarding multi-carrier ownership of earth terminal stations, we believe the revised language raises additional concerns. First, it is unclear how division of ownership is to be determined (i.e. whether the Commission is to determine the allocation, and, if so, what the basis for such determination should be). Second, it is unclear how multi-ownership would be related to operation of the earth terminal station. Sec. 3(b)(1)(A) of the bill provides that Comsat may establish, own and operate satellite earth stations. However, the question arises whether multi-carrier ownership would grant a measure of control to other carriers even though the bill allows Comsat to be an operator. Finally, it is unclear how multi-carrier ownership of earth terminal stations would provide either operational or cost benefits to customers. It is questionable whether the designated entity could operate as participating carrier if it doesn't own the earth stations.

Mr. VAN DEERLIN. Thank you.

Next, Edward Fitzgerald, the American Institute of Merchant Shipping.

STATEMENT OF EDWARD P. FITZGERALD, AMERICAN INSTITUTE OF MERCHANT SHIPPING

Mr. FITZGERALD. Thank you, Mr. Chairman.

The American Institute of Merchant Shipping represents a user community of 25 companies owning or operating 157 American flag oceangoing vessels, aggregating over 6 million tons. AIMS has strongly supported the development of satellite communications

systems for our industry and participated extensively in work done by the Inter-Governmental Maritime Consultative Organization, IMCO, which produced the convention whose implementing legislation is before you today. Mr. Chairman, we have submitted a written statement which I would like to be included in the records of this committee.

I would like to make a few statements related to that particular testimony. In H.R. 11209, it has as its stated objectives—which the American Institute of Merchant Shipping supports: The participation of the United States in international maritime satellite organizations; support any system that will serve the maritime commercial and safety needs of the United States and foreign countries; that participation of the United States in the organization shall be through a private corporation; that the corporation may establish, own, and operate satellite earth terminal stations, and shall interconnect such stations, and the interconnection shall be with private communication systems which we define as the end user.

The corporation, in our understanding, is not a carrier's carrier. The corporation shall interconnect the maritime mobile satellite telecommunications services provided with the facilities and services of foreign correspondents. The Commission can authorize private communications systems to own up to 50 percent of the assets of any Earth station terminal. The Commission can establish rules and procedures under which in, determining whether to modify any license of public maritime coast station services to provide for additional radio frequencies or in determining whether to modify any licenses for maritime satellite communications services to provide for additional frequencies shall not take into account any impact which one action may have on the other.

The Commission can conduct a study of public maritime coast station services in order to establish a systematic approach to the provision of modern and effective maritime telecommunications systems.

Both statements I have just made, Mr. Chairman, are the ones we specifically support in this particular bill. As users, we believe that we are not competent to comment on the establishment of the communications satellite corporation as the designated entity to represent the United States in the international maritime satellite organization or another satellite telecommunications agency. However, we must emphasize the importance of competition and the preventing of any interruption of the present maritime satellite service in operation today. Any further legislation which might impact on a transition of Marisat to Inmarsat should be written so as to ensure continuity of service and compatibility of shipboard equipment for users of these maritime telecommunications services.

Shipowners' support for maritime satellite communications is in recognition of the fact that enhanced telecommunications capability will lead to greater management efficiency, provide for greater safety at sea, and minimize the risk of maritime pollution.

In the area of safety and pollution prevention, radio determination should be included as a service to be provided by Inmarsat.

As the organization representative of a substantial portion of the U.S.-flag merchant fleet, AIMS thanks you for the opportunity

to be heard relating to the planned services that in the long term must be accepted and utilized by the maritime community, if the provision of such services is to be an economic viability.

Thank you, Mr. Chairman.

[Mr. Fitzgerald's prepared statement follows:]

COMMENTS OF THE AMERICAN INSTITUTE OF MERCHANT SHIPPING ON H.R. 11209,
THE INTERNATIONAL MARITIME TELECOMMUNICATIONS SATELLITE ACT

My name is Edward P. Fitzgerald and I wish to express the views of the American Institute of Merchant Shipping (AIMS) in support of H.R. 11209, implementing legislation for an international maritime satellite convention (INMARSAT). AIMS represents a user community of 25 companies owning or operating 157 American-flag oceangoing vessels aggregating over 6 million tons. AIMS has strongly supported the development of satellite communications systems for our industry and participated extensively in work done by the Inter-Governmental Maritime Consultative Organization (IMCO), which produced the convention whose implementing legislation is before you today.

H.R. 11209, the "International Maritime Telecommunications Satellite Act," has as its stated objectives providing for:

1. The participation of the United States in the International Maritime Satellite Organization or another satellite telecommunications agency which shall develop and operate a global maritime mobile telecommunications system;

2. That any system shall have facilities and services which will serve the maritime commercial and safety needs of the United States and foreign countries;

3. That participation of the United States in the organization shall be through a Corporation, which constitutes a private entity operating for profit, and which is not an agency or establishment of the Federal Government;

4. That the Corporation

a. May establish, own, and operate satellite earth terminal stations and shall interconnect such stations, and the maritime mobile satellite telecommunications provided by such stations, with the facilities and services of United States domestic common carriers, international common carriers, and private communications systems;

b. May establish, own, and operate the United States share of the jointly owned international space segment and associated ancillary facilities;

c. Shall interconnect such facilities, and the maritime mobile satellite telecommunications services provided by such facilities, with the facilities and services of foreign correspondents;

d. Shall own not more than 50 percent of the assets of any such station; and

e. Shall be the sole United States representative in the managing body of the organization or the satellite telecommunications agency, as the case may be;

5. The Commission to authorize domestic common carriers, international common carriers, and private communications systems to own not more than 50 percent of the assets of any satellite earth terminal station;

6. The Commission to establish rules and procedures under which:

a. In determining whether to modify any license for public maritime coast station services to provide for the addition of radio frequencies, shall not take into account any impact which the provision of maritime satellite telecommunications services may have upon the provision of public maritime coast station services;

b. In determining whether to modify any license for maritime satellite telecommunications services to provide for the addition of frequencies, shall not take into account any impact which the provision of public maritime coast station services may have upon the provision of maritime satellite telecommunications services;

7. The Commission to conduct a study of public maritime coast station services, with particular emphasis on high seas services, with a view toward determining whether the rules and regulations of the Commission and the assignment of licenses and radio frequencies in effect on the date of the enactment of this Act should be subject to any alteration in order to establish a systematic approach for the provision of modern and effective maritime telecommunications systems.

As users we believe that we are not competent to comment on the establishment of the Communications Satellite Corporation as the designated entity to represent the United States in the International Maritime Satellite Organization or another satellite telecommunications agency. However, we must emphasize the importance of preventing any interruption of the present MARISAT System services in operation today. Any future legislation which might impact on a transition from MARI-

SAT to INMARSAT should be written so as to assure continuity of service for users of these maritime telecommunication services.

Shipowners' support for maritime satellite communications is in recognition of the fact that enhanced telecommunications capability will lead to greater management efficiency, provide for greater safety at sea and minimize the risk of marine pollution.

As the Organization representative of a substantial proportion of U.S.-flag merchant fleet, AIMS thanks you for the opportunity to be heard relating to a planned service that, in the long term, must be accepted and utilized by the maritime community if it is to be economically viable.

Mr. VAN DEERLIN. We hear next from Robert Conn, Western Union International.

STATEMENT OF ROBERT E. CONN, EXECUTIVE VICE PRESIDENT AND COUNSEL, WESTERN UNION INTERNATIONAL, INC., ACCOMPANIED BY ROY ANDRES, VICE PRESIDENT OF PLANNING

Mr. CONN. Good morning, Mr. Chairman.

I am accompanied by Roy Andres, our vice president of planning, who has devoted the last 3 or 4 years exclusively to planning our operations in this field. That includes not only our participation in Marisat, but he has served as an advisor to the U.S. Government on almost every overseas meeting concerning Inmarsat, and is now engaged in planning our own independent competitive shipboard terminals, which we believe are of the highest quality on the market today.

I hope that his plans and our company's efforts and endeavors do not crumble as a result of the proposed Comsat monopoly. However, I fear they will. I also have seen the second generation cooperative planning of Comsat General, WUI, my company, WUI, ITT, and RCA. I have seen that cooperative endeavor come to an abrupt halt as the result of the proposed Comsat monopoly.

I know that my time is limited and I would like to make five points, some of which will have to be covered by my prepared statement, which I would like to have incorporated.

Also, I would urge the members of this subcommittee to read the testimony of the hearing on March 21 conducted by Mr. Murphy, with particular reference to the testimony of Ed Gallagher, our president, concerning the same issue.

My five points, Mr. Chairman, are as follows.

One, WUI's satellite credentials are strong.

Two, WUI has contributed substantially to the Marisat system, and up until February 16, when everything seemed to grind to a halt, we were engaged in arrangements for the follow-on system which is necessary by 1981 and which must be planned this year.

Three, WUI has earned the right to be part of the U.S.-designated entity to Inmarsat.

Four, neither WUI nor any other eligible carriers should be legislatively barred from the U.S.-designated entity.

Five, public benefits from competition, not monopoly. We can endorse the bill before you if it has some slight changes to make it competitive, not monopolistic, and the administration's bill does that. It effectively mandates competition.

There is another draft bill submitted by ITT which we could endorse, and there was a proposal by the Federal Communications

Commission in June of 1975 which we could endorse, and I was disappointed to hear today that the FCC seems to have drawn away from that proposal. That proposal would have been a joint venture corporation to represent the United States in Inmarsat. However, it would not be a profitmaking enterprise. It would be what the FCC called in its June 1975 order, a flow-through entity; it would not make a layer of profit and it would have served the public interest.

Today we hear that the FCC's Common Carrier Bureau has changed its position, and now we have a natural monopoly. I was disappointed to hear that, because all of international telecommunications is a natural monopoly as far as the facility goes. We do not have competitive satellites. We do not have competitive cables. We have a unitary facility over which robust competition is conducted. That is the way our telecommunications policy is structured today, and I hope that I have not heard today that we are now moving toward monopoly.

Your choice is clear, members of the subcommittee. You can legislate a monopoly or you can legislate competition. There is an illusory provision, I am sorry to say, in the bill which indicates that the carriers in the United States, both domestic and international, can have access to this system. Why do I say that is illusory? Because that access is minimal and not meaningful.

For example, our present Earth station is located in Connecticut, 70 miles north of New York City, where WUI's operating office is located. This bill would relegate us to the role of the 70-mile messenger boy in this era of satellite communications. We do not like that role. We think we can provide more to the public. If we provide only 70 miles of service on the monopolist, Comsat provides 45,000 miles of service up to the satellite and down to the ship, it is easy to see that about 99 percent of the revenue requirements will be Comsat's, the minimal will be ours.

That is not meaningful competition. Comsat's 99 percent revenue requirement will be a monopolistic revenue requirement burdening every rate payer. Our 1 percent or even less than 1 percent so-called competitive requirement will be meaningless. The public will not benefit. We respectfully submit that by designating Comsat, as fine an entity as it is, and it is entitled to congratulations for all of its achievements to date, that Comsat will be in an irreconcilable conflict-of-interest position if you vest another monopoly in that entity.

The FCC has tried to minimize or obviate this conflict of interest in many orders throughout the last 3 years. It promoted the creation of Comsat General, and it made such statements as in its January 1974 order, that it did not expect Comsat General to be a mere division of Comsat. The FCC said, and these are quotes, "We will require that intercorporate dealings be at arm's length." In a 1975 order, the FCC said, "Comsat General should be a complete separate corporate subsidiary with financial as well as operational independence." The FCC even went further and denied an application for an official of Comsat General to be an official of Comsat. However, the FCC conceded in that latter mentioned order that there "may even be a conflict" between Comsat's Intelsat role and

Comsat General's Marisat role. Events have proven that also correct within the last month.

We submit, Mr. Chairman, you cannot legislate against conflicts of interest. You can only strive to put a concern in a position that it will not be in a conflict. However, Comsat and Comsat General—I don't care what you call them—will be in an obvious conflict. There are three situations now before us concerning maritime satellites. One is, we will annex them to the Intelsat series, Intelsat 5 series.

Comsat is the manager of the Intelsat organization.

Another proposal, we thought we had a separate and independent partner in Comsat General. The Marisat carriers have been meeting over the past year among themselves and with Europeans planning the second generation system, and we have kept our Government agencies informed. The FCC, the State Department constantly file minutes. However, all of that has ground to a halt in the last 6 weeks since this bill surfaced, and we submit that whether it is Comsat or Comsat General, whether it is this bill—Comsat now proposes to make it Comsat-exclusive, that is a third alternative, Comsat exclusive, a second-generation Marisat or in Intelsat only.

Whichever you have, you also have Comsat, and we submit that whether they are Comsat or Comsat General, they all march to the same drummer, and that drummer seems to be a monopolistic beat.

Finally, Mr. Chairman, we submit that it is inequitable to give a monopoly to Comsat. We, WUI, and other carriers provided a share of the seed money for the Marisat project. We are now on the verge of being legislated out of any possibility of recouping even our original investment. We need a follow-on system in 1981, and as A.T. & T. indicated, it does not see a meaningful role for itself in the follow-on system. We have to now examine whether there is any role for us.

In Comsat's prepared statement today, I notice that it is concerned about heavy start-up costs and it seeks an opportunity to recover profit deficiencies in later years. I would hope that Comsat would give us the same privilege to recover start-up costs and later generations, but if we are foreclosed, as Comsat would have it, we will never recover our investment. We will never have an opportunity to recover earnings deficiencies.

I am surprised that people will now want to add to Comsat's monopolistic role. Frankly, Comsat was born with a silver spoon in its mouth. It inherited Government-financed research and development. We heard earlier that it didn't have a nickel of the taxpayers' money. I submit it had millions and millions of dollars of taxpayer contribution to get the United States started in place.

There was the issue in the early 1970's of launch costs, NASA launch costs. You have reports before you from the GAO in the years 1970 and 1971 showing that Comsat was underbilled for the launch. The taxpayers financed that launch, and finally there is the ratepayer. I think the U.S. international carriers represented at this table pay about 98 percent of Comsat's revenue requirements if not more, and yet we have been overcharged, Mr. Chairman. The FCC now has a \$100 million escrow fund it is trying to administer and dispense through us to our ultimate users. We want

to cooperate, but we not only have been overcharged \$100 million since mid-1976, but even back in 1973 the FCC trial staff in the 12-year-old rate case argued that Comsat should make an immediate rate reduction of about 25 percent.

That never occurred, although the Common Carrier Bureau made great efforts to get that reduction, but it did not occur, so I must conclude, Mr. Chairman, that monopoly brings overcharges, it brings subsidies, it brings conflicts of interest. Competition brings benefits to the ratepayers, and we have plans, as I say, to have a high quality shipboard terminal. We have spent money developing it. We see our plans crumbling. We have plans with the present Marisat system to use some surplus channels that are simplex. They go only one way, ship to shore. We are competitive today. We have competitive plans that we have not talked about before to utilize those unique directional channels to bring new and innovative services to the public. We see our plans crumbling.

We support competition, and we urge that the bill be amended to make the designated entity not a monopoly but an entity that would include all eligible carriers whose credentials would have to be approved by the Federal Communications Commission.

Thank you, Mr. Chairman.

[Mr. Conn's prepared statement follows:]

STATEMENT OF ROBERT E. CONN FOR WESTERN UNION INTERNATIONAL, INC. (WUI)

Good morning, Mr. Chairman, I am Robert E. Conn. I am Executive Vice President and legal counsel of Western Union International, Inc.

I have also represented my company in the establishment and operation of all of its various communications satellite and submarine cable joint ventures with other U.S. carriers, and with foreign administrations in the case of cables. Two of our international satellite joint ventures are:

1. MARISAT—the world's first commercial maritime communications satellite system; and

2. INTELSAT Earth Stations—the seven jointly-owned U.S. earth stations.

Both of these joint ventures are operating harmoniously in the public interest. These jointly owned systems are being used competitively with resulting benefits for the consumers.

The INMARSAT designated entity should be structured along these same lines. It should be jointly owned by all eligible carriers, who should have the opportunity for fair competition. The public will benefit. It will suffer if Comsat is granted a monopoly over maritime satellite communications.

I. WUI'S STRONG CREDENTIALS IN SATELLITE COMMUNICATIONS

WUI, an international common carrier, has strong credentials in satellite communications, including maritime communications. We have operated via INTELSAT satellite channels since the inception of commercial satellite technology in 1965. Commencing in 1967, WUI became a co-owner of the U.S. INTELSAT earth stations, which now total seven and are located in the continental U.S., Hawaii, Puerto Rico and Guam.

During the timeframe of 1968-1973, we operated maritime satellite stations on board U.S. Navy vessels for the world-wide television transmission of the splash-downs of the 11 Apollo missions and one Skylab mission. We have also located our satellite earth stations in foreign nations for televised coverage of special events, such as the 1972 Presidential visit to the People's Republic of China. WUI now provides high-speed data service to the Department of Defense via our domestic satellite earth stations in California and Hawaii, and plans to construct domestic satellite earth stations at Andover, Maine and Etam, West Virginia, subject to FCC approval, for service to the National Aeronautics and Space Administration (NASA) in support of its space shuttle program.

Commencing in 1973, WUI joined other carriers in planning the MARISAT consortium. The MARISAT carriers in the order of magnitude of their ownership shares are Comsat General, RCA Globcom, WUI and ITT Worldcom. Although WUI

is a minority shareholder, its investment is about four times the minimum established by the FCC.

The MARISAT system commenced operations in 1976 with the launch of spacecraft over the Atlantic and Pacific regions, followed by a third spacecraft in the Indian Ocean area. Marisat now serves U.S. Navy vessels, world-wide, and commercial vessels in the Atlantic and Pacific regions. Commercial service in the Indian Ocean area is expected later this year, subject to FCC approval, via a maritime satellite earth station in Japan. The MARISAT system also includes earth stations located in Connecticut and California. WUI has its own separate program underway for the development, manufacture, and marketing of high-quality satellite shipboard terminals.

A WUI official was the communications chairman two weeks ago of the prestigious International Navigational Aid and Communications Conference, which was addressed by leaders of industry and government, including Senator Ernest F. Hollings, Congressman Mario Biaggi, and Subcommittee Counsel Brian Moir.

WUI has expended considerable effort in negotiations with other U.S. carriers and with the European Space Agency for the establishment of the second generation maritime satellite system to follow MARISAT, whose 5-year design life expires in 1981.

In summary of our first point:

1. WUI's satellite credentials are strong;
2. WUI has contributed substantially to the MARISAT system and is now engaged in arrangements for the follow-on system in 1981;
3. WUI has earned the right to be part of the U.S. designated operating entity in the International Maritime Satellite Organization (INMARSAT); and
4. Neither WUI nor any other eligible carrier should be legislatively barred from the U.S. designated entity in INMARSAT.

II. LEGISLATING ANOTHER MONOPOLY FOR COMSAT, AS THE U.S. DESIGNATED ENTITY TO INMARSAT, WILL NOT SERVE THE PUBLIC INTEREST

It is not in the public interest to vest any further monopoly power in Comsat by legislation. Comsat's plate is already overflowing with its:

1. U.S. monopoly role in INTELSAT, and its monopoly position as the sole source wholesale supplier of international space segment capacity in the U.S. to the international carriers;
2. Alliance with American Telephone & Telegraph Co. (AT&T) in the domestic satellite market, as the sole source wholesale supplier of domestic satellite space segment capacity to AT&T;
3. Partnership with International Business Machines Corp. (IBM) as an emerging powerful force in the retail domestic satellite market;
4. Recipient of excessive earnings in its INTELSAT monopoly role, which has burdened the ratepayers with more than \$100 million in overcharges since mid-1976, and untold millions for prior years;
5. Large-scale role in MARISAT;
6. Supplier of shipboard terminals for operation with MARISAT;
7. Control of several foreign INTELSAT earth stations;
8. Consultant for the establishment of a regional satellite system for 21 countries by the Arab Satellite Communications Organization; and
9. Recently-disclosed sole-source contract with the U.S. Postal Service for international electronic mail service, which may well be in violation of existing law and policy.

Comsat already has a strangle-hold on satellite communications, aided and abetted by its statutory monopoly under the Communications Satellite Act of 1962. Comsat's many-faceted roles, as outlined above, make it the bridge between AT&T and IBM, and give it the allure abroad of a U.S. quasi-governmental entity. Consequently, Comsat is possessed of tremendous commercial leverage, domestically; and is clothed with the appearance of near-governmental power, abroad. Less advantaged U.S. companies will find it ever more difficult to compete with Comsat in its non-monopoly endeavors, and they will be absolutely foreclosed in the Comsat-monopoly sectors.

H.R. 11209 would vest even more power in Comsat. Not only would it be granted additional monopoly roles as the sole source supplier of maritime satellite space segment capacity and as the exclusive U.S. participant in INMARSAT, but Comsat would also gain the foundation to build a de facto monopoly over all maritime satellite services in the U.S. This foundation is contained in the provision of the bill giving Comsat access to all end users, through the undefined, but wide-open, classification of "private communications systems." Although both "domestic common

carriers" and "international common carriers" also are granted access to Comsat's space segment by the bill, the role of these carriers in maritime satellite communications is more apparent than real. Armed with its additional statutory monopolies, Comsat should have little difficulty in sweeping aside the domestic and international carriers and in monopolizing all of the consumer requirements.

If Comsat were to attain a maritime space segment monopoly, as contemplated by H.R. 11209, competition would likewise be restrained in the marketing of shipboard terminals.

Any resulting total monopoly in maritime satellite communications would be contrary to the public interest. Deprived of the benefits of competition, end users will eventually suffer the ills of many consumers who are solely dependent upon a monopoly source of supply—higher rates and deteriorating service.

Since the inception of INTELSAT service in 1965, history has taught that vesting exclusivity in Comsat is the way to obtain inflated satellite rates. Although INTELSAT has reduced its annual space segment charges to Comsat by about 66 percent, the U.S. international carriers have never been granted rate reductions by Comsat over many routes for satellite full-time voice-grade channels, have received token reductions over other routes, and have obtained no reductions since 1971, other than to Hawaii when the domestic satellite competition was introduced. Although Comsat has consistently heralded the economic advantages of satellites, particularly during cable authorization proceedings, Comsat has been especially adroit in retaining such benefits for itself. As a matter of fact, the FCC has found Comsat's rates to be excessively high, and is now considering large-scale reductions including refunds of over \$100 million in excess charges by Comsat.

This history is likely to be repeated in the maritime sector if Comsat is again granted a *de jure* monopoly over space segment capacity and over Inmarsat representation, and a *de facto* monopoly over all maritime satellite consumer services. In my opinion, H.R. 11209 would grant all of these monopolies to Comsat.

International maritime satellite service planning will require the cooperation of the foreign administrations participating in INMARSAT. U.S. vessels will not always be reachable via U.S. earth stations, particularly when they are sailing in the Indian Ocean areas which are not accessible directly from the U.S. Therefore, world-wide standardization of service offerings will be desirable. If Comsat is vested with the exclusive role as U.S. designated entity to INMARSAT, Comsat will be able to do all of the service planning with the foreign administrations. All other U.S. carriers will be frozen out. Consequently, the bill's provision for "domestic" and "international" common carriers to interconnect with Comsat at the earth stations appears to be illusory.

In summary of our second point: The public will be the ultimate loser if Comsat is enabled through H.R. 11209 to monopolize maritime satellite communications because the benefits of rate and service competition will be lost.

III. COMSAT WAS CREATED FOR A SPECIFIC LIMITED PURPOSE—NOT TO DOMINATE INTERNATIONAL COMMUNICATIONS NOR TO RESTRAIN COMPETITION

"When the Satellite Act was enacted, Congress, in order to assure that the fledgling corporation—Comsat—received needed communications expertise and guidance, made provision for communications common carriers to own up to 50% of Comsat stock and to elect six members of Comsat's Board of Directors. * * * Comsat was created by Congress primarily for the important and immediate purpose of representing and promoting this nation's interests in the establishment and operation, in conjunction with other nations, of a global international communications satellite system [INTELSAT]. That mission with the aid and support of AT&T and other carriers, has been achieved with a high degree of success." (38 F.C.C. 2d 665, 679).

Comsat was nurtured and supported by both government and industry. Comsat was the beneficiary, at no cost, of a wealth of technology developed by NASA and other entities. Launch services have been provided to Comsat at less than NASA's full costs. The FCC has compelled the international carriers to lease unneeded satellite circuits from Comsat. As Comsat's rate payers, the carriers have been overcharged for many years and have reduced their rates to the consumers in reliance upon unfulfilled promises by Comsat of rate reductions. Nevertheless, these consumers, including government agencies, have incurred excessive charges due to Comsat.

Comsat has received substantial subsidies from American taxpayers, the U.S. international carriers, and ultimate communications users.

Despite all of these unprecedented benefits, Comsat has manifested predatory instincts toward the carriers. Comsat's current endeavors to dominate maritime

satellite communications, to the exclusion of the carriers, have been furthered through Comsat's conflicting roles. Through its subsidiary, Comsat has been planning the second generation MARISAT system in—what we thought—was a cooperative effort with its MARISAT partners, including negotiations with the European Space Agency. At the same time, through its INTELSAT relationship, Comsat has been attempting to annex the next MARISAT generation to the Intelsat V spacecraft. Also, Comsat has been promoting legislation for its own exclusive designation as the U.S. representative to INMARSAT, as the sole supplier of maritime satellite facilities, and as the prime retail carrier.

Last week, Comsat reportedly entered into a sole source contract with the U.S. Postal Service for the transmission of international electronic messages. Six years ago, WUI obtained an agreement with the Postal Service for international electronic mail service, but has been stymied by regulatory delays from initiating this service. We do not understand how Comsat can by-pass the carriers in dealing with the Postal Service. The FCC's "authorized user" decisions of 1966-7 delineated Comsat's role as a carriers' carrier (4 F.C.C. 2d 421, 6 F.C.C. 2d 593).

Comsat has escalated its endeavors to dominate international telecommunications and to exceed its primary mission as the INTELSAT carriers' carrier. Comsat's wholesale role was stamped indelibly into the legislative history of the Satellite Act, as illustrated by the statements of Senator Pastore, the manager of the bill:

"The satellite corporation and the carriers will not be competing in the same market. Let me repeat these simple but all-important facts. The market to be served by the corporation consists of the carriers who will use its facilities. The market to be served by the carriers will be the senders and recipients of communications traffic. The corporation will depend upon the carriers for its revenues; the carriers will depend upon the corporation for facilities." (108 Cong. Rec. 16920).

During the creative and formative years of Comsat, four former FCC chairmen reiterated Senator Pastore's remarks. For example, Chairman Minow stated that Comsat "will not be rendering service directly to the public; it will be rendering service only to the other carriers."

WUI's willingness to include Comsat as a participant, although not a monopolist, in both the wholesale and retail sectors of the infant maritime satellite market is without prejudice to the requirement that Comsat remain a wholesale carrier with respect to INTELSAT in conformity with existing law and policy.

In summary of our third point: Comsat's primary INTELSAT role should remain unchanged, and its participation in maritime satellite communications should not accord it any exclusivity.

IV. NO ELIGIBLE CARRIER SHOULD BE EXCLUDED FROM THE U.S. DESIGNATED ENTITY IN INMARSAT

H.R. 11209 should be amended to provide for the establishment of a new broad-based corporation to become the U.S. entity. Each of the four existing MARISAT carriers should be deemed eligible to participate, as should any other U.S. carrier whose participation is determined by the FCC to be in the public interest. The magnitude of the ownership participation by each carrier should be determined by the FCC. However, no single carrier should be authorized to own more than 49 percent of the new corporate designated entity, unless such greater ownership is required for the purpose of reaching 100 percent.

WUI and the other three MARISAT partners assumed the risk and provided the seed money for the world's first commercial maritime satellite system. Each of these carriers has acquired valuable experience in maritime satellite operations, but there is no assurance that they will gain any financial profit, or even recover their investment from this developmental system. Additionally, WUI and the other MARISAT carriers have expended considerable efforts in their negotiations among themselves, with AT&T and TRT Telecommunications Corp., and with the European Space Agency, all concerning the second generation system. WUI has also supplied expert representation to the U.S. delegation to the many pre-INMARSAT conferences, and to the INMARSAT Agreement International Preparatory Committee.

Any legislative exclusionary policy disqualifying carriers from ownership eligibility in ultimate communications systems, after such carriers undertook the risk of funding the initial developmental system, would be highly inequitable. Not only would these pioneering carriers be deprived of their ultimate opportunities to recoup their losses from the pilot system, but also the consumers would be deprived of the expertise of these carriers and the competitive benefits that they would bring to maritime satellite services and shipboard terminals.

If WUI is to be disqualified by legislative fiat from participating in the designated entity to INMARSAT, WUI will be forced to reexamine its proposed participation in

the second generation system, whose planning must move forward expeditiously this year.

The consortium approach to international satellite facilities has been successfully used for both MARISAT and the U.S. INTELSAT earth stations, as mentioned at the outset of this testimony. We respectfully urge the amendment of H.R. 11209 to provide for a consortium approach for the U.S. designated corporate entity to INMARSAT.

There are various bills available to the Subcommittee which would accomplish this result. These bills include H.R. 9647, dated October 19, 1977, which was introduced on behalf of the Administration and has been supported by the State Department, the Office of Telecommunications Policy, and the Maritime Administration; a discussion draft, dated January 11, 1978, prepared by your staff; a Staff Working Draft, dated August 5, 1977, containing "Alternative No. 1"; and the draft amended H.R. 11209 which is being submitted by ITT Worldcom.

Rather than submitting still another version, WUI's counsel would be pleased to work with your staff in developing appropriate amendments to H.R. 11209 to provide for an INMARSAT designated entity consisting of a corporation owned by all eligible U.S. carriers.

In summary: The designated U.S. entity to INMARSAT should be a corporation owned by the MARISAT carriers and by any other U.S. carriers authorized by the FCC.

Thank you for according us the opportunity to testify.

Mr. VAN DEERLIN. Thank you, Mr. Conn.

Finally, Mr. O'Reilly, from the Hawaiian Telephone Co.

STATEMENT OF THOMAS J. O'REILLY, WASHINGTON COUNSEL, HAWAIIAN TELEPHONE CO.

Mr. O'REILLY. Thank you, Mr. Chairman.

May I extend my special thanks to your staff, and particularly Mr. Moir, for keeping the door open until late yesterday afternoon so that I could have the privilege of appearing before you this afternoon.

I have prepared and submitted to the staff, Mr. Chairman, a very brief statement, and if I may, I will try to be even briefer in summarizing it.

It is so nice to be among friends, Mr. Chairman. I have heard much this morning with which I can fully agree. I have heard a number of things with which I cannot agree, but I think those are covered in the prepared statement. Something that may surprise you a little bit, I found much of what Dr. Charyk said that I could fully agree with. I had originally thought that this would be somewhat of a battle between Comsat and the existing international carriers, but Joe, with his usual modesty, in pointing with pride to Comsat's accomplishments over the years and in commenting on the familiarity that he experienced with the arguments today compared with those he heard many years ago, led me to the conclusion that in view of Comsat's success and in view of the similarity of the arguments that took place in 1962 and that you are hearing this morning, the Congress, in its wisdom, in 1962, enacted a statute under which the international carriers could participate fully and could compete fully in serving the international market.

Were H.R. 11209 drafted in the same fashion as the Communications Satellite Act, Hawaiian Telephone would fully support its enactment. Unfortunately, it is not, and to put our problem in a nutshell, I would share Mr. Conn's views that Hawaiian Telephone does not wish to be relegated to the role of a local errandboy, even though that would be a more pleasant role in Hawaii than going from New York to Connecticut.

We do have at the moment, Mr. Chairman, something approximating two-thirds of a billion dollars invested in telephone plant. Much of this is in underseas cable, satellite Earth stations, and in other facilities used in international service. We provide service now to some 210 foreign countries, and we do not find it pleasant to visualize our role in providing service to ships at sea as simply picking up the traffic and delivering it to Comsat at Paumalu or Waikiki. Thank you, Mr. Chairman.

[Mr. O'Reilly's prepared statement follows:]

STATEMENT OF THOMAS J. O'REILLY, ON BEHALF OF THE HAWAIIAN TELEPHONE CO.

Mr. Chairman and members of the Subcommittee, I am Thomas J. O'Reilly, Washington counsel for Hawaiian Telephone Company, for whom I have the privilege and pleasure of submitting this prepared statement for your consideration.

Maritime, satellite, and Hawaii would seem to tie together equally as well as, if not better than, hot dogs, apple pie and Chevrolet; but although maritime and Hawaii have been closely related since well before Captain Cook, and satellite and Hawaii equally close for over ten years, the tripartite connection has not yet been made.

In the prospective birth of INMARSAT, Hawaiian Telephone anticipated the occasion on which that connection might be made. Unfortunately, however, H.R. 11209, as we understand it, provides literally no incentive for Hawaiian Telephone to invest or participate in the maritime satellite system contemplated by this proposed legislation.

As you and the members of your Subcommittee know, Mr. Chairman, Hawaiian Telephone is and has been in the business of providing not only local exchange and other intrastate communications services to the over 900,000 residents of our State; but we also provide interstate telecommunications services between Hawaii and the U.S. Mainland and foreign services to some 210 countries in the rest of the world. We provide these interstate and foreign services through submarine cables and domestic and international satellite facilities, facilities which Hawaiian has acquired and operates pursuant to appropriate authorizations from the Federal Communications Commission. In 1977, Hawaiian served 642,085 telephones, handled 1.5 billion local calls and 29 million toll calls, and owned and operated telephone plant representing an investment of \$666 million.

In the maritime satellite system proposed by H.R. 11209, however, Hawaiian Telephone would be relegated to essentially the status of a "connecting carrier", i.e., a carrier that engaged in interstate or foreign communication only through interconnection with another carrier, with the other carrier in this instance being Comsat. Under the bill as written, it would be Comsat that would own, control and operate the space segment, provide channels to the public (Sec. 4(b)(3)(A)), and permit interconnection with the system by both common carrier and private communications systems. It is true, of course, that the bill (Committee Print) would also permit the acquisition of total or partial ownership interests in earth stations by carriers and private systems. Whether ownership would carry with it operating rights in the earth station is not clear, nor is how or by whom ownership shares would be determined. But if Hawaiian Telephone's sole function in the proposed satellite system is to collect or distribute traffic within the State of Hawaii, why should it contribute funds to an earth station? Since an investment under the circumstances would not afford Hawaiian a voice in the operation of the satellite system itself, it would appear that Hawaiian's participation in ownership would not be that of a carrier but simply that of an investor, a role subject to question from a legal standpoint and of no discernible practical benefit.

Hawaiian Telephone's concerns over these aspects of H.R. 11209 are heightened by the provisions of the bill which would permit direct service to the public by Comsat and the acquisition of ownership interests by operators of private communications systems. Hawaiian Telephone anticipates a relatively limited market for maritime satellite services, an anticipation based in part on the recent closure of Hawaii's only high seas maritime station because of lack of traffic. To the extent that a significant demand for maritime service materializes, it would seem reasonable to assume that large customers, i.e., operators of sizable fleets, would represent the bulk of that demand. It would be precisely those customers who could be expected to have private communications systems, and who under H.R. 11209 would be permitted to bypass Hawaiian Telephone in favor of direct dealing with Comsat, thus leaving Hawaiian with responsibility for serving only the small or occasional

users. Parenthetically, Hawaiian Telephone is also concerned that under H.R. 11209 Comsat would apparently be permitted to provide services to these potentially large users without regulation of its rates by the FCC, whereas all of Hawaiian Telephone's rates are fully subject to regulation.

For these reasons, which can be summed in the phrase "lack of investment or business incentive," Hawaiian Telephone cannot support H.R. 11209 in its present form. We could and would support, however, a maritime satellite bill that would provide for a system in which Hawaiian Telephone could have ownership and operating rights similar to those we now have in the INTELSAT system; and one in which Comsat would function essentially as it now does, as a carriers' carrier fully subject to FCC regulation.

Thank you, Mr. Chairman, for permitting me to present Hawaiian Telephone's thoughts on H.R. 11209.

Mr. VAN DEERLIN. Thank you, Mr. O'Reilly. I think your credentials for brevity have been further heightened today.

Mr. O'REILLY. Thank you, Mr. Chairman.

Mr. VAN DEERLIN. Mr. Marks, do you have a question of the panel?

Mr. MARKS. Thank you, Mr. Chairman. I do have a couple. you have come down pretty heavily on the monopolistic trend you have suggested is in the bill we are considering, Mr. Charyk. I am curious, because this is really the bottom line. It had appeared to us recently that as far as the management system is concerned, there is no question that it appears to be monopolistic in that sense, but not necessarily in the services area, and I wonder if you three gentlemen would speak to that just briefly, if we can, and then have Mr. Charyk answer that same thing.

Mr. WHITE. Yes, sir. If I understand your question, which relates to why we considered the proposed bill as granting to Comsat a monopoly. It is certainly clear. I don't think there is any question that insofar as the space segment is concerned, you are not allowing the other carrier to perform or participate in that service.

With respect to the Earth station ownership, the original form of the bill, the original version guaranteed Comsat a 50-percent ownership which, of course, we regard as negative control. In fact, when packaged with the space segment, it is real control. Even under the latest version, which we have just seen, it leaves to the FCC the opportunity to determine who the owners of the Earth station should be, but you will note that as part of Mr. Hinchman's testimony, he indicates that the Earth station ownership should be in—at least the Common Carrier Bureau believes that the Earth station ownership should be in the same hands as the owner and operator of the space segment, so that your bill in effect is implemented by the FCC as you would permit. It would seem to lead toward obsolete control of Comsat's both Earth station and space segment, and as others have clearly indicated, that is the service. The land line distribution, the reaching of the customer wherever he or she may be, on the mainland or in Hawaii or wherever, is really a small portion of the service. It has nothing to do with the future of maritime communications service.

Insofar as the Telex is concerned, there is complete domination in that area by the Western Union Telegraph Co. While we provide some services and equipment in the gateways, and I recognize the latest version eliminates any question with regard to our being able to operate outside the gateways, there is not enough business to make operation outside the gateways meaningful, if we could

only operate outside the existing gateways, this service, so to me that adds up to a 100 percent or a 99 percent Comsat operation.

Mr. MARKS. Mr. Carr, do you want to comment further on what was said?

Mr. CARR. Mr. Marks, A.T. & T. would reach essentially the same conclusion that has been enunciated by Mr. White. We would come to the conclusion that under the provisions of H.R. 11209, Comsat would have effectively 99 percent of the operation. We would be delivering the traffic from its originating point to their earth station, which would not be an added incentive for us. We do that today, sir, so there would be no additional incentive on our part to invest in or promote the service.

In the final analysis, Mr. Marks, we want to see this technology succeed. I believe that the virtual monopoly which has been characterized by Mr. White as a 99-percent monopoly, if there is such a thing, I think that would work to the detriment of making this technology succeed and develop.

Thank you, sir.

Mr. MARKS. Mr. Conn?

Mr. CONN. Mr. Marks, to plan competitive services, which I think your question was, competitive services, carriers must have some access or some control over the overseas facility, whether it is a submarine cable or communications satellite. Today we plan that service in cooperation with our overseas correspondent, be he in Europe, Asia, or the southern hemisphere, and we would not have that opportunity if it were an all-Comsat show on the maritime spacecraft and now we hear perhaps on the Earth station.

The reason that in the maritime field, we need to plan the services with our overseas correspondents is that international communications is still a cooperative venture. When ships are sailing in the Indian Ocean, they will not have direct access to a U.S. Earth station. They will have to go through an Earth station in another continent, and that is done cooperatively every day. Services have to be planned together. We cannot have one type of service in the Atlantic and a different type of service in the Indian Ocean. When our ships are in one ocean, they expect the same service as in another ocean.

So, unless we have access to our foreign correspondents, rather than being isolated from them by a Comsat wall, we cannot plan good, cooperative, and, I stress, competitive services.

Mr. DeROSA. I would like to add something, Mr. Congressman, on behalf of RCA. I agree with what my colleagues have said. I think, however, we should also emphasize that what we have here is a very thin market, and what you are asking us to do is split it with Comsat. We will still be providing high frequency radio service for years and years to come, and you are precluding us from what in effect will be the future as far as maritime communications are concerned.

In addition, to foreclose us from providing satellite service is a disincentive to continue to offer high quality service to high frequency users. We see a real danger in permitting Comsat to provide service directly to the big users. It is a disincentive for us to continue to provide high frequency marine service.

Mr. MARKS. Mr. Charyk?

Mr. CHARYK. Mr. Marks, having heard some of the discussion in the last few minutes, I am reinforced in my belief that the proposed legislation is sounder than ever. There seems to be a tendency here to throw out the word "monopoly." I guess the reason for that is that somehow monopoly is a bad word, and yet what is being proposed here—I don't think there is any argument against the idea that the U.S. ownership of the space segment will be single. There won't be multiple space segments around that people can invest in. The economy will demand the minimum number of Earth stations to access those satellites. No one is proposing to build a multiplicity of such Earth stations.

There will be a minimum of Earth stations, and there will be a single U.S. participation in the space segment. That is being described as a monopoly. The only thing being argued is who will own that space segment and those Earth stations. It will be single in any event. Where the competition comes in is in the imagination of the new kinds of services that can be offered. This will determine the growth of the market. That is open to everyone.

I am sorry that WUI, with all of their planning skills that were elaborated on a few moments ago, conceives themselves to be a 90-mile messenger. If that is the extent to which their planning has led, I suspect they will not have a meaningful role. The real role will depend upon the imagination of the kind of services that can be offered.

The facilities are going to be common. There is going to be a single space segment. There is going to be a minimum number of Earth stations. Anyone can have access to those stations, anyone who desires a particular kind of service.

It would be our feeling that what is needed here is the imagination, the energy, and the marketing skill to develop new concepts as to how this media can best be used by various companies to better conduct their operations, to conduct their operations in new ways, more meaningful ways, and it is certainly not in my book the idea of a messenger service. If that is the extent of the imagination, then those companies that have that kind of imagination certainly will not have a meaningful role, regardless of what is legislated.

I think the discussion emphasizes, therefore, that it is important that a definite decision be made as to the ownership of the Earth stations and the ownership of the space segment. The opportunity is presented for all to make use of those facilities in a meaningful and important way, and the dropouts will be those who do not have the initiative, the energy, or the imagination as to how best to use these facilities.

If Comsat is given the privilege of owning the space segment as far as the United States is concerned and the Earth station, those facilities are available to all in any way that anyone chooses to use those facilities. They will be offered on a common basis. There will be no preferential treatment, and the use will be strictly determined by the imagination, inventiveness, and the ingenuity of the companies who will be offering the services to the ultimate customers, and no one is excluded by this legislation. That is the first point I would like to make.

As far as a couple of other points, I cannot resist saying that the idea of a new company is not a new idea. Comsat is a new company. It was created by the Congress. The carriers were afforded an ownership interest in that company by the legislation. Mr. Conn talks about the silver spoon. Well, I think WUI had a very good silver spoon. Western Union International sold 19,000 shares between \$57 and \$58. They sold 10,000 shares between \$79.50 and \$84 a share. They purchased the shares at \$20. Those shares are now selling for \$35.

The people who are stuck at the moment are those people who had the courage, the imagination, and the belief that when the Congress created Comsat, it was for the purpose of being the vehicle of the United States in international global satellite communications. An ownership interest was provided to the general public. We have about 100,000 shareholders. Many of those from whom I hear every day are people who bought shares for their grandchildren or for their children to assist in their education. Those people who had the confidence, who bought the shares at \$20, now have those shares valued at \$35. The people who profess that they should now form some kind of new company and buy an ownership interest in this new company sold out at these inflated rates. I say the new company was formed. It was formed for the purpose of exerting U.S. leadership in international global communications.

That company, I think, has done an imminent job on the basic point-to-point service. It has taken the leadership role in the maritime service. The carriers have been afforded the opportunity to have ownership interests in that company. They have for various reasons chosen to sell their shares, all at substantial profits. I think the time now has arrived to eliminate the discussion and the argument, to crystallize on the U.S. participation in international global maritime service, so the United States can go back to playing an important role, a leadership role in the development of this new technology.

This bill provides the opportunity for all parties to provide services, limited only by their ingenuity and imagination. That I insist is true competition. Thank you, Mr. Marks.

Mr. MARKS. Mr. Chairman, one quick question if I may. Thank you, gentlemen, for your responses. There was a statement made by Mr. Conn a while ago that the FCC had changed its position. Have you in fact changed your position?

Mr. HINCHMAN. Mr. Marks, the Commission issued as part of this inquiry a further notice, a supplemental notice in 1975, in which it indicated at that time a tentative preference for an entity, focusing both on the need to separate that entity in various ways and on our concern about the overall structure of the industry. The Commission did say tentatively that it should not be Comsat, but rather an entity owned by all the participating carriers. The Commission put that out for further comment, and now, having had those further comments, the Commission believes, or at least the Bureau has recommended and I believe the Commission has generally adopted the concept that it should not be a multiple carrier consortium.

Mr. MARKS. Thank you. Thank you, Mr. Chairman.

Mr. VAN DEERLIN. Ms. Mikulski?

Ms. MIKULSKI. Thank you, Mr. Chairman.

As a member of the Merchant Marine Committee I have heard some of the discussion before, and I am now in a position where I believe the last person who talks. I would like to ask a very basic question of Comsat and RCA, WUI and ITT. What would be exactly the benefit to the user if a new corporation was owned by you, meaning RCA, WUI, and so on, as compared to Comsat—and to Comsat, I would like to know what would be the benefit to the user if you were the primary owner.

Mr. VAN DEERLIN. Mr. Conn?

Mr. CONN. Thank you, Mr. Chairman.

Ms. Mikulski, the benefits of competition to the consumer that I foresee are documented in history. I do not have to talk about the future. I can talk about history. We have the most robust competition in the telecommunications industry, in the international record carrier field. If I could illustrate that competition, I could tell you that the least channeled charge between the mainland and Hawaii 10 or 12 years ago was \$14,000 a month. Today it is down to about \$2,500 a month, and I must admit we are giving some difficulty to the FCC and I think for good reason the FCC has been suspending some of these rate reductions because it wants to examine if this is going too far.

Anyway, that is competition, and it is ultimate, and with the FCC oversight to make sure there are no cross-subsidies. Let's look at monopoly. We have a statutory monopoly under the Satellite Act today. However, the FCC has been given oversight of rates. We have not had a Comsat rate reduction since 1971 to any foreign point. In 1971 there was a promise by Comsat of rate reductions which never materialized. The FCC made a statement—it is not my statement—that Comsat went back on its promise for a rate reduction.

Meanwhile, we reduced our rates to our consumers in reliance on an unfulfilled promise by Comsat. I do not want to monopolize. I can go on forever, and that is a bad word, but the competition we have engaged in is written in the annals of FCC history. The Comsat monopoly situation shows a reluctance to reduce rates.

Ms. MIKULSKI. Before the others go, I would like to follow up with you a moment, Mr. Conn. You talk about monopoly, and of course the three of you really represent an oligopoly, which really may be only the second generation of a monopoly, but when you talk about how robust competition is, how much did you invest originally, and why did you not invest more? I was somewhat dismayed to find on page 4 of Dr. Charyk's testimony that Comsat put up 86 percent for Marisat, and as a combined unit all others put up only 14 percent. It would seem to me that you would have put in more bucks if you really—I just wondered why you did not put in more bucks.

Mr. CONN. The FCC minimum investment criterion was \$1 million. WUI today has invested approximately \$4 million. For a company our size, we believe that was a substantial investment. We are a small company compared to Comsat. Comsat's revenues, if I recall correctly, are at least twice ours, and its net operating income is three to four times ours. We are a small company. We

made what we thought was a prudent investment, and it is approximately \$4 million.

Ms. MIKULSKI. What is your gross annual revenue?

Mr. CONN. Our gross annual revenue is approximately \$85 million for 1977.

Ms. MIKULSKI. I would like to hear from some of the others.

Mr. DEROSA. I will try to be brief. We think one of the things the committee should be considering right now is that we have an ongoing system, as the Congressman mentioned, in Marisat. We think this is a working system. We are talking about Marisat 2. We are ready to put up new satellites once we finish working out the arrangements. We think the burden should be on Comsat and not the carriers. We don't understand why we should have a service taken away from us. Why should the carriers, who have to provide high frequency radio service presently and will be required to do so until well past the year 2000, be faced with a situation where they in effect lose the future, while at the same time Comsat is given a monopoly?

No matter how you slice it, Comsat has been very successful. They presently lease domestic satellites to A.T. & T.

Ms. MIKULSKI. Yes, but tell me why the user would be benefited more under you.

Mr. DEROSA. We think that it is to the benefit of the user to have the four marine satellite carriers, RCA, WUI, ITT, and the others together with A.T. & T. in a consortium. We feel it would provide added flexibility to the FCC in the event in the future they do want to change the competitive situation. Competition can only be fostered by having more than one company.

There is active price and service competition in the international voice record industry right now. It is obviously a direct result of the fact that you have three or four carriers trying to attain additional market penetration every day.

Ms. MIKULSKI. Mr. DeRosa, how much money did your company put up in the original investment?

Mr. DEROSA. Our company put up approximately \$9 million, I believe, and we spent an additional \$1 million in related costs. We based our investment on our ability to provide a high quality marine Telex service. We took a look at what the system is going to give us. Most of the investment in the satellites was for the purpose of providing service to the Navy. The commercial system was an add-on, an afterthought. Some people have described it as a Comsat buy-in into the commercial area. However, we took a good, hard look at it, and we said that for \$10 million we will get enough channels to provide marine Telex service of a quality we can live with.

A.T. & T. took nothing because there was not enough band width for A.T. & T. evidently to provide the type of service they wanted to provide. Our decision was also influenced by the fact that a quick turnaround contract was involved. We only had one month or two in which to make a decision.

Ms. MIKULSKI. Was RCA one of the major investors of the corporate private sector?

Mr. DEROSA. Comsat put up 86 percent, which I am sure you will hear today. The others put up 14 percent. As for Marisat 2, in

which we are presently involved in discussions, Comsat General, I believe, is willing to put up 60 percent. The other carriers are discussing an investment in the area of 40 to 43 percent. So, things have changed. This is ongoing, and it is because there is going to be more capacity in the system available for the commercial use. I would like to make one more point. The FCC on three different occasions, I believe, has had the subject of Comsat and Comsat General before it—Comsat as the U.S.-designated entity to Intelsat, Comsat General as a domestic carrier in a consortium with IBM, and Comsat General in Marisat.

The FCC raised two questions: One, whether there should be an expansion of Comsat's statutory monopoly, and two, whether or not cross-subsidy should be permitted. It was decided that Comsat General should be authorized to take on certain activities which either Comsat had proposed to undertake or which FCC had been considering to allow Comsat to undertake.

When Comsat General was established, it was intended that it be more than a mere corporate shell. It was supposed to act as more than a mere division of Comsat. Nevertheless Comsat General is not here today, not pursuing this corporate opportunity.

We have an ongoing Marisat system. All we are asking is to be permitted to go ahead with Marisat 2, and extrapolate it into Inmarsat. Marisat is working well as an organization. Why should there be a change?

Ms. MIKULSKI. Thank you. I would like to hear from I.T. & T., and if you could confine your remarks not to telling me what is wrong with Comsat, but what you think is better about you, it would be helpful.

Mr. WHITE. Yes, Ms. Mikulski. I think you have asked two questions. What difference would it make to the user—

Ms. MIKULSKI That is right.

Mr. WHITE [continuing]. Which is the first question. I think we could just address that in terms of the fact that the users will have and will require for the foreseeable future high frequency radio services, the coast station services. To the extent that the customer requirements can be satisfied through the coordinated efforts of our company knowing and participating in the satellite service as well as the high frequency service, I think we would be better able to serve the customer's long-range needs.

If we are out of the satellite picture, if we do not know what is being planned, what is going to come up, we can only say, well, we are in this dying business of coast station services, and we will do just what is necessary to comply with our obligations as a carrier, so that in large part I think the answer to that is coordination of services, both of which are required for the same customers, and an incentive to us as a carrier to provide the best service with the view of long-range participation.

Ms. MIKULSKI. If Comsat became the designated entity, do you think the private sector would begin to bail out of providing traditional coastal maritime communications? I have heard it referred to as kind of a dying thing, or very limited.

Mr. WHITE. Yes. Well, insofar as the coast station service is concerned, the satellite service will be superior, we expect, to that, so it is not so important what we want to do but what the custom-

ers want to do, and the customers will want to move to the superior service once they can afford to provide the ship terminal stations, so that there will be less demand for this service, although the small users will, of course, still require this service.

Ms. MIKULSKI. How much money did you put up?

Mr. WHITE. OK, for a carrier that grosses approximately \$3 million a year from all maritime services, we felt there were two reasons why a \$3 million investment in Marisat was adequate. One is, and I think probably the most important one, is referred to in our testimony on pages 4 and 5, at the bottom of 4 and the top of 5, wherein we felt that Comsat has grossly misallocated the costs between the service requirements for the Navy and the commercial services, so that we questioned the long-range viability of the system.

Nonetheless, we made a significant investment for the purpose, the express purpose of being part of the satellite venture, so that we could remain a part of the future of maritime services, and that was specifically stated in our request to the FCC for authorization to provide that service.

Again, it is largely a question of size of the company and how much. I guess the second reason is, we had to anticipate, and here we were concerned about our commercial customers, more so than with the Navy. The Navy had a temporary requirement, and we assumed that it would go away once it established its own system, so that the important thing for us to decide was, knowing our customers, how much capacity did we need to provide our customers with adequate service.

We obtained a discrete amount of capacity through that percentage that we acquired, and the record has shown that that was an adequate amount of capacity for our customers' needs, so the fact that we did not take more has not been proven to be wrong by anything that has happened up to now.

Ms. MIKULSKI. Dr. Charyk? Thank you.

Mr. CHARYK. I think the answer to the question you asked, Ms. Mikulski, might be evident in the answers. First of all, when the initial program was contemplated, it did not look as though it was that exciting a financial proposition. The Navy was agreeing to take a minimal service for a period of two years.

There was no defined commercial service, and you were talking about an investment in excess of \$100 million. You had to have considerable faith. You had to have some idea of what you thought this new medium was going to provide in the way of new and different services, and yet we have the carriers here today talking about this new system as just a continuation of the old HF type services, conventional Telex and voice services. If that is the extent to which this new medium can contribute, the I could understand the reservation and willingness to take chances and invest in the system.

We offered to take 100 percent, the maximum that was invested by the other carriers when the Commission offered them an equal opportunity to participate, as you have heard, with 14 percent. We picked up the balance of 86 percent because we had faith that this new medium would provide new and meaningful services, and yet

we talked about the conventional old ideas carrying on into this new medium.

Now, I think that the discussion here has also illustrated one other thing, in other words, what will the customer be looking for? I think he will be looking for ways in which this new medium can provide him new and different services to better do his job. If all he is going to get out of this is the continuation of the classical services, it will not be very exciting, and it will not be very important.

We do not believe that. We believe that this can make a major change in the way companies are going to operate, but if the only kinds of services that are going to be offered to these companies are sort of the classical type services, that will not do much for the customer. If we are in this business, we do not intend to limit it to that. We intend to study the way these companies operate. We intend to study how this new medium can better meet their requirements, how it can better organize their business, and we think that there are many new and exciting opportunities. That is why we made the investment in the first instance.

Now, I want to reemphasize that under this legislation as it is proposed, no one is inhibited or prohibited from providing a variety of services to the customer. All we are talking about is the fact that the ownership of the space segment and the Earth segment as we would propose it would be in an entity that could make prompt, effective decisions, and that has a belief and a confidence in what satellites can contribute to the maritime scene.

We think that the fact that we made the investment of 86 percent, the fact that we have the confidence in maritime satellite communications is the reason why Comsat should be given consideration to own the space segment and the Earth stations. The idea that some sort of a new entity should be created with a multiplicity of ownership, I think the discussion here has emphasized that prompt, effective decisionmaking, which is what this company will need, would be very difficult to achieve if the ownership was divided in many different portions by people with very diverse interests and very diverse ideas as to the future of this new medium.

Thank you.

Mr. VAN DEERLIN. Mr. Moorhead?

Mr. MOORHEAD. Thank You. One of the big concerns I have is, if Comsat is going to have a monopoly on the satellite picture, why should they also be allowed to compete with the direct sales to customers? Wouldn't it be just like giving Exxon a license to be the only one that imported oil, and then the other companies have to buy from them for direct sales?

Mr. CHARYK. As has been pointed out, the investments involved in the Earth station and the space segment is going to be very substantial. It is likely that in the early years this is not going to be a very attractive economic proposition. I think that you have heard some of the ideas of the carriers as to how they propose to utilize the satellites. Frankly, they are not very imaginative at the present time. If we are going to make this investment, it seems to me we should have an opportunity to stimulate the system.

Mr. MOORHEAD. I really don't think that is a fair assumption that they won't be imaginative, because I am sure these companies will do everything they can to make sales.

Mr. CHARYK. I think they have said they would not have the incentive if they didn't have an ownership interest. I would hope that would not be the case.

Mr. MOORHEAD. I do not think that is an accurate assessment. I don't buy it, and I am sure that others do not.

Mr. CHARYK. I hope that is correct.

Mr. MOORHEAD. Doesn't it give you an economic advantage over them, if you have control over both the satellite and Earth station, if you are also competing in the direct sales to the customers?

Mr. CHARYK. I think not, in the sense that the economic aspects of the use of the ground segment and the space segment would be common to all. We would have no economic advantage at all.

Mr. MOORHEAD. Why are you so anxious for it, then?

Mr. CHARYK. Because we think it should be in single hands so that we can move ahead and make effective, prompt decisions. I do not think that those effective, prompt decisions can be made if those facilities are in a multiplicity of hands.

Mr. MOORHEAD. So you are trying to provide more of a public service than make a profit.

Mr. CHARYK. We think those facilities should be brought into being and made available to all to use. That is our total objective, and I think setting it up in the simplest possible way is the best answer, and offering those facilities to everyone under the same terms and conditions stimulates the maximum amount of competition.

Mr. MOORHEAD. How much profit actually is there in this area in which you are to be given a monopolistic role?

Mr. CHARYK. In the first place, I don't like the word "monopolistic." I don't think it is. No one is talking about multiple ownership of Earth stations and multiple ownership of space segments. There is going to be only one. The question is, is it owned by Comsat or a combination of companies? So, I don't think the word "monopoly" properly describes the situation.

In any event, I think the likelihood is for some years this is just not going to be profitable. This is going to require the development of new and different kinds of services, the development of the use of this system, which is going to take some time, and it is going to take a number of years, I believe, before this activity can be described as profitable.

Mr. MOORHEAD. Let me ask another question then. How much money do you figure it will cost you, and where are you going to get it?

Mr. CHARYK. The space segments of the United States participation will be about 17 percent. I would guess that the original investment will be something in excess of—well, it will be on the order of \$200 million. That is about \$34 million in the space segment, then. There will have to be several million in the Earth stations, presumably.

As far as the shipboard terminals are concerned, that is open to everyone. Anyone can provide shipboard terminals.

Mr. MOORHEAD. Where would you get this \$200 million? If it wouldn't be profitable, why would you put that kind of money in?

Mr. CHARYK. The United States would put up \$34 million. Other nations of the world would put up the balance of the \$200 million. That is called for under the Inmarsat agreement. The reason the other countries have agreed to invest \$200 million is because they feel that the advent of satellite communications can lead to new and important services for the maritime user, and in most countries, of course, the investments will be made by governments.

Mr. MOORHEAD. Will they then share in the profits or will the company just get the profits?

Mr. CHARYK. The profits would accrue from the sale of services to the customer, and as I indicated earlier, under this legislation all the carriers and other parties would be free to offer services to a variety of customers, and the people that will be providing the services will earn their profits on the basis of the services they provide. The investment in the international space segment will basically entitle you to use of that space segment to meet the requirements of your country's users.

Mr. MOORHEAD. I believe you had a comment.

Mr. CONN. If I may just give a minute of rebuttal to some overstatements that were made, first of all, Mr. Moorhead put his finger better than I can on the overstatement that the other carriers have done nothing, but I must rebut, and these are quotes, that we are "dropouts" and we lack imagination.

No. 1, we do not want to drop out, but we do not want you to legislate us out. No. 2, on the imagination, I think the record speaks for itself. I will not recite all of the imaginative services that WUI has been authorized to provide for the FCC in the data and transmission field particularly. However, the shipboard terminal, you heard a remark that anyone can provide a shipboard terminal under this legislation. That is not an exactly correct statement for this reason. I can just read the script from the Comsat salesman after the bill passes. It will say, divided responsibility, don't do it. They will tell the customer, we control the entire space segment, we control the Earth station on land, don't buy WUI's terminal, it is divided responsibility.

We have been innovative in our terminals, and I submit and believe the record will show that the WUI-provided terminal, in which we have invested additional money in addition to the \$4 million I mentioned before, that terminal has a superior gyroscopic stabilizer. It is the envy of the industry. The users love it, and I am saying we will not have an ability to connect that with Comsat dominated and Comsat-controlled channels.

Mr. CHARYK. Just a minor point. We have invested in 200 terminals. I believe Western Union international has two. I hope they do have a better terminal. I think that is what this game is all about, the idea of having new and better kinds of terminals to provide for the user. The Japanese are very active. Other company's manufacturers are going to be very active in providing shipboard terminals. We are going to be dealing with a multiplicity of shipboard terminals. We deal today in the Marisat system with a multiplicity of Earth stations built by various manufacturers around the world. This system will have to operate with ship terminals made in

many different companies by many different manufacturers, and we welcome more different and hopefully better terminals.

Mr. MOORHEAD. Didn't Mr. Conn say earlier that the Commission was going to want one company, yours, to control Earth stations?

Mr. CHARYK. Not on board ships.

Mr. VAN DEERLIN. Mr. Wirth?

Mr. WIRTH. Thank you, Mr. Chairman.

I wanted to direct a question to Mr. Hinchman, if I might.

As I sat and listened to this discussion, it brings up thoughts of hearings we had about 6 months ago on various other aspects of international communication, and I was wondering if the FCC and your Bureau had given thought to the implications of decisions that are made on this proposal to future decisions in the international area.

In particular, I was looking at the bottom of page 5 of the proposed legislation, which says that the corporation shall directly interconnect consumers to Earth stations for global satellite communications. In other words, the direct access question is raised. If we make a decision to allow this kind of access, are we setting some kind of precedent for a change in the authorized user concept that was of such concern 6 months ago during the hearings of the subcommittee on other aspects of international communication?

Mr. HINCHMAN. Mr. Wirth, the Commission is planning to re-examine the authorized user and a number of other matters, such as the free direct access decisions. Those decisions relate to international fixed services, but I do not believe what we have recommended in this bears any necessary relationship to those activities by the Commission. We have tried to look at the maritime satellite communications business in its own right; the various functions that are performed there, and whether these functions should be competitive or monopolistic, and whether there should be tie-ins between the competitive and monopoly activities. I think as far as the Bureau is concerned, we have looked solely at this issue on its own merit. We do obviously have concerns about, and we have expressed them before, about the ability of the users to use a single piece of terminal equipment, whether it be shipboard or in their office, to communicate via any one of the carriers as opposed to the present tie-in arrangement, where they have to have multiple terminals to operate with multiple carriers. I don't think that was raised in this proceeding specifically and we didn't address that.

Mr. WIRTH. Maybe the record carriers would react to that. If I were one of the record carriers reading this language and thinking about further precedents down the line, I would wonder if this is going to alter, or imply that the Congress wanted to alter the authorized user concept, or is that not a concern that any of you have? Sir?

Mr. CONN. Mr. Wirth, you are absolutely right. We do have a concern, and the maritime field is very interesting to us, and we do want to move forward in it, but I must concede it is probably the tail of the dog, and you put your finger on it.

We do not want to see established policy, policy which has brought reproductions and service approvals to the customers through the authorized user policy, we don't want to see that

decided in a forum that is only examining a microscopic part of the telecommunications.

Mr. WIRTH. Are any of the other record carriers concerned?

Mr. DEROSA. We would agree certainly. We have, I believe, raised this in past discussions with some of the staff, but only fleetingly. After we did see the legislation, we did indicate that we were worried about it in that regard.

Mr. WIRTH. It seems to me, and I do not know if other members of the panel have a reaction to that, but it seems to me that is really the issue we are talking about here. We are talking about a very tiny market when talking about the maritime industry, compared to the size of the rest of the market, and what we are really talking about here is whether or not through this legislation this subcommittee and the Congress is going to establish precedent saying we are no longer going to have authorized users.

That is, Mr. Moorhead was asking before that people don't have to go through those authorized users in order to get access to Comsat. Do any of the other members of the panel have a reaction?

Mr. WHITE. Yes, Mr. Wirth. That is a major if not the overriding concern that we have. This legislation in its present form would prejudice the authorized user matter. All the reasons that are being given for giving Comsat complete control over Inmarsat facilities or facilities used in connection with Inmarsat could also be used as arguments for eliminating the authorized user decision as it now stands.

The problem is that even when we talk about it now, we are not talking about the various related problems. In other words, at what price and what cost would be included, even if you eliminated the authorized user decision. Our experience so far has been that whenever Comsat has attempted to get an exception to that decision, it has proposed prices to the customers that are the same as the prices provided to us, even though the cost of providing service to us would be cheaper, because of lack of need for marketing and other services.

Mr. WIRTH [presiding]. The bells have gone off, and Ms. Mikulski and I have got to go over and answer this quorum call. I am curious, Ms. Mikulski. Your question went to who is benefitting the consumer. I think what we are getting into now is a broader issue, which is, how does or how does not the whole authorized user concept benefit different kinds of consumers.

If in fact what we are talking about here is the central issue or that which is of greatest interest to the record carriers, it seems to me we ought to come back and spend a little time focusing on the authorized user concept before we go drifting off into this piece of legislation without really examining what a number of members of the panel seem to think is one of or the central issue involved here.

Ms. MIKULSKI. Do you have more questions, Mr. Wirth, when we return?

Mr. WIRTH. No.

Ms. MIKULSKI. We will temporarily recess while we vote. The Chairman has gone ahead, and when he comes back he will reconvene the meeting.

[Brief recess.]

Mr. VAN DEERLIN. Perhaps the answer to Mr. Wirth's last question should wait until his return, but rather than lose any time, why do we not proceed immediately to staff questioning? Chief counsel, Mr. Shooshan? We will stop and resume the other line of questioning as soon as Mr. Wirth returns.

Mr. SHOOSHAN. Thank you, Mr. Chairman.

Mr. Hinchman, just to provide the subcommittee with a little clearer idea of the time frame in which you are working on this, the process began in earnest, planning for a maritime satellite entity, in 1972, and a report was developed in 1974. At that point, the Commission issued a notice of inquiry, did it not, into these issues?

Mr. HINCHMAN. Yes, that is correct.

Mr. SHOOSHAN. Today in your testimony you said that the major difference that you would see or the Commission would see from the approach taken in H.R. 11209 is that the Commission would propose not to designate Comsat as an entity, or would rather not have that done in legislation, but would prefer to do that through further rulemaking proceedings.

Considering the Commission has had this issue before it in one form or another for about 4 years, are we likely to see this resolved any time soon?

Mr. HINCHMAN. Mr. Shooshan, I think both the Commission and a lot of other parties or agencies have had this before them for a long time.

Mr. SHOOSHAN. We will get to the other agencies.

Mr. HINCHMAN. And some of the interplay between those various fora has contributed to some of the Commission's delay and perhaps has contributed to some of the other delays, but the Bureau has recommended to the Commission the designation of Comsat at this time based upon what we thought was an adequate record, but recognizing that this had only been a notice of inquiry, we were not in a procedural posture to be able to make that designation definite.

The Commission in the March 15 meeting decided they would put that out for further rulemaking.

Mr. SHOOSHAN. You do not have the power right now to designate it any way do you? Is it not a question of what you can recommend to Congress?

Mr. HINCHMAN. We can recommend to Congress, but we were not even in a posture at that point of taking any kind of official Commission action to do that.

Mr. SHOOSHAN. How long do you think it will take to build the kind of record to make a recommendation to the Congress as to what the entity ought to be?

Mr. HINCHMAN. We believe that could probably be done in about 6 months, since most of the issues have already been put out, commented upon, and the committee has an expression of a tentative recommendation by the Commission that would be before the parties.

I think, Mr. Shooshan, it is fair to note that there were some Commissioners who were prepared to go ahead and express a preference at this time for Comsat. There were other commissioners who felt that they had not had an opportunity yet to see all of the

evidence they would like, and that is the reason the Commission decided not to tentatively designate Comsat at this point.

Mr. SHOOSHAN. Would you as part of that recommendation be considering the kinds of issues that are raised in the study which the legislation, the proposed legislation, H.R. 11209, would mandate you to look at under section 5?

Mr. HINCHMAN. That is correct. We actually proposed two separate proceedings. One was a rulemaking to actually designate an entity. The other was to look into the questions of economic impact, the structure of Comsat should Comsat be designated. The same issues that are in that study were envisioned as an inquiry by the Commission.

Mr. SHOOSHAN. Do you think that that evaluation can be done with the Commission personnel you have on hand right now?

Mr. HINCHMAN. We have asked that we have more time and more resources to do that, if we understand this to be a broad study of the corporate structure of Comsat. If this were only to be a study which led to some recommendations about how the Inmarsat activity itself might be structured within Comsat, I believe that we could do it in a much shorter time, but as we read H.R. 11209, it is a broad investigation of Comsat's corporate structure and how it has fulfilled or will fulfill its obligations in the future.

Mr. SHOOSHAN. Could you do it in shorter time, and could you also do it without the additional four staff personnel and the \$450,000?

Mr. HINCHMAN. Not without dropping other high priority programs, such as Docket No. 18875, and those types of proceedings.

Mr. SHOOSHAN. It seems to me a lot of these issues have been before the Commission in one form or another for some time, and it is a question here to focus it together and get it before the Commission and get some kind of input to the Congress.

Mr. Naleszkiewicz, you have been involved for some time at NTIA and prior to that OTP in dealing with these issues. When did your involvement at OTP begin?

Mr. NALESZKIEWICZ. Mr. Chairman—Mr. Shooshan, I am sorry.

Mr. VAN DEERLIN. It is a mistake frequently made.

Mr. NALESZKIEWICZ. From the very first day I have been in the OTP, I have been involved on behalf of the FCC prior to my OTP involvement. I have been involved in that since 1973 when I was U.S. representative at the very first meeting on the economics of Inmarsat in 1973, and I am U.S. representative to ECON, the Economic Financial Planning of Inmarsat and other—

Mr. SHOOSHAN. We have met many times with you, and you have always been very helpful to the staff.

Mr. NALESZKIEWICZ. Thank you.

Mr. SHOOSHAN. I am interested in a press release dated February 20, 1976, about 2 years ago, where acting OTP Director John Eger announced major legislative proposals which would designate a specially created subsidiary of Comsat to represent the United States in a Commission of International Global Satellite Services.

Briefly, with the indulgence of the Chairman, I would read a direct quote from that.

By also designating Comsat as the U.S. operational entity in international mobile satellite agreements for mobile communications such as the one being negotiated in

London for Inmarsat, we can simplify business and operational relationships for both ourselves and participating nations.

Now, in your statement today, or reading Mr. Fishman's statement today, it reflects a very clear shift in position. You talk about it being, in your considered judgment that the most desirable solution lies in the creation of a new private corporation. Could you enlighten the committee a little bit more than it is in Mr. Fishman's statement why this significant shift was made over the last 3 years?

What analysis have you gone through that has led you to change your mind?

Mr. NALESZKIEWICZ. Mr. Shooshan, there has been an enormous amount of work done on the legislative proposal of the administration since that time. There has also been a change in the Administration. The present administration has cleared the OMB with all the executive agencies. This is the present view.

Mr. SHOOSHAN. But it was developed at OTP, and I am asking you what kind of analysis did you have in presenting this bill to OMB for clearance that Mr. Eger and Mr. Fishman and Mr. Naleszkiewicz didn't have in 1976 in presenting that bill for clearance to OMB?

Mr. NALESZKIEWICZ. I have the answer. It is embarrassing, but it was not the view of Mr. Naleszkiewicz and Mr. Fishman in 1975. It was not our proposed recommendation. We were in a position eventually to prevail, I think, to do additional work. These are not black and white situations, obviously, to say Comsat, RCA, or a consortium. It took quite a lot of additional work for us to proceed through the maze of the situation.

What helped us was the creation of Marisat. This is the present consortium with several carriers. That is a viable one as an organization. They had some troubles in the beginning.

Mr. SHOOSHAN. It is domestic service, though, we are talking about.

Mr. NALESZKIEWICZ. Pardon?

Mr. SHOOSHAN. It provides domestic service.

Mr. NALESZKIEWICZ. It provides the only maritime satellite service, but I am saying that administration basically provides for a corporate entity which is the Marisat type of consortium but is a corporation, and in that sense it really blesses the present type of structure. It doesn't give or take away from anyone anything, but the only difference between 1975's and 1977's administration bill was more work, more soul-searching, I think, and eventually we convinced the other executive agencies that this would be the more prudent approach.

I would like to emphasize, Mr. Shooshan, that the primary concern of the governing agencies is to sign the Inmarsat agreement.

Mr. SHOOSHAN. If the position keeps flipflopping every 2 years, it will be increasingly difficult.

Mr. NALESZKIEWICZ. This is the organization's view, and I do not think there will be any flipflopping on this point, Mr. Shooshan.

Mr. SHOOSHAN. One last question which was raised by the continuing discussion about Comsat's role, this somehow being a monopoly. I wonder if any of the participants would want to—including Mr. DeRosa, might want to comment on the antitrust ramifications.

tions, if any, of having this entity be made up of a consortium of the international record carriers and A.T. & T., the international voice carrier, which would then, one would surmise, be able to control not only entry regarding facilities, but also the provision of services, and what if some years down the road new services come along such as we have seen in international communications generally with services like Graphnet or Telenet, if you want to try to extend the service, and whether the antitrust implications of what you seem to be suggesting might not be just about as severe as the concerns raised about Comsat's role in this.

Mr. DeROSA. What I previously said was that you have a situation where we can either have one company owning the facilities and providing the services or a group of companies owning the facilities and providing the service. I feel that it is better to have a group because you do have diversity of opinion and a difference of interests.

Mr. SHOOSHAN. Have you any barriers to entry?

Mr. DeROSA. I beg your pardon?

Mr. SHOOSHAN. Do you have any barriers to entry?

Mr. DeROSA. I think so long as the Commission maintains jurisdiction over the maritime satellite service, we would probably be in a position of making renewed investments periodically as in the Marisat situation. I would think that the Commission could by maintaining continuing jurisdiction then take a look at the competitive situation and perhaps at some point in the future change the rules of the game on a reasonable basis, of course, and for example allow additional competition.

Mr. SHOOSHAN. Are there any other comments?

Mr. CONN. Mr. Shooshan, on the last question, I believe the barriers against entry do not exist, as witness the planning of the second generation system. The existing four Marisat carriers, after consultation with the FCC, to find out who the FCC considered eligible, issued an invitation to all non-Marisat carriers to attend our meetings planning a second generation. A.T. & T. accepted that invitation. TRT accepted that invitation, and I believe Hawaiian Telephone did, and WLO received correspondence and did communicate with us, so there is no barrier, as I see it.

We advocate a competitive access under FCC jurisdiction. Frankly, Mr. Shooshan, I do not see any words in this present bill about equitable and non-discriminatory access as appear in the Satellite Act of 1972. The FCC, I think, has administered that provision very well. New carriers have come along to new parts of the world, and they have been in effect guaranteed access by the FCC. I think that same provision should be carried forward here.

Mr. SHOOSHAN. Mr. Hinchman, are you at liberty to comment on any of this, or are your instructions from the Commission to keep your options open?

Mr. HINCHMAN. I would comment on a couple of things. We have heard quite a bit today about Marisat and what a great organization that has been in providing services and why it should be continued. Our experience at least in dealing with the formation of Marisat and sorting out the multiplicity of issues that arose among the carriers is one of the reasons we have recommended to the Commission that a multiple-owned entity is not a very good idea. I

think it is very difficult to structure that entity, to regulate it, and to get it to operate in a responsible way.

Also, on the question of conflict of interest, I think your point is very much on target. There is a conflict of interest in this arrangement, in any of the arrangements that have been talked about, whether it is Comsat or a multiple owned entity. I think our assessment is that the conflict becomes perhaps greater by throwing entities who should be competing in the marketplace together in joint ownership rather than leaving that monopoly aspect to a totally separate entity.

The one thing that comes through to me in the discussions here very much today is that there is not so much of an emphasis on competition in services. There seems to be a great emphasis on the ability to invest and the revenue requirement and where the revenue requirement falls, whether it is with Comsat or with the other carriers, and that is really the key issue as I see it.

What we have suggested would permit much service competition, but it does not give the other carriers the opportunity to make an investment, and in this business if you can make an investment, you can earn a rate of return on that investment, and I think that is a central point in this whole discussion.

Mr. SHOOSHAN. Thank you, Mr. Chairman.

Mr. VAN DEERLIN. Mr. Conn?

Mr. CONN. Mr. Chairman, if I may be brief in commenting on a point just mentioned, it appears on page 12 of Mr. Hinchman's prepared statement. There is a haggling attributed to the joint venture partners in both the Marisat and the Intelsat Earth station consortia. I would respectfully disagree. The Intelsat Earth station consortium has been in effect since 1967, and I have the distinction, perhaps dubious, of representing my company continually on that for the last 11 years. After the initial constitution was developed and competitors cannot agree, and the FCC's proper role is to adjudicate in the public interest, the FCC made its adjudication. The Intelsat Earth station joint venture has gone harmoniously now into its 12th year.

With respect to the Marisat joint venture, again, there were initial growing pains, and the disputes had to be brought to the FCC. They were resolved. The constitution was formed and adopted in the midseventies, 1975, and we have no problems now. As a matter of fact, the FCC, in its wisdom, in resolving these problems laid out a procedure where we could bring back disputes. We have never returned to the FCC with a dispute.

So, they are going harmoniously, and I must respectfully disagree with the word "haggling."

Mr. VAN DEERLIN. Mr. Coleman?

Mr. COLEMAN. Thank you, Mr. Chairman.

Mr. White, in responding to Ms. Mikulski's question about the benefits to the public from a carrier-owned corporation, you mentioned unified control of Earth stations and high frequency radio stations. We are aware, as I am sure you know, that there are efforts on the part of owners of radio stations to close those stations, and if that is the case, could not unified ownership of the high frequency radio stations and the Earth station and space

segment lead to a more rapid closing of those high frequency radio stations?

Mr. WHITE. Mr. Coleman, the efforts to close high frequency stations or co-stations is related to the amount of traffic and the number of stations that are in essence redundant stations. This has to do with the failure of maritime communications traffic to grow or possibly even to diminish over a period of time. The effort to close stations is quite apart from providing service.

The intention of all the parties, as far as I know, is to continue providing service in the most efficient way, and as a matter of fact, when the Commission conducted an inquiry on the subject, it retained the services of an independent research organization, and that organization, which is not connected to any of the carriers, also concluded that there were too many co-stations trying to provide a limited amount of service. That is the only subject being dealt with in that regard.

Mr. COLEMAN. The mere fact that the ownership of both satellite facilities and high frequency facilities and the fact that one of the reasons for traffic diminishing in high frequency would be a move toward satellite does not lead you to believe that in an effort to more rapidly close those stations, the satellite service would be made that much more attractive to the user?

Mr. WHITE. I think the attractiveness of the satellite service is going to be related to the quality and availability of that service, not to how many co-stations there are, assuming you have enough co-stations to provide adequate co-station service. I do believe that one thing the Commission should study in one of your study programs proposed in this legislation, we do believe that along with other things, the Commission should study the question as to whether or not the party that has ownership of the satellite communications should not be required to take over the responsibility for the co-stations for even better coordination, and this is one of the things that we were talking about in terms of keeping the communications common carriers, the co-station carriers in the satellite services. They would be in coordinated hands.

Mr. COLEMAN. Fine.

Dr. Charyk, if H.R. 11209 were enacted, would Comsat sign the operating agreement in Inmarsat?

Mr. CHARYK. Yes.

Mr. COLEMAN. Do you see any conflicts of interest between your role as the designated entity in Intelsat and the proposed role for Comsat as the designated entity in Inmarsat?

Mr. CHARYK. None at all. As you know, Intelsat has explored the possibilities of providing some maritime capability to meet the interim requirement before Inmarsat can be created. It seems to me that the best U.S. interest is served by not having any potential divergence of interest as to the appropriate role of Intelsat and Inmarsat. I would imagine that you would really have a conflict if you had one U.S. participant in Intelsat pushing one way and another U.S. participant in Inmarsat pushing another way.

We think that by having the common membership in Inmarsat and Intelsat, we can operate to the best total United States interest.

Mr. COLEMAN. Mr. DeRosa, you mentioned in your statement that the market for maritime satellite services was very limited in size. If that is the case, what need do you see for the creation of an entirely new corporation to serve that market?

Mr. DEROSA. Whether or not you have a new corporation, a partnership, or whatever you have has no relationship to the size of the market.

Mr. COLEMAN. I am talking in terms of the amount of business there is to meet, whatever corporate overhead and costs would be associated with whomever provides maritime satellite services, and it would appear to me at least that the creation of a new corporation would involve more corporate overhead and administrative costs than the utilization of an existing corporate structure. If that market is very limited in size, it does not offer very much revenue, is there need for a new corporation?

Mr. DEROSA. We would rather see a joint venture along the lines of the present Marisat organization. I don't think, however, the market is so thin that you would have the type of trouble you envision. The market, as we stated however, is thin and because of that we feel you should not have a carrier's carrier in the event that e.g., we, the international record carriers, A.T. & T. and Comsat General are involved in providing this service along the lines of the present Marisat setup.

Mr. MOIR. Mr. Carr, what is the view of A.T. & T. in this area?

Mr. COLEMAN. With regard to the creation of a new corporation I think is the question.

Mr. CARR. The view of A.T. & T. is that we believe the designation of an existing carrier as a carrier's carrier together with a structured role for the traditional carriers would be the preferable means of establishing a new form of maritime satellite communication.

Mr. COLEMAN. Which existing carrier?

Mr. CARR. We have indicated in previous testimony we will be willing to accept Comsat in that role as the operator on behalf of the owners which would be the current carriers.

Mr. COLEMAN. Failing that sort of option within the confines of this bill, what would then be A.T. & T.'s position with regard to the entity? Would you favor the creation of a new corporation or Comsat as a participating interconnecting carrier?

Mr. CARR. Mr. Coleman, our major concern with respect to the creation of another new corporation has to do with the possibility that that corporation would involve an overhead expense that we would find distasteful. If a new corporation is put together, we would insist for our part that it be a low overhead operation, and I believe subject to correction that perhaps the Marisat operation now is of that nature.

Mr. MOIR. In the September hearings, in your supplemental comments, you said "not only the direct redundant costs incurred by the new entity but also the indirect burden placed on the industry by the creation of another carrier in an already crowded field." Do you still maintain that is the case?

Mr. CARR. Yes, Mr. Moir. The case with us is simplicity. To the extent that simplicity prevails in this endeavor, we believe it will

save expense, and it is necessary to save expense in the view that this is not a very remunerative market.

Mr. COLEMAN. With regard to the possible structure of that industry, Mr. Naleszkiewicz, on page 5 of your statement you mentioned that the FCC could possibly restructure the designated entity of Inmarsat under the administration bill from time to time. Doesn't this lead to instability with regard to that entity's dealing in the international arena?

Mr. NALESZKIEWICZ. Mr. Coleman, no, we don't think so, not any more than the restructuring of ownership of Intelsat every year. The Intelsat changes its composition.

Mr. COLEMAN. But whatever year, we don't change the structure of our designated entity to Intelsat. That was my question, with regard to changing from time to time the form of the designated entity.

Mr. NALESZKIEWICZ. I think there might be some misunderstanding. We basically felt, Mr. Coleman, that we are saying that it would be up to the FCC to decide which carrier or carriers can buy in, for instance, additionally. For instance, TRT might be permitted to acquire a share later or an additional percent or fraction thereof that would not clearly affect anything.

Mr. COLEMAN. Let me quote what troubles me. On page 5 you say that under the administration's proposal, the FCC would retain plenary jurisdiction over ownership of the entity in the first instance, and could restructure such ownership as the public interest requires from time to time. Do you mean the shares of the various participants in the ownership and not the actual structure of the consortium or whatever?

Mr. NALESZKIEWICZ. We think that this really should be left up to the regulatory agents. Someone should have the flexibility to take whatever action is necessary at some future date to take care of any emergencies there might be, for instance, the merger of a carrier with another carrier. There might be someone going out of existence. There are a number of possibilities which I think this type of language would provide for, and the regulatory agency could take care of it under this language.

I don't think we had any more than that—we did not have any more than that in mind.

Mr. COLEMAN. Also on that page you mentioned that after a five-year period, noncarriers would be able to participate in ownership in the new entity created under the administration bill. What is the significance of the 5-year period? Why after a 5-year period? Why not initially or never?

Mr. NALESZKIEWICZ. The market is relatively thin for the services of maritime satellites. The big users, such as Exxon, Gulf, Shell, and whatever, have large fleets, and there is a possibility that two or three of them could access directly.

Mr. COLEMAN. Keep them dangling for 5 years?

Mr. NALESZKIEWICZ. No, sir. I think if the common carriers have invested already in Marisat the experimental system, and they are going to raise capital they should not be bypassed in the first 5 years, which I think would be enough for the system to settle down and start making money. This would be a syphoning off of the

largest users to permit them to bypass the common carriers. We do not think it will be equitable to start from day one.

Mr. COLEMAN. Mr. Carr, in the statement you read, you mentioned there would be no incentive for A.T. & T. to provide these maritime services, given the structure of the entity under the sub-committee bill. How does the provision of those services differ in terms of incentives to market from any other A.T. & T. type service such as international direct-distance dialing or any other international telephone type service?

Mr. CARR. The difference, Mr. Coleman, is significant and monumental, if you will. There is every incentive from the standpoint of the profit to the corporation for us to develop, to promote and encourage the use of international direct-distance dialing.

Mr. COLEMAN. Let me stop you a moment. I do not quite understand. Are you saying you would not be making any profit on telephone calls that were dialed pursuant to the provisions of this bill through the interconnecting agreement with Comsat, that A.T. & T. would realize no profit from that sort of service?

Mr. CARR. Mr. Coleman, if I understand the proposed structure suggested by H.R. 11209, A.T. & T. and the other carriers would be forced to derive all of their revenues from the land link, that is, from the customer's premises, either to a switching point or an Earth station. We would derive no revenues from that point on, if I understand the arrangement contemplated here.

Mr. COLEMAN. But you would derive revenues, and there would be an incentive to——

Mr. CARR. You bet we would derive some revenues, but they would be minuscule. This market is——

Mr. COLEMAN. You are not interested in minuscule revenues?

Mr. CARR. Mr. Coleman, we are interested in fat revenues, minuscule revenues.

Mr. COLEMAN. So there is an incentive for A.T. & T. to market whatever sources it could then provide.

Mr. CARR. I will not concede that point in the way that you have stated it, sir. Any organized business is required to allocate its resources in terms of the potential return on those resources. If it were given to us as a choice to allocate our resources between international direct distance dialing, which is a profitable service for us, or to allocate our resources to a service where we enjoy only 1 percent of the overall revenues, certainly we are going to invest it in the one most profitable to us.

The point I was trying to make was that we would not ignore the service, certainly not, but we are not going to devote a major portion of our marketing effort to a service that yields virtually nothing.

Mr. COLEMAN. I have no more questions, Mr. Chairman.

Mr. WIRTH [presiding]. Thank you, Mr. Coleman.

Mr. Charyk, could we go back to the question I posed earlier about the authorized user concept and the implications of this legislation for that as we get further into the rewrite? Do you have any reaction to the previous discussion of about a half an hour ago?

Mr. CHARYK. I think you are undoubtedly correct. Some of the vehemence of the discussion is engendered by the fact that there is

some feeling that what is proposed here could be a precedent in the basic international satellite service.

As Mr. Hinchman has indicated, that is a separate question, and I would assume that whatever is done here would not necessarily carry over to any other field, but I think it is the concern that it might that engenders some of the feelings that have been expressed here today.

Mr. WIRTH. My experience in 3 years in this institution is that people are always concerned about the implications—what our next step is going to be. If this happens here, does that open the door in the future? It seems to me then the following question goes back to Ms. Mikulski's questioning, what is in it for various users? Were we to follow the precedent being set in this legislation, what benefit would the users get from a more direct access to Comsat rather than having to go through record carriers?

Mr. CHARYK. I think time does not permit us to go into the total authorized user question here, and as I say, I do not think it is as involved in this particular piece of legislation. It is the concern that it might carry over that is the potential problem, but I don't think we can wait on resolving the authorized user question before we enact implementing Marisat legislation.

I do think that in a number of areas users have objected to the present arrangements in the basic service. As a matter of fact, I believe the Commission has before it at the present time a petition that would permit the television networks to deal directly with Comsat on the basis that no useful service is provided by virtue of requiring the television networks to go through the carriers to get satellite services, and the contention is at least made that no useful service is provided and that substantial increases in cost are involved.

Now, this is a position which I am sure the Commission will be reviewing in the weeks to come. I think at various times the Department of Defense has expressed some concerns about the inability to deal directly with Comsat. There is also a pending case involving the National Aeronautics and Space Administration in getting service to meet some of its critical needs. In that connection Comsat did submit a proposal directly to NASA to provide the service. The NASA determination was that the Comsat proposal provided a superior service at the lowest cost.

Objections were raised by the OTP against the direct provision of service to NASA by Comsat, so we have been foreclosed from dealing directly with NASA, despite the fact that the determination was that the Comsat proposal was superior in capability and cost. So, it is an important issue. Reservations have been expressed by Government agencies, by television networks, and I am sure it is a matter the Commission will continue to explore in more detail.

Mr. WIRTH. Do any other members have a comment to make?

Mr. CONN. Mr. Chairman, we have advocated fair competition before you today, and we are not afraid of competitors, even though they are bigger than we, but when they have a built-in advantage given to them by the United States Congress for a good reason, when they get subsidies from U.S. taxpayers, when they inherited research and development developed at the expense of U.S. taxpayers, we think that is not fair competition, and if the

authorized user is being re-examined now, we submit that Comsat as a wholesaler has an advantage over us. They are the only ones who can buy that product at wholesale, and they would then want to charge the customers the same as they charge us.

You heard—I think you were here when Mr. White indicated that the costs are different, because we do the marketing, we condition the raw channels. The unfair competition of giving Comsat both the monopoly to deal abroad and to be the wholesaler and then compete with us, we submit, is unfair.

I must respond to the NASA remark, because my company, to show our interest in satellite communications, was the successful bidder to develop new satellite Earth stations and interconnect domestic and international satellite stations for the National Aeronautics and Space Administration. We won that award. Comsat protested it to the GAO. The GAO rejected the protest. I do not know that there is a case pending now unless Comsat wants to initiate a case, but I am reminded unauthorized users, Mr. Chairman, on March 16 of 1977, when I think you had an exchange with Comsat on this very issue, Comsat then said that it did not aspire to enter the retail market in the telephone field. It did not want to serve the housewife, the business telephone user.

That is a \$600 million international business, but for some reason they have their eyes on a competitive \$300 million international record business. Comsat would say or did say to you a year ago the user should have a choice, but he is talking about the private-line user, and I am wondering why, unless it is a conflict of interest, as we have alleged today, why Comsat does not want to take on A.T. & T., and they want to pick on smaller carriers.

I don't know the reason, but I know Comsat has a relationship with A.T. & T. Excuse me, Mr. Carr. I don't mean to get you into this, but one of the Comsat roles is the sole source supplier of domestic satellite craft to A.T. & T., and a year ago Comsat said they had no design on A.T. & T.'s international business, yet they have design on all business.

On the conflict of interest, if I could just conclude on this remark, I would like to offer specifics in rebuttal to generalizations. In reply to Mr. Coleman's question about whether there was a conflict of interest between Comsat having the Inmarsat role and the Intelsat role, the answer came back, no—a generalization.

I would offer for your consideration a specific. In Australia just a few months ago there was an Inmarsat meeting. A technical preparatory group headed by our State Department and our industry was there. Comsat General sat with us on this panel of technical experts. They received a proposal from a former Comsat employee who I think now works for Intelsat. It is difficult to tell, but I think he now works for Intelsat, whom Comsat manages.

So, Comsat submitted an Intelsat 5 proposal, sitting, let's say, where I am sitting, and where you are sitting up on the bench sat the Inmarsat group, including Comsat General, so Comsat is proposing to Comsat. I submit that is a conflict of interest and is not the way to have competitive procurement which will help the ratepayer.

Mr. WIRTH. Mr. Hinchman?

Mr. HINCHMAN. I would like to comment on the cost to the user. It seems to me this is a red herring in this particular discussion, because there are at least two very special factors, unique circumstances that were involved in the authorized user decision. One is the role of Comsat as a carrier's carrier rather than as a participating carrier, which makes a very substantial difference in the types of concern one has about Comsat being in the retail and wholesale markets.

As I understand the bill, and certainly as we have recommended, a role as a participating carrier would not involve being in the wholesale and retail markets. It would be joint participant in the retail market. I think that is a substantial difference. The other difference is that in the international fixed services area Comsat offers a full satellite service for lease while its customers have an option of owning and operating their own separate facilities.

That does not exist in this situation. We are talking about a single entity to provide maritime satellite services. I think that was also a factor which was very much involved in the authorized user decision.

So, I think there are different circumstances. To the extent that authorized user is involved in this area at all, I would think it would only be in terms of the ability of the single entity to provide services directly to some private users as opposed to the structure of the entity or anything else, and I think that is a very limited way in which authorized user might be concerned here.

Mr. WIRTH. It may well be a red herring. It seemed to me there were some parallels there between earlier discussions of one year ago and what we were talking about today.

Mr. Charyk, you had a comment and Mr. Moir had a question.

Mr. CHARYK. Again, if we are going to talk specifics, and we did refer to the NASA service, the original Comsat proposal had an arrangement whereby a station at Goddard would provide the service directly. The innovative proposal proposed by WUI is to erect two new Earth stations, one at Goddard and one at our international Earth station in either Andover or Edam or both, to go through the Intelsat system down to either Andover or Edam, back up to a domestic satellite system and down to an Earth station at Goddard, so we are talking about three new Earth stations and a separate satellite system to provide no useful addition to service but at substantially increased costs. If that is innovation, I think it is the kind we don't need.

Mr. DEROSA. Just to stay on the conflict question for another minute, we are in a bit of a quandary here. We have a partner in Marisat 1, Comsat General. We envision Comsat General as a partner in Marisat 2, but we are hard pressed. What is done here today, perhaps, and with the active support in the position taken by their parent, as far as some of the carriers are concerned, have a definite effect on whether or not Marisat 2 is viable for certain of the carriers.

Mr. CHARYK. The reason for planning an interim system, I have indicated at the outset, namely that we do not visualize that an Inmarsat system can be in being in time before the lifetime of the present generation of satellites have expired, so therefore it is very

critical that some arrangement be made for an interim satellite capability, and all possibilities have been explored.

Intelsat has made some proposals to assist in providing interim capability. The European Space Agency has made certain proposals. Other people have made proposals. We have worked with the U.S. carriers to see if a continuation of the Marisat arrangement might meet these interim requirements until a decision could be made on U.S. participation in Inmarsat. The whole situation can be greatly simplified if there is implementing legislation which makes clear the nature of U.S. participation. That entity or entities can then proceed to make plans with the international partners for the participation in Inmarsat, and for some positive decisions on interim capability.

Absent this kind of determination, or absent this kind of implementing legislation, I am afraid the United States will, in planning both the interim and ultimate system, be greatly affected in a negative direction.

Mr. WIRTH. Mr. Moir?

Mr. MOIR. Thank you, Mr. Wirth.

Two aspects to my question. One, we have heard a lot about the demise of the high frequency radio service. We have not heard from our independent high frequency radio representative that is here at the far left table down there. Do you feel the industry is going the way of the dodo bird? Do you feel there is a future? I assume there is a good chance of that, since you are here today. Would you comment on any demise of the high frequency?

Mr. BERCOVICI. My client certainly does not feel that high frequency radio is going away. There has not been the growth in high frequency radio there has been in other communications services for a number and variety of reasons, some of which are service-related, some of which are inherent to the use of radio communications. There are areas of high frequency radio that are today growing. Particularly in one respect the teleprinter service has been growing over the past 4 or 5 years, and will hopefully continue to do so.

I think that one of the aspects raised in this question of Inmarsat and has been touched upon is the viability question as to what the market actually is, and what types of users would be interested or avail themselves of the service. Certainly there are a number of users, and we would have to share the concerns or doubts that the market will be other than a thin market. As long as that will be the case, there will be a need and probably a growing need for high frequency communications.

Mr. MOIR. Do you have any concern of the fold-in concept we have heard before this subcommittee in September, where some of the carriers, two of whom are here at the table today, propose to have their high frequency facilities become part of a combined maritime service? It is a twofold question. Would you want to have your facilities a part of that, or if they were outside, how would you feel this might affect your ability to compete?

Mr. BERCOVICI. As far as having the facilities as a part of an integrated operation, that would depend, of course, upon the terms under which the facilities would be purchased by the single entity, and what kind of valuation would be placed upon the business that

is there and the service being rendered. As far as surviving in an atmosphere in which there are several, and mobile marine, you must understand, is the only high frequency telephony carrier, as one of two high frequency telephony carriers, the other high frequency telephony carrier being A.T. & T., we just have not gotten into the service in the past year or so on a regularly authorized basis, and it is the largest of, I believe, three high frequency telegraphy carriers which are independent from IRC operations in the IRC tieline delivery network.

The prospect of a carrier competing and surviving in an atmosphere where the principal carriers are handling most of the traffic and having the land line delivery connections merging into a single entity with A.T. & T., ITT, RCA, and TRT, joining to provide a unified service, is indeed frightening, especially with the power they may have to prefer and shift traffic and to have vessels shift traffic into the maritime service in order to assure the viability of that service, and we would be very concerned about that type of an operation.

Mr. MOIR. Do any of the other witnesses have a comment on that? Mr. Naleszkiewicz?

Mr. NALESZKIEWICZ. Thank you, Mr. Moir. I think I would like to add what I think is a misconception over the past few years. A number of witnesses at this time have used the expression "thin market." You have to be very careful what is meant by this. Today there is a thin market in maritime satellites. There are 101 terminals operating from the Marisat consortium. Comsat, when it filed for Marisat was told in a couple of years there will be 300 terminals, and they thought that would permit them to break even.

At the Oslo meetings 4 or 5 years ago, the experts looked at this whole picture. We sent through the computer some 50 or 60 different possibilities, combinations, and it always came out 14 years, in other words, 7 years of red ink every year for Inmarsat and another 7 years to recover from the first 7 years, 14 years, but that was 4 or 5 years ago.

Today we have a viable system in Marisat which in 1979 will have been in operation 4 years. The spadework is the most difficult 4 years. In 1979-80, there will be 300 ships in the Marisat consortium which will be compatible with Inmarsat. That will make the Marisat consortium heading revenues if they acquire Marisat and Marisat's capabilities on day one.

In the original 7 years of red ink, we originally saw the first 4 years lopped off already by the experience of the Marisat consortium. This is a very conservative industry. It takes a number of years to convince them to use the system. The first 4 years will have already gone by by 1979. So, it will take possibly 3 more years to break even, and only therefore approximately 3 years to come out of this. That is not so bad. On top of that, the United States designated entity will have a disproportionate portion of the fleet under the U.S. flag as compared to world standards, and also all of these equipped terminals on vessels will be really geared to the traffic going of U.S. harbors. This is a United States-oriented system. The first days that Inmarsat takes over, if it does, Marisat consortium capabilities, that will give a U.S. entity, because of its

formula in the Marisat convention, much more income than the 17 percent capital contribution.

This is going to be a very good deal for the United States. For 17 percent capital contribution, we are going to inherit in the first year probably 50 percent of the business of the Inmarsat consortium, and we forecast from going from approximately 300 ships in the first year at Inmarsat to 5,000 or 8,000 ships in 14 years in Inmarsat organization, and in 15 years it is going to be a very profitable venture, and it will only be for 3 years or for 7, but after that it will be a very profitable and efficient venture.

Thank you, sir.

Mr. WIRTH. Thank you all very much for being here. Let me make a couple of notes for the record.

First: We have a submission from TRT Telecommunications which, since there is no objection, will be included in the record.

Second: Notices have gone out about a mark-up on this bill tomorrow. That will not be the case, and the subcommittee will meet again on notice from the Chair. Thank you all very much for being with us.

[The following letter was received for the record:]

TRT TELECOMMUNICATIONS CORPORATION, MARCH 29, 1978.

Re H.R. 11209, A bill to provide for the establishment, ownership, operation and governmental oversight and regulation of international maritime satellite telecommunications services.

HON. LIONEL VAN DEERLIN,

Chairman, Subcommittee on Communications of the Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: We have taken the liberty of writing this letter in order to present the views of TRT Telecommunications Corporation (TRT) to your subcommittee concerning proposed legislation relating to international maritime satellite telecommunications services. In this regard, we have reviewed the language of H.R. 11209, upon which we understand the Subcommittee on Communications will hold hearings on April 4, 1978. We have also been furnished with a copy of the proposed amendments to this bill which have been suggested by ITT World Communications Inc. (ITT Worldcom).

TRT has been engaged in the provision of maritime service to the public since 1913. It is presently the operator of WNU, near New Orleans, which is the largest of the five competitive public coastal radiotelegraph stations serving the Gulf coast. In addition to TRT, maritime telegraph services are provided by ITT Worldcom, RCA Global Communications, Inc. and several smaller companies, such as Mobile Marine Radio. Maritime telephone service has long been provided by American Telephone and Telegraph Company.

Although the high frequency (H.F.) and medium frequency (M.F.) services provided by the traditional maritime communications carriers will continue to be needed and utilized by smaller maritime users, it is clear that the future of maritime communications lies with the new, more reliable satellite technology. H.R. 11209 would grant Communications Satellite Corporation (COMSAT) a monopoly with respect to this new technology, while the traditional maritime carriers participation would be relegated to that of domestic connecting carriers. Indeed, since the maritime record carriers do not operate extensive domestic communications networks, it can be anticipated that their participation in maritime satellite services even as connecting carriers, would be quite limited. The traditional carriers would, however, be left with the burden of maintaining increasingly unprofitable public coast stations as more and more traffic is diverted to the superior satellite medium.

In this regard, TRT believes that the amendments proposed by ITT Worldcom, which would permit the traditional maritime carriers, as well as Comsat General, to participate in the maritime communications services of the future via satellite, provide a solution which is much more in the public interest than that proposed in the present language of the Bill. Such amendments, we submit, would accord appropriate recognition to the contributions and experience of the companies which

have been providing maritime communications services for many years before Comsat's entry into the field.

Moreover, as much as we are concerned that H.R. 11209 would deny the traditional carriers any opportunity to participate in the ownership of the maritime satellite monopoly contemplated under the Bill, in our view, the most significant defect in the present language of H.R. 11209 is its failure to deal adequately with the certain adverse impact that the implementation and development of maritime satellite technology will have on the continued financial viability of the HF and MF maritime services. Even today, these services are being provided at a loss, or at best, on an only marginally profitable basis and sufficient revenues are not available to finance service improvements demanded by the public.

In this regard, we recognize that the Bill before the Subcommittee does provide in Section 5(a) for a F.C.C. study of public maritime coast station services, "with a view toward determining whether the rules and regulations of the Commission and the assignment of licenses and radio frequencies in effect on the date of the enactment of this Act should be subject to any alteration in order to establish a systematic approach for the provision of modern and effective maritime telecommunications systems". As you are no doubt aware, the FCC has had this general subject under study for sometime, first in Docket No. 19544 and presently in Gen. Docket No. 78-67, which was just recently initiated by the Commission's Notice of Proposed Rule Making, released February 27, 1978.

However, these past and present inquiries, which the FCC has initiated on its own motion, as well as the new study which the FCC would be directed to make by Section 5(a) of the proposed Bill, are, in our opinion, doomed to failure because of their failure to deal directly with the circumstance that the future of maritime services lies with the new satellite technology and that the traffic base of the H.F. and M.F. services will in the future be continually declining, as more and more traffic is diverted to the satellite medium. Accordingly, we believe that such inquiries and studies can only arrive at short-run solutions that will at best assure the continuation of H.F. and M.F. services for a time. In the longer run, we think it is relatively clear that the continued and improved H.F. and M.F. services needed by smaller users can only be maintained if they are provided a strong financial base by their integration with the newer satellite services. We therefore strongly support the added language to Section 5(a) of the Bill proposed by ITT Worldcom. This language would require the FCC in its study of public maritime coast station services specifically to consider whether such services should be integrated with the maritime satellite services into a single operating entity.

We thank the Subcommittee for its consideration of our views and we ask that this letter be included with the record of the hearings on H.R. 11209. TRT, of course, would be happy to provide such additional information as the Subcommittee may require.

Very truly yours,

RODERICK A. METTE,
Vice President and Counsel.

[Whereupon, at 1:30 p.m., the hearing was adjourned.]



