Y4
.C 73/2
92-53
1041
92 1/4
C 73/2
92-53

MARINE PROGRAMS FISCAL YEAR 1973

GOVERNMENT
Storage
UMENTS
JUN 19 1972
THE LIBRARY
KANSAS STATE UNIVERSITY

HEARINGS

BEFORE THE

SUBCOMMITTEE ON MERCHANT MARINE

OF THE

COMMITTEE ON COMMERCE
UNITED STATES SENATE

NINETY-SECOND CONGRESS

SECOND SESSION

ON

S. 3241, 3335, and 3404

MEASURES EFFECTING VARIOUS MARINE PROGRAMS

APRIL 18; MAY 1, 2, AND 3, 1972

Serial No. 92–53

Printed for the use of the Committee on Commerce

KSU LIBRARIES
A11900 966791



AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

MARINE PROGRAMS FISCAL YEAR 1973

HEARINGS

BEFORE THE

SUBCOMMITTEE ON MERCHANT MARINE

OF THE

COMMITTEE ON COMMERCE

UNITED STATES SENATE

NINETY-SECOND CONGRESS

SECOND SESSION

ON

S. 3241, 3335, and 3404

MEASURES EFFECTING VARIOUS MARINE PROGRAMS

APRIL 18; MAY 1, 2, AND 3, 1972

Serial No. 92–53

Printed for the use of the Committee on Commerce

U.S. GOVERNMENT PRINTING OFFICE

78–255 O WASHINGTON : 1972

COMMITTEE ON COMMERCE

WARREN G. MAGNUSON, Washington, *Chairman*

JOHN O. PASTORE, Rhode Island
VANCE HARTKE, Indiana
PHILIP A. HART, Michigan
HOWARD W. CANNON, Nevada
RUSSELL B. LONG, Louisiana
FRANK E. MOSS, Utah
ERNEST F. HOLLINGS, South Carolina
DANIEL K. INOUYE, Hawaii
WILLIAM B. SPONG, JR., Virginia

NORRIS COTTON, New Hampshire
JAMES B. PEARSON, Kansas
ROBERT P. GRIFFIN, Michigan
HOWARD H. BAKER, JR., Tennessee
MARLOW W. COOK, Kentucky
TED STEVENS, Alaska
J. GLENN BEALL, JR., Maryland
LOWELL P. WEICKER, JR., Connecticut

FREDERICK J. LORDAN, *Staff Director*
MICHAEL PERTSCHUK, *Chief Counsel*
EMANUEL ROUVELAS, *Staff Counsel*
LOYAL T. R. SNYDER, *Staff Counsel*
ARTHUR PANKOPF, JR., *Minority Staff Director*
DAVID CLANTON, *Minority Staff Counsel*

MERCHANT MARINE SUBCOMMITTEE

RUSSELL B. LONG, Louisiana, *Chairman*

JOHN O. PASTORE, Rhode Island
ERNEST F. HOLLINGS, South Carolina
DANIEL K. INOUYE, Hawaii
WILLIAM B. SPONG, JR., Virginia

ROBERT P. GRIFFIN, Michigan
TED STEVENS, Alaska
J. GLENN BEALL, JR., Maryland
LOWELL P. WEICKER, JR., Connecticut

CONTENTS

	Page
Opening statement by Senator Long	1
Text of bills:	
S. 3241	2
S. 3335	6
S. 3404	183
Agency comments on S. 3335:	
Comptroller General	8
Department of the Navy	8
Department of Commerce	8, 9
Agency comments on S. 3404:	
Department of the Interior	184
Department of State	184
Department of the Navy	186, 187
Office of Emergency Preparedness	187
Department of Commerce	188
Federal Maritime Commission	189
Federal Power Commission	190

CHRONOLOGICAL LIST OF WITNESSES

APRIL 18, 1972

Blackwell, Hon. Robert J., Deputy Maritime Administrator, Maritime Administration, Department of Commerce; accompanied by Steven Lazarus, director of planning	10
Questions and answers thereto	20
Hatfield, Hon. Mark O., U.S. Senator from Oregon	177
Olsson, Hon. John P., Deputy Under Secretary, Department of Transportation; accompanied by Adm. Chester R. Bender, Commandant, U.S. Coast Guard	140
Questions of Senator Magnuson and the answers thereto	153
Questions of Senator Hart and the answers thereto	176
Questions of Senator Griffin and the answers thereto	176
Packwood, Hon. Bob, U.S. Senator from Oregon	177

MAY 1, 1972

Opening statement by Senator Spong	179
Opening statement by Senator Cotton	190
Opening statement by Senator Beall	192
Calhoon, Jesse, president, Marine Engineers Beneficial Association; accompanied by Ben Man, deputy executive director of the AFL–CIO Maritime Committee	205
Prepared statement	213
Clark, Earl W., codirector, Labor-Management Committee; accompanied by Hoyt S. Haddock, codirector; and Irvin M. Heine	267
Prepared statement	270
Ervin, J. J., president, Mathiasen's Tanker Industry, Inc	262
Prepared statement	264
Gammelgard, P. N., American Petroleum Institute; accompanied by R. E. Howe, chairman of the American Petroleum Institute Marine Committee	239
Prepared statement	254

Page

Rein, Hon. Bertram, Deputy Assistant Secretary for Transportation and Telecommunications, Department of State; accompanied by Carroll Perry, Deputy Director of the Office of Maritime Affairs; and James Akins, Director of the Office of Fuels and Energy ---------- 194

MAY 2, 1972

Hettena, Ran, president, OSG Bulk Ships, Inc., and director, American Maritime Association; accompanied by Joseph Klausner, counsel; and Jack Goldstein, economist ---------- 277
Prepared statement ---------- 286
Letter of January 10, 1972, with attachments ---------- 300
Klebanoff, Michael, president, Ogden Marine, Inc.; accompanied by Marvin J. Coles, counsel for the American Tanker Owners, Inc ---------- 349
Loree, Philip J., chairman, American Committee for Flags of Necessity; accompanied by Laurence London, executive secretary; and William E. Fagen, public relations counsel ---------- 319
Prepared statement ---------- 327
Supplemental statement ---------- 331
Maskin, Alfred, director, American Maritime Association; accompanied by Joseph Klausner, counsel; and Jack Goldstein, economist ---------- 340
Prepared statement ---------- 345

MAY 3, 1972

Moody, O. William, Jr., administrator, Maritime Trades Department, AFL–CIO; accompanied by Bertram Gottlieb, director of research, Transportation Institute ---------- 359
Prepared statement ---------- 368
Steinberg, David J., executive director, Committee for a National Trade Policy, Washington, D.C ---------- 355
Letter of May 4, 1972 ---------- 358

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

AFL–CIO, statement ---------- 418
Blackwell, Robert J., Acting Assistant Secretary for Marine Affairs, Department of Commerce, letter of April 5, 1972 ---------- 439
Coast Guard program for procurement of vessels and aircraft construction and acquisition of shore facilities, fiscal year 1973 ---------- 103
Committee of European National Shipowners' Associations, statement ---- 411
"Due to Worsening of Market, MOT Plans To Revise Shipping Policy on Basis of Lower Demand Estimate," article from the Japan Economic Journal ---------- 349
Easley, A. Thomas, executive vice president, the New England Council, letter of May 3, 1972 ---------- 424
Groton, Page, assistant to the international president, International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers, statement ---------- 409
Haddock, Hoyt S., executive director, AFL–CIO Maritime Committee, statement ---------- 375
Independent U.S. Tankers Owners' Committee, letter of May 17, 1972 ------ 481
Kuykendall, J. R., vice president—government relations, Matson Navigation Co., letter of May 16, 1972 ---------- 403
Maskin, Alfred, executive director, American Maritime Association, letters of:
April 18, 1972 ---------- 391
May 16, 1972 ---------- 428
McDermott, Edward A., Hogan & Hartson, letter of May 4, 1972 ------- 426
Mobil Oil Corp., statement ---------- 415
Moody, O. William, Jr., administrator, Maritime Trades Department, AFL–CIO, letter of April 6, 1972 ---------- 420
Pack, Howard M., president, Seatrain Lines, Inc., letter of April 19, 1972 ---------- 395

Page

Pelfrey, Melvin H., vice president, Marine Engineers Beneficial Association, Great Lakes Task Force, letter of March 30, 1972 ---- 389
Southern California Edison, statement ---- 410
Steinbrenner, George M., III, chairman and chief executive officer, The American Ship Building Co., letters of:
April 26, 1972 ---- 397
May 17, 1972 ---- 404
Wagonseller, James M., chairman, Merchant Marine Committee, the American Legion, statement ---- 387

MARINE PROGRAMS, FISCAL YEAR 1973

TUESDAY, APRIL 18, 1972

U.S. SENATE, COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON MERCHANT MARINE,
Washington, D.C.

The subcommittee met at 2:10 p.m., in room 5110, New Senate Office Building, Hon. Russell B. Long (chairman of the subcommittee) presiding.

Present: Senators Long and Stevens.

OPENING STATEMENT BY SENATOR LONG

Senator LONG. Please come to order.

Today we take up S. 3335 the authorization of appropriations for the maritime programs of the Department of Commerce for fiscal year 1973 and S. 3241 the authorization of Coast Guard projects.

S. 3335 authorizes $526 million for construction and operating differential subsidies, research and development, reserve fleet expenses and maritime training in accord with the policy established under the Merchant Marine Act of 1970.

S. 3241 would authorize $136 million for the Coast Guard for the construction of an icebreaker, repair and renovation of vessels, procurement of aircraft and various construction projects.

Last week the House passed a companion measure to these bills, H.R. 13324 and H.R. 13188, with some amendments. So we will also have these measures under consideration.

The House increased the merchant marine authorization by $30 million and the Coast Guard authorization by slightly more than $8 million.

We have previously submitted detailed questions to each of these agencies and these questions and answers will be inserted in the record following the testimony.

(The bills and agency comments follow:)

Staff members assigned to these hearings: Emanuel Rouvelas and Loyal T. R. Snyder.

92D CONGRESS
2D SESSION

S. 3241

IN THE SENATE OF THE UNITED STATES

FEBRUARY 25, 1972

Mr. MAGNUSON (by request) introduced the following bill; which was read twice and referred to the Committee on Commerce

A BILL

To authorize appropriations for the procurement of vessels and aircraft and construction of shore and offshore establishments, and to authorize the average annual active duty personnel strength for the Coast Guard.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That funds are hereby authorized to be appropriated for fiscal year 1973 for the use of the Coast Guard as follows:

VESSELS

For procurement and increasing capability of vessels, $81,070,000.

A. Procurement:

(1) replace one icebreaker.

B. Increasing capability:

(1) renovate and improve selected buoy tenders;

(2) conduct major repairs on cutter (polar icebreaker) Glacier;

(3) renovate two wind class polar icebreakers for interim service;

(4) abate pollution from vessels.

AIRCRAFT

For procurement and extension of service life of aircraft, $11,600,000.

A. Procurement:

(1) two long-range search aircraft.

B. Extension of service life:

(1) repair outer wings on nine HC–130 aircraft.

CONSTRUCTION

For establishment or development of installations and facilities by acquisition, construction, conversion, extension, or installation of permanent or temporary public works, including the preparation of sites and furnishing of appurtenances, utilities, and equipment for the following, $42,990,000:

(1) Marshfield and Otis Air Force Base, Massachusetts: modernize radio station facilities;

(2) Brooklyn, New York: construct barracks and messing facility at air station;

(3) Fort Hancock, New Jersey: rebuild Sandy Hook Station;

(4) Portsmouth, Virginia: construct new base (phase II);

(5) Islamorada, Florida: construct permanent facilities;

(6) Monterey, California: rebuild Monterey Station and construct moorings at Santa Cruz;

(7) Coos Bay, Oregon: construct new air station;

(8) Cape May, New Jersey: expand electrical capacity at training center;

(9) Yorktown, Virginia: construct barracks at training center;

(10) Cocoa Beach, Florida: establish C–130 aircraft facility at Patrick Air Force Base;

(11) Fort Pierce, Florida: rebuild station;

(12) Port Isabel, Texas: renovate station;

(13) Dana, Indiana: renovate barracks at loran station;

(14) Various locations: abate pollution from stations;

(15) Washington, District of Columbia: procure and install National Response Center information system equipment;

(16) Various locations: aids to navigation projects on selected waterways;

(17) Various locations: automate light stations;

(18) Presque Isle, Maine: construct station for loran–C development project;

(19) Houston, Texas: establish marine traffic control system;

(20) Various locations: public family quarters;

(21) Various locations: advance planning, survey, design, and architectural services; project administration costs; acquire sites in connection with projects not otherwise authorized by law.

SEC. 2. For fiscal year 1973 the Coast Guard is authorized an average active duty personnel strength of 30,074.

92D CONGRESS
2D SESSION

S. 3335

IN THE SENATE OF THE UNITED STATES

MARCH 13, 1972

Mr. MAGNUSON (by request) introduced the following bill; which was read twice and referred to the Committee on Commerce

A BILL

To authorize appropriations for the fiscal year 1973 for certain maritime programs of the Department of Commerce.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That funds are hereby authorized to be appropriated without fiscal year limitation as the appropriation Act may provide for the use of the Department of Commerce, for the fiscal year 1973, as follows:

(a) acquisition, construction, or reconstruction of vessels and construction-differential subsidy and cost of national defense features incident to the construction, reconstruction, or reconditioning of ships, $250,000,000;

(b) payment of obligations incurred for ship operation subsidies, $232,000,000;

(c) expenses necessary for research and development activities (including reimbursement of the Vessel Operations Revolving Fund for losses resulting from expenses of experimental ship operations), $30,000,000;

(d) reserve fleet expenses, $3,900,000;

(e) maritime training at the Merchant Marine Academy at Kings Point, New York, $7,670,000; and

(f) financial assistance to State marine schools, $2,290,000.

B–163519.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, D.C., April 6, 1972.

Hon. WARRREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: With respect to your request of March 24, 1972, for our views on S. 3335, 92d Congress, "A Bill To authorize appropriations for the fiscal year 1973 for certain maritime programs of the Department of Commerce," this is to advise that we have no comment to offer.

Sincerely yours,

PAUL G. DEMBLING,
(For the Comptroller General of the United States.)

DEPARTMENT OF THE NAVY,
OFFICE OF LEGISLATURE AFFAIRS,
Washington, D.C., April 19, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Your request for comment on S. 3335, a bill "To authorize appropriations for the fiscal year 1973 for certain maritime programs of the Department of Commerce," has been assigned to this Department by the Secretary of Defense for the preparation of a report expressing the views of the Department of Defense.

This bill would authorize appropriations for the use of the Department of Commerce for fiscal year 1973 for ship construction and operating differential subsidies, research and development activities, reserve fleet, and Kings Point and State marine schools.

The Department of the Navy, on behalf of the Department of Defense, defers to the views of the Department of Commerce as to the enactment of S. 3335.

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

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there is no objection to the presentation of this report on S. 3335 for the consideration of the Committee.

For the Secretary of the Navy.

Sincerely yours,

LANDO W. ZECH, Jr.,
Captain, U.S. Navy, Deputy Chief.

GENERAL COUNSEL OF THE DEPARTMENT OF COMMERCE,
Washington, D.C., May 4, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce, U.S. Senate, Washington, D.C.

DEAR MR CHAIRMAN: This is in respect of S.3335 and H.R. 13324, bills—

"To authorize appropriations for the fiscal year 1973 for certain maritime programs of the Department of Commerce."

The bills as introduced at our request, and H.R. 13324 as it passed the House, would authorize appropriations in the amount of $7,670,000 for maritime training at the Merchant Marine Academy at Kings Point, New York.

On March 20, however, the President sent to the Speaker of the House of Representatives a communication (House Doc. 92–267) proposing amendments to the request for appropriations for the fiscal year 1973 to meet the additional costs of federal pay increases ordered pursuant to law. This document proposed (p. 45) an increase in the request for this appropriation from $7,670,000 to $7,854,000.

We therefore, request that the bills be amended to increase the authorization for appropriations for this purpose from $7,670,000 to $7,854,000.

The Office of Management and Budget advises that there is no objection to the submission of this report of the Congress from the standpoint of the Administration's program.

Sincerely,

WILLIAM M. LETSON,
General Counsel.

GENERAL COUNSEL OF THE DEPARTMENT OF COMMERCE,
Washington, D.C., May 12, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your staff's request for this Department's views on an amendment to S. 3335, the Maritime Authorization Bill, proposed to you on behalf of The American Ship Building Company (AmShip), the contractor for the construction of the oceanographic vessel, *Researcher*, It would add $15 million to Section (c) of S. 3335 which, as passed by the House of Representatives (H.R. 13324), and as previously recommended by the President, would authorize the appropriation of $30 million ". . . for research and development activities. . . ." in the merchant marine field.

As you know, the AmShip Chairman has sent us a copy of his letter to you of Aprl 26, 1972, from which it appears that the proposed amendment arises from the fact that AmShip incurred cost overruns approximating $5 million in the construction of the *Researcher*. Reference is also made in that letter to the fact that two other contractors involved in the constructiton of three prior oceanographic vessels incurred cost overruns of $2.5 and $7.5 million, respectively, making for a total with the AmShip case of $15 million.

It is apparently intended by the proposed amendment to authorize the Secretary, subject to an appropriation and under Congressional guidelines yet to be developed, to reimburse these three shipbuilders for their overrun costs on the four existing oceanographic vessels and to pay any similar excess costs which may be incurred with respect to any new oceanographic vessels. And, it is suggested that such payments would help ". . . to preserve shipbuilding capability in the United States of these vessels and to recognize and advance research and development efforts in the shipbuilding sciences which were initiated in the building of these novel and complex oceanographic vessels."

We urge against the adoption of this amendment both because, in our considered opinion, the claims based upon construction of the *Researcher* and other vessels referred to are not justified in either equity or as a legal matter, and also because additional funds for the purposes indicated could not be justified in relation to the goals and current needs of the oceanography or merchant marine programs.

As reported to you by letter of February 17, 1972, from Acting Secretary James T. Lynn, the case of AmShip and the *Researcher* was fully investigated by this Department as a result of a petition filed with the Secretary by AmShip for extraordinary equitable relief under Public Law 85–804. Shortly before he left office, Secretary Stans went over the entire record and concluded (and so advised AmShip's counsel) that there was no merit to the case. The record which he reviewed included not only AmShip's several voluminous submissions and responses from the Maritime Administration, but also reports of independent investigations and evaluations made at his request by technical personnel of the Ninth Naval District and the Defense Contract Audit Agency.

Simply stated, AmShip's claim was for $4.4 million of cost overruns (plus profit, interest and claim preparation). The investigations showed that more than $1.5 million was directly attributable to errors of business judgment and the remainder could all be accounted for by faulty contract performance and other circumstances for which the Government was not responsible. For your further information, Secretary Peterson, at the behest separately of Senators Inouye and Taft, also recently reviewed this matter and concluded and so advised them that there was no basis for reversing or modifying Secretary Stans' adverse decision on the AmShip claim.

The nature and status of the claims of the other two contractors likewise provides no basis for the monetary relief contemplated. With respect to the first contract under which excess costs of about $2.5 million were allegedly incurred, the Maritime Administration reached an agreement in 1963 with the contractor whereby the latter accepted some $260 thousand in full settlement

of its claim. And, the contractor for the next two vessels has since sued the Government in the Court of Claims which in September 1971 published the decision of its Trial Commissioner (Case No. 332–67), rejecting entirely the contractor's claim on the merits.

It should be noted incidentally that the Commissioner's decision in the latter case characterized the contractor's performance and losses in a manner demonstrating lack of comparability or other relevance to the facts and issues involved in the *Researcher* case. In other words, it amounts to a contradiction of AmShip's suggestion of a uniform pattern of contractor losses in this kind of shipbuilding attributable to Government fault.

With respect to the program implications of the proposed amendment to Section (c) of S. 3335, we should point out that said Section only authorizes appropriations for "research and development" activities of the Maritime Administration in furtherance of the Merchant Marine Act of 1970. Financing of oceanographic work would be inappropriate under this program, its objective being to make our merchant fleet more competitive through practical application of technological advances, particularly those which reduce construction and operating costs and improve productivity and profitability.

The acquisition of general knowledge in oceanography and related sciences is funded under separate statutory authorizations available to the National Oceanic and Atmospheric Administration, and the construction of the vessels here involved was provided for under such authority. But, research and development funds in this field are now required and being separately requested by NOAA for the next fiscal year only for a variety of specified research purposes, including installation of newly developed scientific devices and continuing use of these existing vessels but not for new construction of this nature.

Apart from the fact that the proposed amendment is questionable in the context of S. 3335, it is also difficult to justify it in terms of its intended purpose ". . . to preserve shipbuilding capability in the United States of these vessels. . . ." or otherwise serve the oceanographic program. In the first place, the vessels involved are already engaged in that program, and no such additional vessels are presently required. Also, notwithstanding the losses incurred, the fact is there is no suggestion or showing that AmShip's viability as a shipbuilder has thereby been impaired. The same is true with respect to the contractor for the first vessel here involved, although it happens it has recently been specializing in ship repair work. Similarly, the second contract for its own business reasons has been concentrating in the aerospace and related industrial fields but has disposed of its shipyard to another capable shipbuilder.

We have been advised by the Office of Management and Budget that there would be no objection to the submission of this report to your Committee from the standpoint of the Administration's program.

Sincerely,

WILLIAM N. LETSON.

Senator LONG. We will take up the Maritime Administration first.

Our first witness is the Honorable Robert J. Blackwell, Deputy Maritime Administrator, Maritime Administration, Department of Commerce.

STATEMENT OF HON. ROBERT J. BLACKWELL, DEPUTY MARITIME ADMINISTRATOR, MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE; ACCOMPANIED BY STEVEN LAZARUS, DIRECTOR OF PLANNING, MARITIME ADMINISTRATION

Mr. BLACKWELL. Thank you, Mr. Chairman.

I am accompanied by Steven Lazarus, the Director of Planning for the Maritime Administration.

Unfortunately, the Assistant Secretary Gibson is not able to be here today. He is in the Soviet Union discussing with the Soviet representatives various shipping matters.

I appreciate this opportunity to testify in support of S. 3335 which

authorizes funds for merchant marine activities in fiscal year 1973 in the amount of $525,860,000. This sum includes the following:

A. Ship construction and reconstruction	$250, 000, 000
B. Operating-differential subsidies	232, 000, 000
C. Research and development	30, 000, 000
D. Reserve fleet expenses	3, 900, 000
E. Maritime training (Kings Point)	7, 670, 000
F. State marine schools	2, 290, 000

This request is in furtherance of the administration's commitment to revitalize the American merchant marine and restore this country to its place as a leading maritime nation. Later in this statement I shall present a brief explanation of the funds requested and outlined. However, in order to place the request in proper context, I should like to review briefly U.S. maritime activities during the past 3 years.

The active American merchant marine in March 1969 was in a state of precipitous decline. The fleet had dropped from its 1946 level of 2,300 ships to less than 1,000 with no indication of a change in trends. In the period 1960 to 1969, foreign maritime nations had engaged in a merchant ship construction effort which produced approximately 7,400 new ships. During these years, the United States constructed 200 ships—2.7 percent of the world's total. The U.S. active fleet, more than half of which was more than 20 years of age, was swiftly approaching the end of its economic as well as it operating life.

The contrast of the U.S. fleet deterioration and foreign fleet rejuvenation was most visible in the competition for U.S. foreign commerce. As U.S. oceanborne trade increased sharply each year, foreign-flag vessels transported a progressively larger share.

On October 21,1970, President Nixon signed the Merchant Marine Act of 1970. The new program provided for a sustained, long-range building program supported by Federal construction assistance. The need for improved shipyard productivity was recognized; the President established milestones of declining CDS rates to reach 35 percent by 1976. Multiyear procurement of standardized vessels was encouraged, to guarantee that industry productivity matched the Federal support effort. The Commission on American Shipbuilding was established to oversee the construction program and, in an interim report, recently advised the President that considerable progress has been made toward the attainment of these shipbuilding goals.

The new maritime program extended for the first time Operating-Differential Subsidy, as well as Construction-Differential Subsidy, to liquid and dry bulk carriers. The absence of necessary Government assistance in the past in conjunction with other factors had all but eliminated U.S.-flag carriage of any substantial portion of U.S. bulk trade.

Both the title XI mortgage insurance program and the Capital Construction Fund programs were expanded. The previous title XI ceiling of $1 billion was raised to $3 billion, and the program now encompasses a broader range of commercial marine-related equipment. As of January 1972, there were contracts in force of over $1.3 billion, with pending applications for mortgage insurance amounting to more than $800 million. Tax deferment privileges on funds for ship replacement programs—through establishment of Capital Construction Funds—became available for the first time to the domestic fleet and to the nonsubsidized segment of the foreign trade fleet. To date,

78-255 O - 72 - 2

87 applicants have qualified to establish these funds, which will result in $700 million for new construction of vessels in U.S. shipyards.

Mr. Chairman, since the Maritime staff provided the back-up information for my statement, the Capital Construction Fund in those last several weeks has risen from $700 million to $817 million, an increase of just over $117,000,000.

The new maritime program emphasizes the redirection of maritime research and development activities with greater emphasis on practical applications of technological advances, and coordination of Federal programs with those of the maritime industry.

Considerable progress has been made in achieving greater industry cost-sharing, and it is projected that in fiscal year 1973 MarAd will achieve a cost-sharing level of 20 percent.

Increased research capabilities have been brought into being with the new National Maritime Research Centers at Kings Point, N.Y. and Galveston, Tex. These research centers provide a field testing service for the American maritime industry. New technological advances developed by both the Maritime Administration and the industry can be tested and evaluated thoroughly at these centers before being installed aboard merchant ships. Studies and tests will include projects such as ship control research and training simulators, tug-barge linkage systems, development of techniques to improve protective hull coatings, development of oil-water separators and sewage treatment systems to eliminate polluted discharges from ships, offshore terminals, and research will be conducted into LNG (liquified natural gas) carriers.

The extension of the subsidy provision of the Merchant Marine Act to include bulk carriers has opened new opportunities for expanded American-flag participation in this major area of our foreign trade. There is an increasing interest by American ship operators in the business potential of our expanding bulk trades. U.S. trade studies project a twofold increase in our dry bulk cargo movements by 1980 and forecast that petroleum movements, reflecting considerations of our growing energy demands and the potential of Alaskan oil reserves, will triple in the same period. Despite the initial delay in program implementation required for procedural developemnt, contracts for the construction of two 80,000 deadweight ton oil-bulk-ore carriers, three 37,000 ton tankers and one 225,000 ton tanker have already been signed. More important, however, is the industry's inclination toward major expansion in bulk transportation as manifested by proposals under evaluation at the Maritime Administration which cover the construction of 14 bulk carriers (OBO's and tankers) totaling 2.9 million deadweight tons, a figure equal to more than half the capacity of our existing tanker fleet. In this same area, preliminary applications have also been received for the construction of nine liquified natural gas carriers with a total capacity of more than 1 million cubic meters.

Until passage of the 1970 act, the domestic shipping area received only a small fraction of Maritime Administration effort and funds. Viewed against the increasing demands that domestic transportation will experience during the 1970's, and the anticipated developments in transportation technology, domestic water carriers have a greater opportunity for development than ever before.

In 1971, Maritime Administration established the Office of Domestic Shipping to concentrate efforts on expanding shipping capability on the Great Lakes, the inland waterways, and the noncontiguous, coastwise and intercoastal trades. The Office of Domestic Shipping plans initially to examine the impact which regulatory bodies have on domestic carriers; to study commodity flows and provide data to assist carriers in marketing their services; and to pinpoint ways in which all segments of the domestic shipping industry can obtain new capital for upgrading their transportation systems.

Domestic fleet expansion is significantly enhanced by the eligibility to establish tax-deferred funds to finance future shipbuilding as provided by the 1970 Act. Through Capital Construction Funds, Great Lakes operators have immediate plans to construct 10 new dry bulk carriers and seven smaller vessels, and to convert 17 existing bulk carriers.

These and future programs will bring the Great Lakes ship operators, as well as other segments of the domestic waterborne industry, into the mainstream of our national maritime policy.

The Maritime Administration has also taken initiatives not only to increase the level of U.S-flag carriage of U.S. foreign trade but to expand that trade as well. In anticipation of the passage of the Merchant Marine Act of 1970, the agency moved to assure that the large modern ships to be constructed under new program would have the high volume of cargo which would be essential to profitable operation. In the fall of 1969, we established an Office of Market Development and recruited professional steamship marketing and sales personnel from the industry to help formulate and implement sophisticated yet practical programs of cargo promotion for U.S.-flag carriers. Recognizing that information is the basic tool of modern marketing, the office has created the most up-to-date, comprehensive and detailed body of statistical data on cargo flow that is available today.

In June 1971, the National Maritime Council was established. Composed of prominent representatives of shipping lines, shipyards, maritime labor unions and the Maritime Administration, the Council is making a unified effort to acquaint shippers with the advantages of using American-flag services. Most of the Council's programs are aimed at leading exporters, importers and freight forwarders. However, these efforts will also be directed toward creating greater public awareness of the importance to our national well-being of a healthy American merchant marine.

The Maritime Administration has completely restructured its headquarters organization to make it responsive to its program needs: upgrade the organizational level, place increased emphasis on new program activities, and providing for more effective coordination and direction of related functions.

The Maritime Administration field offices have been shifted from a coastal to a regional orientation encompassing all 50 States. The field organization is now divided into three regions, each headed by a Director, with headquarters in New York, New Orleans, and San Francisco. This recognizes that the Maritime Administration is no longer a coastal organization, and that it must extend its interest and efforts to every section of the country, particularly in connection with

market development activities and the promotion of ports, terminals, intermodal systems, and domestic shipping.

These changes have produced a more efficient and responsive organization with an increased capibility to meet its responsibilities under the new program.

In the last 12 months, the Maritime Administration assisted a number of established liner operators to upgrade and convert their break-bulk fleets for containerized service. It may well be said that 1971 marked the end of the break-bulk era in the liner trades and clearly signaled the change to high-productivity ships for the U.S. fleet.

Extensive conversion of U.S. liner break-bulk fleets for container service, coupled with heavy scrapping of outmoded vessels built during or shortly after the Second World War, has significantly increased the productive capability of our active merchant marine. Conversion and scrapping, joined with new construction awards, have lowered the average age of the overall fleet, and especially the age of the subsidized segment. Forty-five percent of the U.S. fleet was under 20 years of age in June 1971, compared with 33 percent in January 1969. In the subsidized segment, 77 percent was under 20 years of age last June against 59 percent in early 1969.

Since World War II the rapid expansion of bulk commodity movements has brought about a tremendous growth in ship sizes with the most dramatic increases occurring since the mid-1960's. At the end of 1965 there were only 19 ships in excess of 100,000 tons in operation. Five years later the number had risen to 319 ships. Of these, 24 were in the excess of 230,000 dead weight ton and six in excess of 300,000 tons.

The development of Very Large Crude Carriers (VLCC) as the standard size vessels for oceanborne petroleum shipments has brought about considerable pressure for the construction of deepwater terminals. Unless a U.S. facility is developed, this country will be at a relative disadvantage in this regard and will be required to pay a premium price for its ever-increasing oil imports.

Projected petroleum import requirements of 600 million long tons by 1980 will require that the United States depend heavily upon Eastern Hemisphere petroleum sources, the Persian Gulf area. It is these distant sources of petroleum that offer the greatest shipping economies through the use of very large carriers. For example, a 230,000-ton tanker operating between the Persian Gulf and the Atlantic coast of the United States can deliver crude oil for about $8 per long ton while conventional vessels capable of using existing ports require a rate of approximately $15 per long ton. That is a conventional vessel in the rate of 80,000 tons, deadweight. Such potential freight rate savings dictate that some means be established for accommodating the very large ships, particularly on the Atlantic coast and the gulf.

As we proceed into the second half of fiscal year 1972 there are indications of a coming breakthrough in the Nation's history—which included $170 million in subsidy payments, the largest subsidy provided since the signing of the original Merchant Marine Act of 1936. By the end of January this year, the American shipbuilding industry had 65 ships, aggregating 2 million deadweight tons of shipping, under construction or on order. This is by far the greatest backlog of commercial tonnage on hand at the beginning of any year since 1958.

Adding further encouragement to our national shipbuilding prospects has been industry reaction to the expanded provisions of title XI mortgage insurance, as contained in the 1970 act. In the past 12 months some $322 million in privately placed vessel construction and mortgage loans have been guaranteed by the Government under the title XI program. This is 46 percent higher than the preceding 12-month period and represents the greatest volume of title XI insurance activity since the inception of the program in 1938.

The ship construction program for fiscal year 1972 is expected to use up all of the available funds. Up to this time contracts have been awarded for:

Conversion of a cargo ship to a container vessel for American Mail Line cost of about $9,500,000 with Government participation through the CDS program at 41.5-percent subsidy.

Three tankers for Margate Shipping Co. at a cost of $55 million with a 43-percent CSD subsidy.

Two LASH vessels for Central Gulf Steamship Co. at a cost of about $55 million with Government participation at approximately 43 percent.

Conversion of four cargo ships to semicontainer ships for Lykes Bros. Steamship Co. at a cost of $14 million with Government participation at about 43 percent or $6 million.

Additional contracts that will be awarded shortly are:

One 230,000-ton tanker for Seatrain at a cost of about $51,500,000 with Government participation in the 42- to 43-percent range.

Six large tankers for Maritime Dynamics Corp. at a total cost of about $355 million with Government participation at 42.9 percent.

Within the next 3 to 4 months we expect to let contracts for:

Six LNG vessels for El Paso Natural Gas at a total cost of around $500 million with Government participation at about the 25-percent level.

Two roll-on/roll-off vessels for States Steamship Co. at a cost of $62,500,000 with Government participation in the range between 41 to 43 percent.

Award of all of these contracts in 1972 would require supplemental funding, as stated in the 1973 President's budget.

The funds for which I am requesting your authorization reflect the levels required in order to continue the impetus toward achieving the objectives established for the new program.

The funding authorizations requested are as follows:

A. Acquisition, construction, or reconstruction of vessels and construction-differential subsidy and cost of national defense features incident to the construction, reconstruction, or reconditioning of such ships, $250 million.

The 1973 request of $250 million provides an increase of $20,313,000 over the 1972 authorization and appropriation. This represents requirements for the third year of the expanding ship construction program.

The increase for 1973 reflects construction cost escalation and more significantly, operator preference for larger ships. The world fleet is in transition to very large and specialized and expensive vessels.

If American-flag operators hope to compete successfully in this environment, they must concentrate on construction of vessels that are

equally productive. In fiscal year 1973 I expect that the demand for new construction may exceed our funding availability by as much as $175 million. When this becomes clear we will seek additional funds to meet the additional requirements.

Senator STEVENS. May I interrupt, Mr. Chairman?

Senator LONG. Go ahead and let him finish. Then we will ask questions.

Go ahead.

Mr. BLACKWELL. Thank you, Mr. Chairman.

Continued efforts in the areas of standard and multiple ship procurement will be pursued in order to attain quantity productions at lower unit prices. As in 1971 and 1972, we plan to minimize Government involvement in the shipbuilding process by awarding subsidy directly to the shipbuilder and not the carrier. Efforts will be continued to encourage shipbuilders to develop efficient production and procurement methods through expanded employment of production line manufacturing techniques and prefabrication of standard components. Plans call for a decrease from the 1972 subsidy rate maximum of 43 to 41 percent subsidy level in 1973. We believe this will be attainable.

B. Payment of obligations incurred for operating-differential subsidy, $232 million.

The requested 1973 appropriation to liquidate $232 million reflects a $7,145,000 decrease from the 1972 appropriation to date of $239,145,000.

This decrease in funding represents the net effect of nonrecurring costs for catchup payments, retroactive salary, and health cost disbursements paid in 1972, and minor decreases in passenger and cargo ship years for 1973. The decreases are partially offset by increases relating to wage escalation and payment of direct subsidy to U.S. bulk carrier operators.

Implementation of the program to pay direct operating subsides to bulk carriers in lieu of the present premium freight rates paid by other Government agencies is designed to consolidate Federal assistance in this area. A funding level of $18 million is requested for direct operating subsidy for the first year of this program and it is estimated that an offsetting met reduction in outlays of $10 million, Government wide, will be attainable through this program innovation.

Consistent with the new maritime program, improvements in the methods used for determination and administration of operating subsidies have been implemented. Foremost among these is the new wage subsidy index system which associates the level of subsidizable wage costs with the general level of wage increases achieved throughout the economy. Other modifications to the previous system of subsidy determination are: payment of all subsidies on a monthly rather than a quarterly basis; determination of manning levels for future subsidized vessels prior to the time construction contracts are entered into; elimination of the former recapture provisions, and partial elimination of nonwage subsidies.

C. Expenses necessary for research and development activities, $30 million.

The 1973 request for research and development of $30 million represents an increase of $6,250,000 over the 1972 appropriation. The program for 1973 has been planned in specific response to a Presidential

directive to expand and redirect maritime research and development efforts with emphasis on practical application on new technology through coordination and cost sharing with the maritime industry.

The basic objective is the national goal of making the U.S. merchant fleet wholly competitive through practical advances. Specific aims are to reduce the life cycle costs of ships, improve productivity of shipyards and the shipping industry and eliminate or minimize subsidies. Priority has been placed on near-term development aimed at reducing both construction costs and operating subsidies.

Mr. Chairman, the remainder of my statement deals with some of the specifics of our R. & D. program, it deals with the relatively small requests for our reserve fleet, the Kings Point Maritime Academy and the State maritime schools.

Key programs are being carried out in (1) advanced ship engineering and development, (2) shipping systems analysis and requirements, (3) maritime technology, and (4) improvement in ship operations and shipping systems.

R. & D. objectives are being accomplished in 1972 through efforts in—

Pollution abatement system study including problems of collection and separation for oily wastes;

Development of advanced nuclear propulsion systems;

Development of ocean transportation systems for liquefied natural gas;

Improved materials and methods for shipbuilding;

Development of improved methods for transporting bulk commodities;

Development of advanced shipping concepts in ocean-going tug-barge systems; and

Advanced marine navigation and communications using satellites.

Additional funding is requested in fiscal year 1973 in the following programs:

Improvements in methods of shipbuilding—An increase of $2 million over the 1972 funding level of $2 million is requested in order to enter the prototype test and evaluation phase of shipyard equipment and systems such as automated welding equipment, conveyors, lifting equipment, and automated equipment for steel surface preparation and coating.

Advanced propulsion systems—An increase of $640,000 over the 1972 funding level of $3,400,000 is requested in order to include detailed engineering effort on the nuclear propulsion system completing the preconstruction engineering phase of this program.

Advanced terminals and ports—An increase of $1,200,000 over the 1972 funding level of $300,000 is requested in order to conduct preliminary engineering for offshore terminals, an oil barrier test program, and design and specifications for a floating waste disposal plant.

Automated shipping systems—An increase of $2,900,000 over the 1972 funding level of $4,500,000 is requested in order to further development of prototype systems including vessel administrative controls, navigation controls, and machinery systems. This provides for developing and expanding use of computer-based systems for compiling and analyzing shipping operation information.

Advanced pollution abatement systems—An increase of $1,350,000 over the 1972 funding level of $1,150,000 is requested in order to continue building of prototype systems for shipboard test and evaluation and for shoreside reception facilities. Also provides for pollution control laboratory requirements to examine means to eliminate shipboard pollution and minimize pollution waste discharge.

Advanced tug-barge systems—An increase of $1 million over the 1972 funding level of $700,000 is requested in order to develop an appropriate shoreside facility for tug-barge linkage tests. Efforts will be expanded to include a full scale instrumentation effort for a semi-rigid connection and testing of promising competitive linkages.

These increases are partially offset by reduction in funding of general maritime technology programs totaling $2,640,000. These reductions reflect a decreased level of general investigations and a movement toward practical applications which promise maximum payoff.

No funds are included in the fiscal year 1973 requests for operation or layup of the NS *Savannah* which is now located in the port of Savannah, Ga., and will become part of the Eisenhower Peace Center after formal transfer.

D. Reserve fleet expenses, $3,900,000.

Funds of $3,900,000 are requested to be authorized for expenses to be incurred in the preservation and custody of reserve fleet vessels. The request reflects a $418,000 decrease incident to the declining number of ships in the reserve fleet.

Funds provided herein are to preserve and maintain ships in three reserve fleet sites to supplement the active fleet in time of national emergency. Provided for are the costs of preservation and maintenance, program coordination, and sale of scrap ships including sale and disposal of Department of the Navy ships as requested.

E. Maritime training at the Merchant Marine Academy at Kings Point, N.Y., $7,670,000.

The $7,670,000 requested in 1973 for continued maintenance and operation of the U.S. Merchant Marine Academy at Kings Point, N.Y., represents an increase of $157,000 over the 1972 appropriation. The requested increase initiates a new program to modernize athletic facilities at the Academy.

The 1973 program anticipates a graduation rate of about 200 merchant marine officers, approximately the same level as during the mid-1950's.

Provision is also made for the maintenace, repair, and operation of the Academy; for continued modernization of Academy buildings, including improvement of cadet housing; for continued upgrading of instructional equipment for the laboratories used in the engineering, nautical science, math, and science departments; and for expenses incurred for program direction and administration, and supporting administrative and academic staffs.

F. Financial assistance to State marine schools, $2,290,000.

The requested fiscal year 1973 authorization for this program of $2,290,000 reflects a $90,000 increase from the 1972 level. The request provides for continuation of the program of financial assistance to six State marine schools as authorized by the Maritime Academy Act of 1958. The six participating schools are located in California, Maine, Massachusetts, Michigan, New York, and Texas. The level of gradu-

ates has approximated 400 merchant marine officers per year. The 1973 program anticipates continuation of this level.

Within the total estimate of $2,290,000, the request covers funds in the amount of $450,000 for grants to the schools, which provides for a payment of $75,000 to each school to help defray expenses. In addition, funds of $862,000 are requested to provide payment of a $600 per annum for uniform, textbooks, and subsistence allowance to eligible cadets in attendance. The amount allowed is intended to partially offset expenses incurred by the cadets relative to the costs of these items.

Finally, the request includes $978,000 to cover: the maintenance, repair, and drydocking costs of Government-owned training vessels on loan to the schools; and first-year funding of $100,000 for maintenance and repair of the Michigan-owned schoolship, *Allegheny*.

This concludes my statement, Mr. Chairman. I will now be happy to answer any questions that you or any member of the committee have concerning our 1973 request.

Senator LONG. Senator Stevens?

Senator STEVENS. Go ahead.

Senator LONG. That is all right. Just go ahead.

Senator STEVENS. You asked for an increase in your authorization, yet you are predicting $175 million which is in excess of your authorization. Are you telling us you are going to want a second authorization act as well as a supplemental during this fiscal year?

Mr. BLACKWELL. We would be asking for a supplemental if, in fact, Senator, we are able to place all these orders for vessels before June 30, 1972. It is my understanding, at least, that we don't proceed through the authorization processes on supplemental requests. I stand to be corrected on that.

Senator STEVENS. Please correct me if I am wrong. This is an authorization for $250 million. You are also telling us that you predict that you are going to exceed your funding availability by $175 million. That would put us in the position of having a second authorization bill as well as a supplemental. I wondered why. Why don't you have an open end?

Mr. BLACKWELL. We originally asked for the full amount of the money that we thought we would spend through the various budgetary processes. Those amounts were reduced but the Office of Management and Budget did indicate that if, in fact, we are able to accelerate the pace of our shipbuilding program, they would, in fact, support a request for a supplemental budget. The matter is—I would say sketchy. We will try to cover all commitments with the funds we have available for ship construction. But if we can't we would like to have the opportunity to present before the appropriate committees a request for additional authorization and the supplemental.

Senator STEVENS. As I recall, you had to have a second supplemental authorization last year. I don't know why you just don't ask for $425 million appropriations. Then you don't have to go through this thing twice as far as authorization is concerned.

Those are just my comments.

Senator LONG. I want to ask about a number of matters. First, let me submit the prepared interrogatories as well as the answers that you have given us. I want that in the record at this point.

(Interrogatories and answers follow:)

Questions re: FY 1973 Senate Authorization of Appropriations
Maritime Administration

Question No. 1

With respect to each contract awarded for construction-differential subsidy during fiscal years 1971 and 1972, please provide the following information: (a) the name of the shipowner, (b) if the shipowner is a corporation the majority of whose voting stock is held, directly or indirectly by another corporation listed on a national securities exchange (a "parent corporation"), the name of the parent corporation, (c) the type and size of ship which is the subject of the contract, (d) the nature of the project, e.g. construction, reconstruction, conversion, (e) the amount to be paid by the Government pursuant to the contract, exclusive of national defense features, (f) the percentage of total cost of the construction or reconstruction which (e) represents, (g) the amount to be paid by the Government for national defense features, (h) the name of the shipyard which is the primary contractor and that of its parent corporation, if any, (i) whether the contract was arrived at through competitive bidding or negotiated procurement.

Answer

See attached Schedule showing data regarding contracts awarded for construction-differential subsidy during fiscal years 1971 and 1972.

Contracts for reconstruction are identified by asterisks; all others are new construction.

Question 1 DATA WITH RESPECT TO CONSTRUCTION-DIFFERENTIAL SUBSIDY CONTRACTS FOR FISCAL YEARS 1971 AND 1972

(Amounts shown in 000's of dollars)

[illegible]ner and Parent [illegible]ration, if any	No. of Ships	Type	Size	Original Contract Price (1)	CDS Exclusive of NDF	CDS Rate	Cost Nat'l Defense Features	Shipyard and Parent Corporation, if any	Competitive Bid or Negotiated
[illegible] YEAR 1971									
[illegible] Export Isbrandtsen [illegible]ines, Inc. [illegible]ican Export Industries, [illegible]	3	C5-S-73b Containership	16,300 DWT	$ 50,980	$ 21,250	41.6%	None	Bath Iron Works, Bath, Maine Bath Industries, Inc.	C-B
[illegible] Steamship Lines, Inc. [illegible] Industries, Inc.	3	C9-S-81d LASH	39,100 DWT each	85,593	37,806	44.2%	$ 60	Avondale Shipyards, Inc. New Orleans, La. Ogden Corporation	N
[illegible] Steamship Corporation [illegible] Industries [illegible] States Freight Company	3	C9-S-81d LASH	39,100 DWT each	83,787	37,007	44.2%	60	Avondale Shipyards, Inc. New Orleans, La. Ogden Corporation	N
[illegible] Gulf Steamship [illegible]oration [illegible] Union Corporation	1	C9-S-81d LASH	39,100 DWT	27,502	12,147	44.2%	20	Avondale Shipyards, Inc. New Orleans, La. Ogden Corporation	N
[illegible] Marine Shipping [illegible]any [illegible] Steamship Company, Inc.	2	OB8-S-90a Oil-Bulk-Ore	80,500 DWT each OBO	60,092	27,000	45.0%	92	National Steel & Shipbuilding Company, San Diego, Calif. Kaiser Industries Morrison-Knudsen Company, Inc.	N
[illegible] Mail Line Ltd. [illegible] President Lines, Ltd.	2*	C6-S-1x Containership	18,900 DWT each	16,808	6,056	36.0%	12	Bethlehem Steel Corp. San Francisco, Calif.	C-B
[illegible] Mail Line, Ltd. [illegible] President Lines, Ltd.	1*	C6-S-1x Containership	18,900 DWT	8,748	3,378	38.6%	None	Bethlehem Steel Corp. San Francisco, Calif.	C-B
[illegible] President Lines, Ltd. [illegible] Company	5*	C6-S-69c Containership	16,000 DWT each	32,536	13,514	41.5%	16	Todd Shipyards, Corp. Seattle, Washington and Todd Shipyards Corp. San Pedro, Calif.	C-B

Question 1 (continued)

(Amounts shown in 000's of dollars)

Shipowner and Parent Corporation, if any	No. of Ships	Type	Size	Original Contract Price(1)	CDS Exclusive of NDF	CDS Rate	Cost Nat'l Defense Features	Shipyard and Parent Corporation, if any	Competitive Bid or Negotiated
American President Lines, Ltd. Autonas Company	3*	C6-S-1qc Container-ship	18,700 DWT each	20,241	8,400	41.5%	None	Todd Shipyards Corp. Seattle, Washington	N
Totals F.Y. 1971	23			$ 386,287	$166,558		$260		

* Reconstruction-conversion to containerships (1) Excludes changes and engineering costs.

FISCAL YEAR 1972 (to date)

Waterman Steamship Company (No parent company)	3	T6-S-93a	37,500 DWT Tanker	$ 54,665	$23,435	43.0%	$ 165	National Steel & Shipbuilding Company, San Diego, Calif. Kaiser Industries Morrison-Knudsen Company, Inc.	N
Central Gulf Steamship Corporation Trans Union Corporation	2	C9-S-81d (LASH)	39,100 DWT each	54,698	23,503	43.0%	40	Avondale Shipyards, Inc. New Orleans, La.	N
American Mail Line Ltd. American President Lines, Ltd.	1*	C6-S-1xa	21,700 DWT	9,463	3,921	41.5%	16	Todd Shipyards Corp. San Pedro, Calif.	N
Zapata Bros. Steamship Co., Inc.	4*	C5-S-37f	14,349 DWT each	55,833	6,035	42.97%	-0-	Todd Shipyards Corp. Galveston, Texas	N
Totals F.Y. 1972 (to date)	10			$174,659	$56,894		$221		

*Reconstruction-conversion to containership
(1) Excludes changes and engineering costs

QUESTION NO. 2

With respect to application for construction differential subsidy received during fiscal year 1971 or fiscal year 1972, but on which no contract for construction differential subsidy has as yet been concluded, please provide the following information: (a) the date of such application, (b) the name of the shipowner and that of its parent corporation, if any, (c) the type and size of ship which is the subject of the application, (d) the nature of the project and its estimated total cost, (e) the name of the shipyard which is the primary contractor and that of its parent corporation, if any, (f) whether the contract between the shipowner and shipyard has been or is to be arrived at through competitive bidding or negotiated procurement, (g) whether the application is still pending or, if not, the disposition that was made of the application.

ANSWER

See attached Schedule showing data regarding pending construction-differential subsidy applications received during fiscal years 1971 and 1972.

Item No. 3

PENDING CDS APPLICATIONS RECEIVED DURING FISCAL YEARS 1971 AND 1972

Name of Shipowner	Date of Application	Parent of Shipowner	Type of Ships	Number of Ships	Size	Estimated Total Cost	Shipyard
Methane Alpha Company	3-17-72	El Paso Natural Gas Company	LNG	1	125,000CM(d)	$87,000,000	Not selected
Methane Beta Company	3-17-72		LNG	1	125,000CM(d)	87,000,000	Not selected
Methane Gamma Company	3-17-72		LNG	1	125,000CM(d)	87,000,000	Not selected
Methane Delta Company	3-17-72		LNG	1	125,000CM(d)	95,000,000	Not selected
Methane Epsilon Company	3-17-72		LNG	1	125,000CM(d)	95,000,000	Not selected
Methane Zeta Company	3-17-72		LNG	1	125,000CM(d)	95,000,000	Not selected
States Steamship Company	1-16-72	Pacific Transport Company	RO/RO	2	18,910DWT	(c)68,000,000	Not selected
Moore-McCormack Lines, Incorporated	1-20-72	Moore and McCormack Co.,Inc.	OBO	2	80,500DWT	(d)59,620,000	(a) National Steel and Shpbldg., Co.
Sea Service Tankers, Inc.	12-15-71	None	Tankers	3	37,250DWT	(d)60,000,000	The Ingalls Nuclear Shipbuilding Division of Litton Systems Inc.
MFC-Boston Tanker Corporation II Inc.	1-11-72	Boston Tanker Co; Maritime	VLCC	1	225,000DWT	(d)58,900,000	General Dynamics Corporation
MFC-Boston Tanker Corporation IV Inc.	1-11-72	Fruit Carriers Co; General	VLCC	1	225,000DWT	(d)58,900,000	Shipbuilding Division
MFC-Boston Tanker Corporation VI Inc.	1-11-72	Dynamics Corporation	VLCC	1	225,000DWT	(d)58,900,000	Quincy, Mass.
MFC-Boston Tanker CorporationVIII Inc	1-11-72		VLCC	1	225,000DWT	(d)58,900,000	
MFC-Boston Tanker Corporation X Inc.	1-11-72		VLCC	1	225,000DWT	(d)58,900,000	
MFC-Boston Tanker Corporation XII Inc	1-11-72		VLCC	1	225,000DWT	(d)58,900,000	
Hsan Shipping Corporation	6-11-70 as amended	Seatrain Lines, Inc.	VLCC	1	230,000DWT	(d)51,100,000	(b) Seatrain Shipbuilding Corp.
Hase Shipping Corporation	6-11-70 as amended	Seatrain Lines, Inc.	VLCC	1	230,000DWT	(d)55,000,000	(b) Seatrain Shipbuilding Corp.
Penn Navigation Company	3-10-71	U.S. Industries Inc.	OBO	2	135,000DWT	(d)90,000,000	Sun Shipbuilding and Dry Dock Co.
Transportation Techniques, Inc.	9-24-71	None	LNG	3	125,000CM	(d)246,000,000	General Dynamics Corp. Shipbuilding Division, Quincy, Mass.
						1,529,120,000	

Parent of Shipyard
(a) Kaiser Industries Inc., and Morrison-Knudsen Company Inc.
(b) Seatrain Lines, Inc.

Competitive Bidding or Negotiated Bid
(c) Competitive
(d) Negotiated

Question No. 3

For each of fiscal years 1971-73, please provide the number and types of vessels that were or are expected to be the subject of operating-differential subsidy contracts.

Answer

For Fiscal Years 1971-73, the number of ship years of operation, by vessel type, which were or are expected to be covered under operating-differential subsidy contracts are as follows:

Fiscal Year	Passenger Vessels	Cargo Vessels	Combination Type Vessels	Total
1971	5.2	201.3	2.0	208.5
1972	2.0	210.8	0	212.8
	3.3	205.7	0	209.0

Question No. 4

Have any operating-differential subsidy contractors elected to amend their contracts to reflect the amendments made by P.L. 91-469 (the "1970 Act")?

Answer

All contractors who had operating-differential subsidy contracts in effect on the date of enactment of P.L. 91-469 on October 21, 1970 have had their contracts amended pursuant to the provisions of said Act.

Questions Nos. 5 and 6

5. With respect to each capital construction fund agreement that has been entered pursuant to Section 607 of the Merchant Marine Act, 1936, as amended, with an operator who is not an operating differential subsidy contractor, please provide the following information: (a) the name of the shipowner, and its parent corporation, if any, and (b) the number and types of vessels whose earnings are eligible for deposit in the fund pursuant to the agreement.

6. Based on existing Section 607 capital construction fund agreements can you estimate the amount of deposits and the number and types of ships which you anticipate will be constructed pursuant to those agreements in the next five fiscal years.

Answer

See the attached Schedule under the heading "Capital Construction Fund Agreements Entered Pursuant to Section 607 of the Merchant Marine Act, 1936, as amended."

In connection with the deposits, it is pertinent to note that the full cost of the project does not need to be accumulated at the time that the shipyard contract is awarded. In most cases, the purchaser of a new vessel will finance a substantial portion of construction cost and amortize the borrowing over a part or all of the economic life of the vessel. If the financing is accomplished under Title XI of the Merchant Marine Act of 1936, as amended, the owner may finance up to 75 percent or 87½ percent of the "actual cost" of the vessel and amortize the borrowed funds over the 20-year or 25-year economic life of the ship. In most instances, we expect that the parties to Capital Construction Funds will use these funds to accumulate the equity investment in new and reconstructed ships and also take advantage of the tax benefits provided by the reserve funds for the payment of principal on indebtedness incurred in connection with the acquisition, construction and reconstruction of the vessels.

78-255 O - 72 - 3

CAPITAL CONSTRUCTION FUND AGREEMENTS E..RED PURSUANT TO SECTION 607 OF THE MERCHANT MARINE ACT, 1936, AS AMENDED

PARTY TO CAPITAL CONSTRUCTION FUND AGREEMENT	PARENT CORPORATION	AGREEMENT VESSELS FOR PURPOSE OF MAKING DEPOSIT INTO CAPITAL CONSTRUCTION FUND		SHIPBUILDING PROGRAM FY 1972 - FY 1977		
		NUMBER	TYPE	NUMBER OF SHIPS	TYPE OF SHIPS	COST MILLIONS
Academy Tankers, Inc.	Petrolane	3	Tankers	1	LPG Carrier	22.0
Arthur Levy Offshore Boats, Inc.	"	1	Offshore Utility			
		1	Offshore Supply			
Arthur Levy Co., Inc.	"	3	Offshore Supply Vessels			
Arthur Levy Marine Service, Inc.	"	2	Offshore Utility			
		1	Offshore Supply			
Kim, Incorporated	"	2	Utility Vessels			
Jake, Inc.	"	2	Utility Vessels			
Arthur Levy Boat and Barge Corporation	"	4	Offshore Crew Boats			
Levy's Cargo Service, Inc.	"	1	Supply Vessel			
Arthur Levy Cargo Boats, Inc.	"	2	Offshore Supply Vessels			
Arty L., Inc.	"					
M. S. Levy, Inc.	"	3	Offshore Crew Boat			
L. A. Levy, Inc.	"	1	Supply Vessel			
		1	Tug Supply Vessel			
D. M. Levy, Inc.	"	2	Supply Vessels			
		1	Supply Vessel			
International Boats, Inc.	"	3	Tug Supply Vessels			
Southern Offshore Boats, Inc.		1	Supply Vessel			
Eastern Offshore Boats, Inc.	"	1	Supply Vessel			
Slater Boat Service Inc.	"	2	Supply Vessels			
Black Cloud Boars, Inc.	"	2	Supply Vessels			
Aurora Bora, Inc.	"	1	Offshore Supply			
Stephen S., Inc.	"	1	Offshore Supply			
Auster, Inc.	"	1	Crew Boat			
		1	Tug Supply			
		1	Offshore Supply			
Celestial, Inc.	"	4	Offshore Crew			
Auriga, Inc.	"	1	Offshore Crew			
Auries, Inc.	"	1	Offshore Supply			
Aura, Inc.	"	1	Offshore Crew Boat			
		1	Offshore Crew Boat			

PARTY TO CAPITAL CONSTRUCTION FUND AGREEMENT	PARENT CORPORATION	AGREEMENT VESSELS FOR PURPOSE OF MAKING DEPOSIT INTO CAPITAL CONSTRUCTION FUND		SHIPBUILDING PROGRAM FY 1972 - FY 1977		
		NUMBER	TYPE	NUMBER OF SHIPS	TYPE OF SHIPS	COST MILLIONS
American Foreign Steamship Corp.		1	Tanker	Purchase and reconstruct 2 tankers		12
		4	C3-S-A2	or construct 1 new tanker		
American Steamship Company		29	Cargo Ships	3	self-unloaders	47.4
		1	Cargo Ship	1	tug/barge	
Cartland Steamship	American Steamship Company	4	Cargo Ships	(see American Steamship)		
Reiss Steamship Company, The	American Steamship Company	12	Cargo Vessels	(see American Steamship)		
Cities Service Tankers Corp.		7	Tankers	2	Tankers	53.0
				1	Barge	
Central Gulf S.S. Corporation		10	Cargo Ships	3	Lash containerships	82.5
Cleveland-Cliffs Iron Co., The		13	Cargo Ships	3	self-unloaders	43.0
				3	vessel acquisition	9.0
				1	vessel reconstruction	2.0
Hawaiian Tug and Barge Co., Ltd.	Dillingham Corporation	16	Tugs	4	Tugs	5.7
		9	Barges	4	Barges	
Ford Motor Company		6	Bulk Carriers	1	self-unloader conversion	6.0
Foss Alaska Line, Inc.	Dillingham Corporation	2	Barge Container	1	RO/RO Barge	4.4
				1	Tug	
				1	RO/RO Barge	
				648	Containers	
Foss Launch & Tug Co.	Dillingham Corporation	76	Tugs	6	Tugs	13.4
		158	Barges	5	Barges	
				1	Bulk Carrier conversion	
Globe Seaways, Inc.	Overseas Shipholding, Inc.	1	Tanker	1	LNG	120.0
				2	or super tankers	
Hannah Inland Waterways Corp.		4	Tugs	2	Barges	1.7
		9	Barges			
Inter-Cities Navigation Corp.	Interstate Oil Transport	1	Tug	1	Barge	6.0
		1	tank barge	1	tug	
Intercontinental Bulktank Corp.	Overseas Shipholding Corp.	2	tankers	(see Globe Seaways, Inc.)		
Interstate Marine Transport Co.	Interstate Oil Transport Co.	19	Tank Barges	7	Barges	28.0
Interstate Materials Transport Co.	"	10	Barges	3	Barges	12.0
		2	Tugs	3	Tugs	
Interstate Towing Co.	"	14	Tugs	7	Tugs	14
		1	Barge			
Kinsman Marine Transit Co., The	American Shipbuilding	16	Vessels	2	Ore Carriers	25.5

PARTY TO CAPITAL CONSTRUCTION FUND AGREEMENT	PARENT CORPORATION	AGREEMENT VESSELS FOR PURPOSE OF MAKING DEPOSIT INTO CAPITAL CONSTRUCTION FUND		SHIPBUILDING PROGRAM FY 1972 - FY 1977		
		NUMBER	TYPE	NUMBER OF SHIPS	TYPE OF SHIPS	COST MILLIO
Luedtke Engineering Company		4	Towboats	1	Tug	(.3
		3	Barges	1	Scow	(
Ocean Tankships Corporation	Overseas Shipholding Inc.	1	Tanker	(see Globe Seaways, Inc.)		
Oglebay Norton Company		4	Cargo Vessels	3	Vessel acquisition	1.5
				3	Vessel reconstruction	1.5
				1	Ore carrier 50,000 T	25.0
				2	Conversions	11.0
Overseas Bulktank Corporation	Overseas Shipholding Inc.	2	Tankers	(see Globe Seaways, Inc.)		
Pacific Towboat & Salvage Co.	Dillingham Corporation	11	Tugs	2	RO/RO Barges	2.8
Penn Navigation Company	U.S. Industries, Inc.	4	Barges Tankers	2	OBO	Unknown
		2	Dry Bulk Carriers			
Pickands Mather & Company	Diamond Shamrock Corp.	16	Bulk Vessels	2	Reconstruction 2 vessels	12.3
				1	Reconstruction 1 Vessel	1.6
Schmidt O.L. Barge Lines, Inc.		1	Tug	1	Tug	(1.4
		4	Barges	4	Barges	(
Harbor Tug and Barge Company, The	Crowley Tug	3	Barges	3	Barges Reconstruction	2.1
Long Beach Tugboat Co.	Crowley Tug	4	Tankers	(see Harbor Tug & Barge)		
Tank Barge 7, Inc.	"	1	Barge	(see Harbor Tug & Barge)		
Tank Barge 10, Inc.	"	1	Barge	"		
Tank Barge 12, Inc.	"	1	Barge	"		
Tank Barge 14, Inc.	"	1	Barge	"		
Tank Barge 15, Inc.	"	1	Barge	"		
Tank Barge 16, Inc.	"	1	Barge	"		
Tank Barge 17, Inc.	"	1	Barge	"		
Tank Barge 18, Inc.	"	1	Barge	"		
Tank Barge 21, Inc.	"	1	Barge	"		
Tank Barge 22, Inc.	"	1	Barge	"		
Tank Barge 25, Inc.	"	1	Barge	"		
Tank Barge 33, Inc.	"	1	Barge	"		
Tug Atlas, Inc.	"	1	Tug	"		
Tug Challenger, Inc.	"	1	Tug	"		
Tug Cuyumaca, Inc.	"	1	Tug	"		
Tug Sea Giant, Inc.	"	1	Tug	"		

PARTY TO CAPITAL CONSTRUCTION FUND AGREEMENT	PARENT CORPORATION	AGREEMENT VESSELS FOR PURPOSE OF MAKING DEPOSIT INTO CAPITAL CONSTRUCTION FUND		SHIPBUILDING PROGRAM FY 1972 - FY 1977	
		NUMBER	TYPE	NUMBER OF SHIPS	TYPE OF SHIPS
Tug Sea Hound, Inc.	Crowley Tug	1	Tug	(see Harbor Tug & Barge)	
Tug Sea Otter, Inc.	"	1	Tug	"	
Tug Sea Ranger, Inc.	"	1	Tug	"	
Tug Sea Witch, Inc.	"	1	Tug	"	
Tug Sea Wolf, Inc.	"	1	Tug	"	
Tug San Diegan, Inc.	"	1	Tug	"	
Tug Sea Lion, Inc.	"	1	Tug	"	
Tug Trojan, Inc.	"	1	Tug	"	
Tug Valiant, Inc.	"	1	Tug	"	
Pacific Barge 3, Inc.	"	1	Barge	"	
TMT Trailers Ferry, Inc.		5	Trailer Ferries	1	Reconstruct Trailer Ferry
United Tanker Company		4	Tanker	2	Liquid Bulk Carrier
Victory Carriers, Inc.		4	Victories	2	Tankers
		4	Tankers		
White Stack Towing Corporation		10	Tugs	2	Tugs
Young Brothers Limited	Dillingham Corporation	11	Cargo	2	Barges
					Containers
Union Oil Company of California		7	Tankers	2	Product ships
		2	Tugs	1	Tanker
		6	Barges		
Collier Carbon & Chemical Corp.	Union Oil Company of California	9	Barges	(see Union Oil Company of Calif.)	
Ashland Oil Inc.		4	Tankers	1	Asphalt Unit
		8	Towboats	2	Barges
		23	Barges		
		1	Harbor boat		

Total Estimated Cost Millions $

Question 7:

With respect to each research and development contract awarded during fiscal years 1971 and 1972, please provide the following information:

(a) a brief summary of the purpose of the project, (b) the party to whom the contract was awarded and its parent corporation, if any, (c) the amount which the government has paid or will pay pursuant to the contract, (d) the date on which the contract was entered, and (e) the date on which the contract was or is to be completed.

Answer

The information for each fiscal year is contained in the following exhibits:

April 10, 1972

OFFICE OF ASSISTANT ADMINISTRATOR
FOR RESEARCH AND DEVELOPMENT

SUMMARY

Fiscal Year 1971 Program
(Dollars in Thousands)

	Obligations	Expenditures
Research and Development Contracts	$17,871	$5,937
N S SAVANNAH Program	5,064	1,846
Joint Surface Effect Ship Program	500	500
Totals	$23,435	$8,283

OFFICE OF ASSISTANT ADMINISTRATOR FOR R&D

FY 1971 Program (Dollars in Thousands)

Project	Amt.	Contr.	Start Compl.	% Compl.	$ Outlay	End Product
Skewed Propeller Development 0-24049	22	Naval Ship R&D Center	7-70 6-71	100	22	Design and model test of a highly skewed propeller for the SEABRIDGE class ships
Ship Structure Committee 46-0504	135	U. S. Navy	FY71	60	75	Studies of various problems of design, materials and testing for improvement of construction and operation of merchant ships
Structural Test of Rigid Coupled Tug-Barge System 1-35475	363	Ingram Ocean Systems	4-71 6-72	60	120	Full scale test of rigid link tug-barge system in ocean transit including strain measurements at selected locations to improve design methods
Increase in Productivity, Reduction of Life Cycle Costs and Subsidy Through R&D 46-0030	260	USMMA	7-70 6-71	100	260	Development of methods to reduce operating costs in a ship or fleet of ships in the areas of fuel, personnel, maintenance and repair, capital charges, insurance and terminals
Increase in Productivity, Reduction of Life Cycle Costs and Subsidy Through R&D MA-4956	133	Webb Inst. of Technology	7-70 7-71	100	126	Development of methods to reduce operating costs in a ship or fleet of ships in the areas of fuel, personnel, maintenance and repair, capital charges, insurance and terminals
Ships of Opportunity 46-200	100	National Oceanographic Atmospheric Administration	1-71 6-71	100	80	Utilization of U. S. flag merchant ships as scientific platforms representing a national network of seagoing laboratories to broaden the scientific data support to marine operations, ocean science and technology programs

* Indicates FY 1971 funding only. Major contract let in previous years or following year.

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Ship Motion Prediction and Control 0-35466	132	Mass. Inst. of Technology	6-70 5-72	85	81	Adapted design seakeeping manual to seas of all directions for the control of ship roll
Maritime Transportation Research Board (MTRB) 46-0274	108	Office of Naval Res. & Nat'l. Academy of Science	FY71	70	60	Evaluation of use of containerships to replenish a task force at sea, and definition of additional fire and safety regulations for ships
Maritime Research Information System 0-35489	196	National Academy of Science	7-70 6-71	100	146	A computer-aided system for collection, storage and dissemination of information available on maritime technology from all U. S. sources
Commercial Ice Transiting Systems 1-35502	250	Wartsila	6-71 6-72	70	52	Data from model tests of hulls of ice-transiting ships for optimum design of such hulls for application to year-round shipping in the Great Lakes and Arctic regions
Cost-Benefit Analysis Model for Great Lakes Ships with Ice Transiting Capabilities 1-35487	57	University of Michigan	1-71 9-71	100	40	Computer model for analyzing costs of and benefits derived from ships with ice transiting capabilities
Deicing Bubbler System Duluth Harbor 46-0339	10	Corps of Engineers	3-71 6-71	100	10	Determination of effectiveness of bubbler systems on vessel performance in mush ice or broken channel ice
Advanced Devices for Improvement of Bulk Carriers in Ice Conditions Indigenous to Great Lakes C-1-35554	154	Arctec Inc.	6-71 12-71	100	110	Advanced devices for improvement of operation of bulk carriers in ice conditions in the Great Lakes

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
High Block Coefficient Merchant Ship Forms with Length-Beam Ratios Ranging Down to Low Values 1-35587	241	Hydronautics, Inc.	6-71 6-73	40	84	Powering data for a new standard series of ship forms for the design of modern bulk carriers
Commodity Form Change 1-35067	195	Litton Systems	3-71 12-71	95	146	Study of the economics of changing the form of major bulk commodities to improve the U. S. shipping's competitive position
Computer Time Sharing & Resources Services 1-35031	62	General Electric	7-70 6-72	70	42	Computer time-sharing service for evaluation of research planning, programs, and results
Impact of Containerization on the U. S. Transportation System 1-35494	144	Manalytics, Inc.	2-71 2-72	95	105	Computer analysis model of containerization impact; future ship, port and terminal requirements; and container flow forecast
Marine Planetary Transmission Systems Developments 1-35536	4,013	Curtiss Wright	5-71 12-75	12	423	Development, fabrication and test of two standardized marine transmissions--one a 40,000 SHP, two-stage system, the other a 60,000 SHP, contra-rotary system, both with reversing capability
Standard Shipbuilding Improvement Project 1-35402	866	Newport News Shipbuilding	10-70 3-72	97	770	Identification of innovative changes in U. S. regulatory requirements and practices to reduce shipbuilding costs and recommend specific innovations which require regulatory changes
Consolidated Nuclear Steam Generator. Competitive Design & Economics, Phase III 1-35030	621	Babcock & Wilcox	6-70 9-71	98	563	Definition of the role of nuclear propulsion in merchant shipping and development of a detailed conceptual design of one or more standardized nuclear propulsion systems adaptable to a variety of ship applications.

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Competitive Marine Propulsion Systems Analysis, Phase I 1-35058	99	Booz Allen	1-71 4-71	100	82	Identification of worldwide requirements for marine transportation in terms of number of ships, size, speed and propulsion power level; develop information on the contribution of the propulsion system to the life-cycle cost of ships
Neo-bulk Shipping Systems 1-35520	275	Harbridge House	6-71 5-72	80	140	Market analysis and technical planning study of the future U. S. shipping requirements in the neo-bulk cargo area.
Consolidated Nuclear Steam Generator Pressure Suppression Test 1-35555	242	Babcock & Wilcox	6-71 12-72	25	55	Experimental substantiation of the CNSG reactor containment system design
Engineering & Development Program for A Consolidated Nuclear Steam Generator, Phase II MA-4989	28	* Babcock & Wilcox	2-70 9-70	100	28	Feasibility and engineering features of a proposed 240,000 shaft horsepower CSNG Maritime Nuclear Propulsion Plant
Computer Time Sharing 1-22972	10	General Services Administration	7-70 6-72	60	0	Computer time-sharing service for evaluation of research, planning programs and results
Shipbuilding Facilities Materials Handling 1-36200	700	Ingalls	6-71 6-73	20	43	Identification and development of improved methods and equipment used in shipbuilding material handling, a systematic analysis of materials handling requirements and alternate equipment capability and engineering specifications and institution of these methods, etc. in shipbuilding materials handling.

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Short-term Studies and Support Assignments 1-35552	14	Booz Allen	6-71 8-71	100	14	Support of a shipbuilders' research conference and preparation of R&D support documents for use in R&D programs
Programming Services 1-23460	3	General Electric	6-71 7-71	100	3	Commission of a Department of Transportation- developed transportation distribution cost model for Maritime Administration Research use
Merchant Marine Crew Skills and Disciplines 0-35505	68	Stanwick	6-70 8-71	100	68	Determination of the benefits to be gained from an operational standpoint by shipboard personnel and ship operators by incorporation of advanced systems and equipment in ships and utilization of these benefits to increase efficiency
Vibration Analysis and Deviation Concept (VIDEC) 0-35505	36	State Univ. of N.Y., Maritime College	6-70 2-71	100	36	Development of specifications for hardware use in monitoring all shipboard equipment
Vibration Analysis and Deviation Analysis (VIDEC) 1-35059	25	Litton Systems, Inc.	9-70 2-71	100	24	Technical assistance for hardware specifications for shipboard monitoring systems
Vibration Analysis and Deviation Concept (VIDEC)--Maintenance Management System 1-35482	20	* Litton Systems, Inc.	3-71	100	19	Preparation of shipboard monitoring hardware technical specifications for request for proposal solicitations
Vibration Analysis and Deviation Concept (VIDEC)--Maintenance Management System 1-35483	20	State Univ. of N.Y., Maritime College	6-71 6-73	30	5	Design of hardware for shipboard equipment monitoring systems

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Satellite Navigation Test 1-35016	33	U.S. Lines/ International T&T	9-70 9-71	100	33	Improved, automatic navigation systems for merchant ships. Quantified cost-benefit of satellite navigation
Design, Install, Evaluate an Advanced Conning System 1-35410	377	AEIL & MDS	11-70 5-72	80	245	Development of a centralized conning system which will be utilized on a wide variety of U. S. flag ships to improve productivity and increase operating efficiency
Marine Data Communications System, Design and Demonstration 1-35057	192	* Applied Information Industries	11-70 8-71	100	192	Economic analyses and hardware feasibility demonstration of Maritime Satellite Systems
Study of Maritime Mobile Satellite Requirements PINA 70-315	4	* MarAd/USCG	3-70 2-71	100	4	Analysis of world vessel population and evaluation of marine communication requirements for U. S. position on satellite communication
Look-out Assist Device MA-3374	3	* Sperry-Piedmont	FY71	100	3	Look-out Assist Device for ships with "hear" and "talk" capability
Radio Technical Commission Marine 46-0261	6	Federal Communication Commission	7-70 6-71	100	6	Cross germination of requirements and opportunities among the several agencies involved in electronic navigation, communications and weather data
Pollution Control and Prevention Program 1-35049	245	MarAd-Esso	10-70 12-71	85	164	Data to support position on anti-pollution regulations and development/test of pollution control equipment
Oil-Water Separator 0-35457	192	Hydronautics, Inc.	6-70 12-72	58	120	A device to separate oil from bilge and ballast water which will meet national and international standards. Least cost solution to the oily discharge problem

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Ship Control Simulator 1-35515	3,550	Sperry Systems	6-71 6-73	15	217	Capability to simulate optimum aspects of ship's control system and ship operating environments and utilize this capability for various experimental scenarios so that related ship operational problems can be amenable to computer solutions
Evaluation of Offshore Terminal System Concepts 1-35409	198	Soros Associates	3-71 3-72	80	109	Evaluation of the need for, and feasibility of, alternate offshore terminals in U. S. coastal waters for crude oil imports by 1980 and dry bulk commodities by subsequent stages of terminal expansion
MarAd Satellite Navigation/ Communications System 1-35594	2,950	Applied Information Industries	6-71	20	529	Establishment of a global, operational, satellite-based system providing navigation, high capability communication and surveillance services to ships through means of an integrated, economical, and reliable shipboard terminal equipment
Develop and Test a Cash Flow Model of Maritime Union Trust Funds 1-35056	42	Inner City Funds	7-70 6-71	100	38	Development of a computerized mode to analyze the effects of ODS and CDS proposals on Maritime Union Pension, and welfare fund cash flows
Develop and Index of Percentage Changes in Hourly Cost of Wages and Benefits for Collective Bargaining Situations 1-20140	35	U. S. Department of Labor	12-70 5-71	100	35	An index of the average annual changes in wages and benefits affected by collective bargaining situations for use in determination of subsidy payments on seafaring wages
Foreign Trade Forecasting Data Tapes--U. S. Trade Time Series, 1963-1969 1-35036	17	Planning Research Corp.	9-70 11-70	100	17	Provision of a data base consisting of time series groupings which will be utilized in a computer model for forecasting U. S. foreign trade

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Maritime Contract Impact System (MCIS) Analysis, Design Programming & Implementation 1-35088	82	General Electric	10-70 8-71	100	82	A computer model capable of rapid computation of costs of proposed salary and benefit agreements during labor-management contract negotiations
Risk/Return Analysis of U. S. Maritime Shipping Industry 1-35401	16	Management Analysis Center, Inc.	9-70 10-70	100	16	A model which estimates the rates of return and profit risk in the U. S. Merchant Marine and in 37 comparison industries
Management Analysis Projection System 1-35424	25	General Electric	11-70 10-71	100	25	Determination of the feasibility of employing a regression analysis and econometric data packet to assist the development of a forecast of U. S. waterborne transportation
Computer Time Sharing Services 1-35499	70	Comnet	2-71 8-72	100	70	Computer services and program to aid in the demonstration and evaluation of Project 72 during the seagoing labor-union discussions
Integrated Data Management Computer Systems Preliminary Design Study 1-35513	8	American Management Systems	4-71 6-71	100	8	Design recommendations for a system which enables integrated management of data files identification of separate data bases and proposal of file management systems
Calibrate Torsin Test Coupons to Determine Modulus of Rigidity of Ship's Line Shafting 1-16528	2	NSRDC	FY71	100	2	See Title
Pipe Stress Analysis Computer Study under New USCG Rules 1-35465	6	Avondale	2-71 5-71	100	6	See Title
Ultrasonic Test to Determine Modulus of Rigidity of Ship's Line Shafting 1-35054	4	Magnaflux Corp.	7-70 6-71	100	2	See Title

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Evaluation of Alternate Railroad Terminal Container Handling Systems 1-35082	18	R. Reebie & Associates	10-70 1-71	100	18	Identify alternate systems for the transportation markets to enable the Maritime Administration to execute its responsibilities for port development
Relationship of Land Transportation Economics to Great Lakes' Traffic Volume 1-35492	47	R. Reebie & Associates	1-71 8-71	100	47	Identify specific representative commodity traffic flows and analyze the economic factors of possible alternative systems for the transportation markets and assist the Great Lakes' water carriers, port interest, and rail carriers to improve the transportation economic conditions in the Great Lakes region
Design and Development of a Pilot Terminal Control System With Automatic Container Identification 1-35434	26	Transocean Gateway Corp. & Computer Identics Corp.	2-71 6-71	100	26	Development of an automatic terminal control and security system for improved container control, increased equipment utilization and effective planning and scheduling to increase profits by using state-of-the-art electronic technology
Radio Frequency Management 46-0275	13	Essa	7-70 6-71	100	10	Joint U. S. Government organization for allocation of radio frequencies for ship use and special frequencies for R&D testing and use
Develop Minimum Rates for Carriage of Military Cargos 1-35514	13	Systems Analysis Research Corp.	FY71	100	13	Determination of minimum rates required for military cargo shipping costs
Development of a Computer Forecasting Model of U. S. Foreign Trade 1-35516	18	Synergy, Inc.	5-71 9-71	100	12	Computer model utilizing previously compiled data base of the time series commodity groupings to predict or forecast U. S. foreign trade

Project	Amt.	Contr.	Start & Compl.	% Compl.	$ Outlay	End Product
Back-up Computer Services 1-22736	17	Naval Ordnance Systems Command	6-71 4-72	80	0	Processing time and data file storage for project UN-72 model as a required efficient and economic back-up
Miscellaneous Purchase Orders	60	--		100	56	--
N S SAVANNAH--Operation MA-3890	700	FAST	7-70 11-70	100	351	Experimental commercial operation of the nuclear ship SAVANNAH
N S SAVANNAH--Training 66-1123	75	USMMA	7-70 12-70	100	12	Training of reactor operators for the nuclear ship SAVANNAH
GAA, N S SAVANNAH Operation MA-6145	770	AEIL	11-70 9-71	100	318	Standby and de-fueling operation of the N S SAVANNAH
N S SAVANNAH--Facilities and Support MA-2206	3,474	Todd	FY71	100	1,165	Facilities and support requirements necessary for the N S SAVANNAH
Nuclear Fuel Shipment, Cask Rentals MA-2239	45	Nuclear Fuel Services	10-71 4-72	90	0	Cask car rental for movement of nuclear fuel, etc. This is on a reimburseable basis from AEC. A MarAd contract so MarAd would have first call on use of cask car
Surface Effect Ship	500	Various	FY71	100	500	MarAd participation in the Joint Surface Effect Ship Program with the Department of the Navy

78-255 O - 72 - 4

April 10, 1972

Office of the Assistant Administrator
for Research and Development

SUMMARY
Fiscal Year 1972 Program
(Dollars in Thousands)

	Obligations	Expenditures
Research and Development Contracts (FY1972)	$7,437	$1,664
Previous Years R&D Contracts	-0-	4,537
Previous Years - NS SAVANNAH Contracts	-0-	1,956
	$7,437	$8,157

Office of the Assistant Administrator for R & D
FY 1972 Program
(Dollars in Thousands)

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Maritime Research Information System 0-35498	242*	National Academy of Sci.	7-70 6-72	75	138	A computer-aided system for collecting and disseminating information available on maritime technology from all U.S. sources.
Ship Motion Prediction and Control 0-35466	5*	Mass. Inst. of Techn.	6-70 5-72	66	5	Charts for quick determination of the responses of Standard Series 60 Forms in head seas only.
Stresses-Great Lakes Ore Carrier-"Ryerson" PIMA 66-669	3	SNAME	FY 1971	100	3	Strain measurements including "springing" strains to improve design criteria for Great Lakes ore carriers and use by ore carriers.
Hydrodynamic Testing of Tug-Barge System 400-28003	336	Naval Ship R&D Center	9-71 8-73	20	17	Design data consisting of powering trends and linkage stresses for the development of optimum ocean going tug-barge systems.

*Indicates FY 1972 funding only
Initial contract phase let in prior year (s)

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Maritime Transportation Research Board (MTRB) 400-28011	135	Office of Naval Res. & Nat'l Acad. of Sci.	FY 1972	60	47	Reports on "Legal Impediments to International Intermodal Transportation and Documentation for Cargo Movement" and recommendation for shipbuilding research necessary for the President's shipbuilding program; and on recommendations for supporting university maritime research programs.
Ship Structure Committee 400-28010	135	U.S. Navy	FY 1972	60	59	Determine feasibility of use of flame straightening for ship steel and publication of a monograph on the structural design of surface ships.
Tug-Barge Computer Service 400-28008	11	NASA Marshall Space Center	3-71 6-72	60	7	Computer data necessary for rigid-link tug/barge system for ocean transit.
Collection and Separation Facilities for Oily Wastes 2-36202	645	F. R. Harris	1-72 11-72	5	0	Definition of requirements, optional systems and economic impact for providing oily waste collection and processing facilities in port/harbor areas.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Clean Ballast Tanker Design 2-36227	129	J.J. Henry	9-71 2-72	90	80	Definition of economic impact of providing segregated ballast tanks in large crude carriers to prevent dirty ballast disposal problems.
Fate & Effects of Oil in the Seas 400-28013	210	NOAA/ NMFS	2-72 6-73	3	0	Determination of effects of oil discharged at rate of 60 liters per mile on marine organisms and recommendation of allowable limits of discharge.
Fate & Effects of Oil in the Seas 400-28014	190	Nat'l Bu. of Stdns.	2-72 6-73	3	0	Determination of oil characteristics which can be analyzed in samples collected from the sea to determine fate and behavior at concentrations discharged from vessels.
Environmental Impacts of Supertankers 400-28015	50	Council on Environ. Quality	FY 1972	100	50	A study to be used as a basis for establishing National Policy concerning Supertanker terminals and operations; this will consider environmental and economic impact.
Consolidated Nuclear Steam Generator Phase IV 2-36216	420	Babcock & Wilcox	8-71 3-73	35	265	Preliminary engineering designs, bid plans and specifications and the Preliminary Safety Analysis Report to obtain regulatory agency approval of the CNSG design prior to start of construction.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Consolidated Nuclear Steam Generator - Critical Heat Flux Characteristics 1-35555 (Task 2)	50	Babcock & Wilcox	2-72 11-72	8	0	Experimental data to verify critical Heat Flux correlations used in the design of the CNSG reactor.
Ocean Wave Height Measuring Systems 400-28016	25	Naval Ship Engr.Center	FY 1972	40	0	Development of a ship-board prototype wave spectra measuring system for use in correlation of full scale ship test data with the actual sea state encountered.
Ship Surface Preparation & Coatings 2-36215	500	General Dynamics	9-71 3-73	10	5	Development of a prefabrication primer, a closed cycle blasting method and evaluation technique for painting systems.
Compute Time Sharing 1-35031	30	General Electric	7-71 6-72	60	17	Computer time sharing service for evaluation of research planning, programs and results.
Shipbldg. Production Research 2-36233	500	Todd Shipyards	11-71 3-73	10	0	Development of misc production method techniques and equipment including use of lazers, model techniques, non-destructive test apparatus and pipe, vent and wire connectors.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Shipbldg.-Welding Methods 2-36214	700	Bethlehem Steel	9-71 9-73	10	36	Development of a one side welding flux, portable welding apparatus, gravity feed electrode and apparatus for vertical butt welding.
Service Contract 2-36249	50	Computer Sci.Corp.	12-71 12-72	35	3	Quick technical reaction contract to provide small research support requirements.
Bulk Commodities Alternative Form Changes & Transport Mode 2-36252	400	Litton Systems	2-71 12-72	2	0	Engineering analysis study of the economics of changing the form of major bulk commodities, three trade situations, including slurry coal, slurry phospate rock, crude oil, iron ore & wheat.
Technical Assistance for National Planning Conf. on Domestic Shipping 2-36261	34	Manalytics	2-72 7-72	30	0	Provide technical assistance in planning, conduct and conclusions of the Domestic Shipping Nat'l Planning Conference.
Service Contract 2-36203	50	Mark Battle Assoc.	12-71 12-72	20	0	Provide small research support requirements on a quick technical reaction basis.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Floatable Waste Treatment Plant 2-35200	192	Lockheed	11-71 6-72	50	63	Engineering and economic feasibility study of conversion of reserve fleet vessels to treatment plants for oily waste materials from ships (primarily tankers) and municipal sewage, plus subsequent preparation of conversion plans and specifications.
Radio Technical Commission Marine (RTCM) 400-28001	6	Federal Communication Comm.	FY 1972	70	2	Cross germination of requirements and opportunities among the several agencies involved in electronic navigation, communication and weather data.
Advanced Conning System 1-35410	95*	AEIL & MDS	11-70 5-72	50	0	A centralized conning system which will be utilized on a wide variety of U.S. flag ships to improve their productivity and increase operating efficiency by better utilization of available manpower.
Anti-Stranding Sonar System 1-35228	158	Raytheon	1-72 11-72	25	44	A shipboard system that will alarm the presence of bottom conditions and obstacles below the surface that are hazardous to ship passage.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Rational Ship Structural Design Criteria 2-36210	282	Sea Use Council	9-71 11-72	45	50	Development of need wave specta for the North Pacific through use of ship mounted Tucker Meter data matched against basic ship strain data. This data will be used for ship and offshore structure design for ship routing and knowledge of world-wide directional wave spectra.
Offshore Terminal - Display Model & Graphics 1-35409	30*	Soros Assoc.	3-71 3-72	100	30	Evaluation of the need for, and feasibility of, alternate offshore terminals in U.S. coastal waters to handle crude oil imports by 1980, and dry bulk commodities by subsequent stages of terminal expansion.
Cost Benefit Analysis Model for Great Lakes Ships with Ice Transiting Capabilities - Phase II 1-35487	90*	Univ. of Michigan	1-72 10-73	65	45	Analysis of benefits and costs derived from ships with ice transiting capabilities able to operate in the Great Lakes during all 12 months of the year.
Commercial Shipboard Test & Demonstration of Low Cost Navy Navigation & Satellite Equipment 400-28012	40	Naval Ord. Systems Command	2-72 10-72	10	2	Evaluation of U.S. Navy low cost radionavigation satellite hardware for inclusion in MarAd standard specifications.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Vibration Analysis and Deviation Concept (VIDEC) 2-36251	341	Raytheon	2-72 9-73	3	0	Provide hardware for automatic monitoring of power plant performance and product component failures.
Maritime Research Center - USMMA 400-28005	215	USMMA	FY 1972	70	144	1st research center devoted exclusively to maritime research associated with commercial ships and shipping systems. Concerned with problems of ship safety, navigation, communication, automation and human factors problems.
Maritime Research Center - USMMA	785	USMMA	FY 1972	70	450	2nd MarAd research center concerned primarily with marine pollution abatement, advanced tug-barge systems, improved ship utilization, liquefied natural gas ships, cargo transfer problems, commerical nuclear propulsion, etc.
Measuring Program Effectiveness of Civil Rights in Shipbuilding 2-36212	47	Univ. of Penna.	8-71 12-72	30	4	Determination of economic forces or civil rights enforcement procedures account for the rising employment of minorities, male and female, in the shipbuilding industries and develop means for more effective use of minorities and disadvantaged manpower in the shipbuilding industry.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Radio Frequency Mgmt. 400-28002	7	NOAA	FY 1972	60	2	Joint U.S. Gov't organization for allocation of radio frequencies for ship use and granting of special frequencies for government R&D testing and use.
Sealift Procurement Analysis & Review 1-35557	49	Control Data Corp.	6-71 1-72	100	9	Determine the sufficiency of competitive military cargo freight rates to cover government costs incurred in transportation of such cargo.
Maritime Contract Impact System 1-35574	30	General Electric	7-71 6-72	60	6	Computer model capable of rapid computation of costs of proposed salary & benefit agreements during labor management contract negotiations.
Foreign Trade Data Tapes U.S. Time Series 1-35036	4	Planning Research Corp.	9-70 7-71	100	4	Computer model consisting of time series commodity groupings which will be used for forecasting U.S. foreign trade.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
Computer Time Sharing Tiresias Project 2-36201	60	Honeywell	8-71 6-72	20	0	Extraction of information regarding commodity movements and performance of quick reaction trade route studies from trade tapes. Also, TIRESIAS system possesses the capability to retrieve info. from other data banks.
Computer Time Sharing Test & Expand Project 72 1-35499	32	Comnet	2-71 12-72	40	10	Development of several computer models to be used in Maritime labor/ mgmt. negotiations to calculate cost & effects of proposed changes in offshore labor contracts.
Forecast & Analysis of U.S. Bulk Carrier Requirements 2-36231	17	Inner City Funds	7-71 11-71	100	17	Develop environmental ramifications of alternative bulk carrier systems.
Ship Information Data Base Computer Services 2-23654	3	Computer Network Corp.	9-71 11-71	100	3	Data base containing info. on U.S. flag vessels such as name, cargo, year built, etc. to provide information on ship requirement forecasts, etc.

Project	Amt.	Contractor	Start & Compl.	% Compl.	$ Outlay	End Product
U.S. Ocean Bulk Shipping Program 2-36245	50	Jones, Bardelmeier & Co. Ltd.	12-71 1-73	35	0	Prepare reports on world-wide ocean bulk shipping for use by the Maritime Administration in its bulk program.
Foreign Trade Forecasting Model 1-35516	20	Synergy	1-72 5-72	80	11	Computer model using data of the time series commodity groupings to predict or forecast U.S. foreign trade.
Miscellaneous Purchase Orders	34		FY 1972	100	34	- - - -

April 11, 1972

Question 8: "Please provide a more detailed summary of the purpose of any of the research and development contracts listed in answer to Question 7 above which are related to prevention or abatement of marine pollution.

Response to Question 8:

The material which follows provides a brief summary of the research and development contracts listed in the answer to Question 7 above which are directly related to prevention or abatement of marine pollution.

A. FY 1971 R&D Contracts

(1) Contract No. Pl-MA70-551

Title: "Test Supervision - Oily Water Separator"

Contractor's Name and Address

U.S. Naval Research and
Development Center
Annapolis, Maryland

Summary

The purpose of this contract is to provide test supervision and performance analysis for shipboard oily water separator equipment.

The Navy R&D center has a broad range of technical capability and analytical experience in determining separation efficiencies.

A final evaluation report is to be prepared on the performance of the Aqua-Chem separator in tests conducted aboard the SS GULFKING.

(2) Contract No. P1-MA70-503

Title: "Shipboard Test-Oily Water Separator"

Contractor's Name and Address:

Gulf Oil Corporation
New York, N. Y.

Summary

The objective of this contract is to perform a shipboard test and evaluation of a promising concept for separating oil from bilge and ballast discharge.

Under this contract, an Aqua-Chem separator was shipped to Jacksonville Shipyards and installed aboard the SS GULFKING. Test supervision and evaluation was performed under separate contract to the Naval Ship Research & Development Center, Annapolis, Maryland. Tests have been completed and while the effluent oil concentration by and large, was low enough to satisfy domestic standards, coalesce element life was extremely short due to plugging from suspended solids and wax.

The unit is to be removed from the GULFKING at its next shipyard availability. A performance report is pending.

(3) Contract No. C-1-35049

Title: "Pollution Control and Prevention Program"

Contractor's Name and Address:

ESSO Research & Engineering
Florham Park, New Jersey

Summary

The purpose of this contract is to develop data on quantities of wastes generated aboard tankers and investigate design features and operational practices which would reduce

the amounts of such wastes discharged into the environment through normal and accidental means. This work includes the following tasks: (1) Pollutant Characterization Studies; (2) Equipment Development, Test and Evaluation; and (3) Pollution Control through Ship Design.

While ship design aspects are being looked at, the main objective is to improve the Load-on-Top operation as the least cost alternative to meeting pollution control regulations.

(4) Contract No. C-0-35467

Title: "Development of a Continuous, Moving Bed to Remove Oil from Oil-Water Suspensions"

Contractor's Name and Address:

Hydronautics, Inc.
Pindell School Road
Laurel, Maryland

Summary

The purpose of this contract is to develop a regenerative continuous separator for oil-water suspension. The contractor has completed Phase I of this contract which resulted in a conclusion that an immediate and practical solution to the problem is possible using a "batch-type" regenerative separator. While technically a "batch-type" process, the regenerative time is so short compared to the separative time that, by using two sections each capable of being overloaded for a short time, the practical result is a continuous regenerating moving bed as envisioned in our original goal.

The contractor is presently constructing and testing a quarter-scale prototype in his laboratory to develop the concept further and pave the way for full scale tests in the near future.

B. FY 1972 R&D Contracts

(1) Contract No. C-2-36202

Title: "Port Reception Facilities for Oily Wastes"

Contractor's Name and Address:

F. R. Harris, Inc.
300 E. 42nd Street
New York, N. Y.

Summary

The President's goal to completely eliminate international oil discharges from ships by 1975 has created a requirement to study alternatives to on-board processing of oily wastes.

The purpose of this study is to (1) determine the volume of oily wastes which would arrive at various U.S. ports assuming the "complete elimination" criteria is implemented and enforced; (2) determine the system, or mix of systems, available for collecting and processing these wastes; and (3) determine the economics of this alternative both in terms of impact on the shipping industry and in terms of entrepreneurial viability.

(2) Contract No. C-2-36227

Title: "Segregated Ballast Tanker Study

Contractor's Name and Address

J. J. Henry Company
90 West Street
New York, N. Y.

Summary

The purpose of this study is to determine the economic impact and potential pollution abatement effectiveness of a

series of very large crude carriers ranging from 125,000 DWT to 500,000 DWT, with various arrangements of segregated ballast tankage.

A requirement for newly constructed tankers to contain a given amount of segregated ballast capacity will no doubt become effective in the near future as evidenced by recently passed legislation, domestically, as well as by decisions under consideration by IMCO, internationally.

The segregated ballast alternatives, while not completely effective, will eliminate the need for mixing (and subsequent disposal) of ballast with residual cargo oil. The penalty to the ship owner/operator can be, however, extremely high depending on the tank arrangement chosen. Likewise the effectiveness of different arrangements is quite different. This study will attempt to determine the best approach to the segregated ballast alternative.

(3) Contract No. C-2-23699

Title: "Program for Computing Bending Moments and Sheer Forces"

Contractor's Name and Address:

ESSO International Inc.
New York, N. Y.

Summary

The preliminary in-house work in preparation for the J.J. Henry Segregated Ballast study included development of general arrangement plans for the tanker designs to be studied.

Development of these plans and arrangements included computation of bending moments and sheer forces to determine design viability. The calculations could have been performed manually but at great expense to time.

Under this contract, ESSO International provided computer time to perform these difficult calculations using a program developed by them.

This effort enabled completion of the total Segregated Ballast study on schedule.

78-255 O - 72 - 5

(4) Contract No. C-2-36268

Title: "Great Lakes Pollution Control Program"

Contractor's Name and Address:

Cleveland-Cliffs Iron Company
Cleveland, Ohio

Summary

The Great Lakes operators are faced with the problem of meeting various "no-pollution" laws of the states bordering the Lakes. These laws are not only at variance with each other, but some are far more stringent than the Fedearl laws, even to the extent they may be impractical. Nevertheless, failure to conform will result in costly delays and/or fines and will seriously handicap shipper operations.

The contractor will develop and carry out the investigative work needed to clearly define the myriad problems. This will result in a detailed R&D program, complete with necessary work statements, for solving the problems in an orderly manner.

(5) Contract No. 400-28013/28014

Title: "Fate and Effects of Oil in the Sea

Contractor's Name and Address:

National Oceanic & Atmospheric Administration/National Marine Fisheries Service/
National Bureau of Standards
Washington, D. C.

Summary

Recognizing that the "complete elimination of intentional oil discharge form ships" will be unattainable for many years and will impose severe economic burdens to tanker operators, this contract is aimed at determining what happens

to oil when discharged in low concentration into the sea, and what harmful effects, if any, are realized at levels discharged using the Load-on-Top procedure.

The goal, here, is to determine if standards somewhat less stringent than those in effect, could be tolerated by the environment thereby composing a lower economic burden to the tanker operator.

(6) Contract No. 400-28015

Title: "Environmental Impact of Supertankers"

Contractor's Name and Address:

Council on Environmental Quality
Washington, D. C.

Summary

The purpose of this study is to develop sound environmental information and recommendations for consideration in the development of a national policy on the presence of supertankers in U.S. ports, harbors and coastal waterways.

Specifically, the study will examine several alternative means of receiving oil from seaborne transport and evaluate each alternative in terms of its economics, probably amount of oil pollution and its overall environmental impact.

(7) Contract No. C-2-36200

Title: "Floatable Waste Treatment System

Contractor's Name and Address:

Lockheed Shipbuilding and Construction Company
2929 16th Avenue, S.W.
Seattle, Washington 98134

Summary

The purpose of this contract is to determine the technical and economic feasibility and acceptability of converting reserve fleet (mothball) liberty ships into floating, in-port waste processing facilities.

The currently funded phase of this work is strictly related to feasibility and acceptability. If shown to have potential, future work is planned in development of conversion plans and specifications followed by prototype construction and operation.

(8) Contract No. (Pending)

Title: "Tanker Tank Cleaning Research Program"

Contractor's Name and Address

Keystone Shipping Company
Chestnut Street
Philadelphia, Pa.

MSA Research Division
Pittsburgh, Pa.

Summary

The purpose of this contract is to develop improved tank cleaning techniques and equipment which will reduce or eliminate oil pollution of the oceans and increase the safety of tank cleaning.

The contractor, with the help of his subcontractor, will evaluate all present cleaning methods and analyze their performance with regard to the purpose of this research program. An assessment shall also be made of the applicability of technology derived from other studies and/or programs to the maritime environment.

The contractor will also study the feasibility of tank cleaning by shore-based personnel, the development of a guide for educational use at various maritime academies and technical schools.

The results are expected to be evidenced by the design, construction, and use of new equipment, materials and procedures.

April 11, 1972

Question 9: "Please provide a more detailed summary of the purpose of any of the research and development contracts listed in answer to Question 7 above which are related to nuclear propulsion."

Response to Question 9:

The material which follows provides a brief summary of the research and development contracts listed in the answer to Question 7 above which are directed related to nuclear propulsion. All of these contracts have been implemented as a part of the Maritime Administration's Competitive Nuclear Merchant Ships Program, a major element of MarAd's overall Advanced Propulsion Systems Research and Development Program.

A. FY 1971 R&D Contracts

(1) Contract No. C-1-35030

Title: "Consolidated Nuclear Steam Generator (CNSG) Phase III: Competitive Design and Economics"

Contractor's Name and Address:

Prime Contractor

Babcock & Wilcox Company
Power Generation Division
P.O. Box 1260
Lynchburg, Virginia 24505

Major Subcontractor

George G. Sharp, Inc.
100 Church Street
New York, N.Y. 10007

Summary

Following a major reassessment of MarAd's previous nuclear activities, a contract (1-35030) was awarded to the Babcock & Wilcox Company in July 1970, to develop an improved version of their Consolidated Nuclear Steam Generator (CNSG) Propulsion System. The objectives are to define the role of nuclear propulsion in merchant shipping and to develop a detailed conceptual design of one or more standardized nulcear propulsion systems, adaptable to a variety of ship applications, which will afford superior economic performance relative to competing fossil fueled propulsion systems. The CNSG design draws heavily on design concepts and components developed and proven in the central station nuclear industry in the past decade, thus eliminating any need for a land-based prototype reactor program prior to introduction of nuclear propulsion in the commercial fleet. Primary emphasis has been placed on reduction of capital cost through standardization and value engineering of the basic design, followed by industrial engineering to identify additional cost reductions achievable in series production.

The initial results of this contract effort indicate considerable promise for economic superiority of nuclear systems in the high power range (above 100,000 SHP), i.e., nuclear propulsion more than competitive with fossil fueled systems. The project has identified further improvements in the competitive position of nuclear versus fossil fueled propulsion as the results of the value engineering and industrial engineering phases have been incorporated. A key task in the current project was directed toward defining the essential R&D which remains to be accomplished before the CNSG nuclear propulsion system can be made available to the maritime industry on a fixed price procurement basis. The first two of seven such R&D tasks have been initiated under Contract 1-35555 which is reported below.

(2) Contract No. C-1-35058

Title: "Competitive Marine Propulsion Systems Analysis"

Contractor's Name and Address:

Prime Contractor

Booz-Allen Applied Research, Inc.
4733 Bethesda Avenue
Bethesda, Maryland 20014

Major Subcontractors

J. J. Henry Co., Inc.
90 West Street
New York, N. Y.

United Nuclear Corporation
Grasslands Road
Elmsford, New York 10523

Summary

This project entails a comprehensive study entitled "Competitive Marine Propulsion Systems Analysis," the results of which are intended to provide a basis for determination of various propulsion systems, both nulcear and fossil fueled. The contract (1-35058) was awarded January 21, 1971, to Booz-Allen Applied Research, Inc., with J. J. Henry Co., and United Nuclear Corporation assisting as subcontractors.

The Booz-Allen/J.J. Henry/United Nuclear team has performed a "General Marine Propulsion Systems Evaluation" to identify world-wide requirements for marine transportation in terms of numbers of ships, service category, size, speed and propulsion system power level, and year of expected entry into service. Also the contractor performed a "Technology Projection and Economic Opportunity Assessment" to develop information on the contribution of the propulsion system to the life-cycle costs of ships in all power ranges and to identify service benefits achievable through the development of improved propulsion systems.

Interim results derived from this contract have been used internally by MarAd in formulating and evaluating program plans for advanced propulsion system development.

(3) Contract No. C-1-35555, Task 1

Title: "CNSG Containment Pressure Suppression Test"

Contractor's Name and Address:

Babcock & Wilcox Company
Power Generation Division
P.O. Box 1260
Lynchburg, Virginia 24505

Summary

Ongoing contract 1-35030, "CNSG Competitive Design and Economics," identified several areas where R&D was needed to support the nuclear propulsion system design. The highest priority R&D task was identified and has been initiated late in June 1971 under Contract 1-35555. This project utilizes an experimental facility furnished by Babcock & Wilcox Co. at no cost to the Government. The data obtained will provide experimental substantiation of the CNSG reactor containment design, as needed to satisfy the Division of Regulation of the U.S. Atomic Energy Commission, and will provide a basis for improved design and consequent cost reduction in the design of future nuclear propulsion systems. Since the pressure suppression concept itself is widely used throughout the world for central station power reactors, the concept itself is not in question -- only the feasibility of its use onboard a ship, subject to conditions of pitch and roll and attitudes away from the vertical, require experimental verification.

B. FY 1972 R&D Contracts

(1) Contract No. C-2-36216

Title: "Phase IV: CNSG Pre-Construction Engineering"

Contractor's Name and Address:

Prime Contractor

Babcock & Wilcox Company
Power Generation Division
P.O. Box 1260
Lynchburg, Virginia 24505

Major Subcontractor

George G. Sharp, Inc.
100 Church Street
New York, N. Y. 10007

Summary

The initial MarAd program plan for development of Competitive Nuclear Propulsion Systems included a phase of work to yield conceptual designs and indepth economic analysis (as provided by on-going Contract 1-35030, "Phase III, CNSG Competitive Design and Economics") and a final phase of engineering to yield preliminary engineering designs, bid plans and specifications and the Preliminary Safety Analysis Report (PSAR) which is needed to obtain regulatory agency (AEC) approval of the design, prior to start of construction. The latter phase of engineering is the subject of the contract Phase IV, "CNSG Pre-Construction Engineering." The Phase IV contract was initiated in August of 1971 under the MarAd FY 1972 Advanced Propulsion Systems program funding.

The Phase IV contract effort (assigned contract number 2-36216) is a vital part of the overall MarAd nuclear propulsion program; it is essentially the last remaining nuclear plant engineering which remains to be accomplished in order to bring the CNSG nuclear propulsion system to the point where U.S. operators and shipyards could enter into a ship

construction contract. The Phase IV contract will provide a fully engineered nuclear propulsion system design package with bid plans and specifications useful to industry, both for U.S. ship operators and possible foreign markets.

Although not part of the contract effort, interagency liaison activities between MarAd and AEC, MarAd and Coast Guard and MarAd and American Bureau of Shipping have been initiated during Phase IV. AEC, Coast Guard and ABS are reviewing the "Recommended General Design Criteria for Maritime Reactors (Pressurized Water Systems)" prepared by MarAd's contractor. Detailed technical and programmatic presentations to the AEC by the Contractor and MarAd will be made as part of the Phase IV effort.

(2) Contract No. C-1-35555, Task 2

Title: "CNSG Critical Heat Flux"

Contractor's Name and Address:

Babcock & Wilcox Company
Power Generation Division
P.O. Box 1260
Lynchburg, Virginia 24505

Summary

This task, initiated as a modification to base contract 1-35555, will provide experimental data to verify Critical Heat Flux correlations used in designing the CNSG reactor and, thus, satisfy a requirement of the U.S. Atomic Energy Commission. Experimental verification of critical design areas is customarily required by the AEC's Division of Regulation and the need for such data was specifically cited by AEC during their initial evaluation of the CNSG in 1969. Babcock & Wilcox is performing the work under a cost-reimbursable contract. The experimental test facility (initial cost approximately $1 million) and the experimental test section are being provided by the Contractor at no cost to the Government.

(3) Contract No. 400-28011

Title: "Maritime Transportation Research Board, Panel on Strategy for Developing Nuclear Merchant Ships"

Contractor's Name and Address

Maritime Transportation Research Board
National Academy of Sciences
2101 Constitution Avenue
Washington, D. C. 20418

Summary

The purpose of this contract is to provide guidance to the Maritime Administration's program to develop competitive nuclear merchant ships. Toward this end, the MTRB Panel will review past studies and studies in progress to compare the economic position of nuclear ships relative to conventional ships in the present and projected future operating and business environment. Factors that will affect policy decisions concerning nuclear ships will be identified and examined to develop specific information needed by various Federal agencies and the maritime industry in developing their respective positions relative to commercial nuclear shipping.

April 11, 1972

Question 10: "Please provide a more detailed summary of any research and development contracts relating to offshore deepwater port facilities".

Response to Question 10:

Contract No. C-1-35409

Contractor's Name: Paul Soros & Associates
575 Lexington Ave.
New York, NY

Summary:

The objective of this contract is to help meet the Nation's potential energy crisis by developing one or more deepwater port facilities capable of handling tankers of 250,000 - 325,000 DWT, at a cost that will achieve total transportation savings on the order of 30%, and to do this with fully adequate measures for protection of the environment.

The contract Scope of Work has three parts. They are:

Part 1 - Analysis of Existing Systems. Analysis of liquid and dry cargo movements, in categories suitable for movement by very large cargo carriers (VLCC's) with projections to year 2000, plus an analysis of the economics of such carriers as a function of voyage length and cargo deadweight.

Part 2 - Utilization of Feeder Vessels, Pipelines, or Relocation of Plants. Analysis of potential deepwater sites on all U.S. coasts, in semi-protected or fully exposed offshore sites, which would allow draft of 75' - 100' without excessive dredging, plus consideration of physical conditions, facilities, operational, environmental, and jurisdictional factors, as well as efficiency of connections to refineries and other users.

Part 3 - Formulation of Advanced Concepts. Selection of approximately 5 priority sites and development of terminal designs for each as necessary to provide a basis for estimating terminal charges and total transportation costs, plus evaluation of the effectiveness of advanced construction concepts in reducing capital cost, plus evaluation of multiple users as a means of defraying overall costs.

This study has been developed in close conjunction with a group of oil companies which import crude oil to the Delaware Bay region, and will be reviewed by the Corps of Engineers as input to appropriate parts of the North Atlantic and Gulf Deepwater Port Studies of that agency. The 5 alternative sites selected for the study are: New York Bay, inside Sandy Hook; Delaware Bay, inside Cape May; outside Delaware Bay 8-1/2 miles off Cape Henlopen; Mississippi River Delta, near Southwest Pass; Texas Coast, offshore from the Cedar River near Galveston. Among these, we have developed the one outside of Delaware Bay in the most detail, because it is the site closest to the center of greatest demand which has the least impact on the coastal zone, and is in water not subject to exclusive state jurisdiction. The contract is being extended to increase the level of detail, and incorporate certain industry input.

April 11, 1972

Question No. 11: "How many offshore facilities do you now foresee and what criteria will be considered for site selection?"

Response to Question 11:

Number of Facilities: In the current MarAd study by Soros and Associates, a requirement for a single offshore deepwater port to serve the North Atlantic region is seen as a necessity now, and a single deepwater port to serve the Gulf area is seen as a firm requirement in the next 5-10 years. The lead time necessary for planning is such that the planning process should now be in progress in both regions. The possibility for more than one terminal in each region should not be ruled out. Because of the existance of deepwater near to existing port facilities in Puget Sound and Los Angeles/Long Beach area, no requirement for offshore facilities were cited on the West Coast, although that coast was studied in detail along with the rest of the U.S. coast.

Criteria for Site Selection: The principal criteria are:

(1) Water Depth: At semi-protected sites: 75', at open ocean site where ship is subject to pitching: 90' - 100'

(2) Geographical Location & Economics: The site should be close enough to a major market to be competitive with existing, or potential alternatives. In the case of the site outside of Delaware Bay, the proximity to Delaware refineries allows a U.S. terminal at this site to use U.S. feeder barges and be competitive with a transshipment terminal in Eastern Canada or the Bahamas, using foreign flag feeders.

(3) Sea Bottom Configuration: The existence of natural deepwater, or a trench to minimize dredging, near a shoal or natural land area where a tank farm could be built economically is an important factor.

Impact upon Coastline and Environment: We consider the visual effect and spill hazard involved in each site and its effect upon the local residents and industry, and design each terminal accordingly.

Wind, Wave and Current Conditions: We have made wave and wind analyses which forecast the probable frequency of critical conditions. The need for breakwater protection has a significant effect on capital cost.

Question 12: Has the Maritime Administration explored the possibility of multi-purpose or multi-use offshore facilities which, in addition to oil transfer capability, might include airport runways, nuclear power generation, container facilities and/or solid waste treatment facilities? If so, please elaborate.

Answer to Question 12:

Multiple bulk commodities. The initial approach considered the possibility of defraying capital and operating costs by combining several commodities within a given terminal complex. Where triangular trades are assured there is merit to having a ship bring in oil and take out coal, or bring in ore and take out coal. As the study progressed, however, it was evident that the requirement for importing crude oil overshadowed other considerations and that early construction of an oil terminal is more important than an optimization of revenue through dry bulk commodities that would not become critical until later years. In the case of coal, certain unresolved questions concerning the blending of coal, expand the space and equipment requirements to a point which current need does not appear to justify. The impact of slurry handling systems have been considered. The technique of cargo handling is currently being studied by MarAd under contract with Litton, however, the time frame for implementation of such systems is considered to be later than our current urgent need for petroleum facilities. LNG facilities have been considered, but our study of ship construction trends does not indicate a probability of draft on these sophisticated cargo ships which would make an offshore facility necessary. Furthermore, the cost of facilities is so much more than that of a crude oil trans-hipment facility, that we have not recommended that they be incorporated with a crude oil deepwater offshore facility.

Power Plants. From a design standpoint, it has been found practical to incorporate a fossil fuel power generating station on an offshore deepwater petroleum terminal as a means to relieve estuaries and coastal rivers from thermal pollution and to relieve coastal property from the visual impact and air pollution of such plants. The availability of certain fuels on such an island and the high degree of automation of such plants make this a desirable combination of facilities for a subsequent stage in the expansion of an offshore facility. Atomic power plants can benefit to an even greater degree from the thermal pollution aspect, but design criteria established by AEC for the type of breakwater protection and other matters makes this combination undesirable at this time. However no study has been made of the economic consequences of locating power plants on off-shore islands and these could alter the conclusions above.

Other Supplementary Users. We have investigated several other types of facilities for which isolation would be desirable, for example, disposition of solid waste and treatment of sewage. In the former case the products are too subject to deterioration and generation of gas to be suitable for breakwater or island construction. This is based on Japanese and other experience in which this has been tried. In general, the land cost of an offshore island is too high for manufacturing activities and the need to transport workers is a negative factor. The presence of an offshore island does provide a storm harborage for fishing fleets, but for safety reasons it is better not to encourage the presence of many pleasure craft by incorporating a marina of any kind.

Question 13. Construction and operation of future Off-shore deep-water facilities would obviously be a mammoth undertaking. At present, do you see this as a project to be undertaken by the government, private enterprise, a Federal group, or some other means?

Answer to Question 13.

Role of Government. Because of the urgency of the national energy crisis we see the Government acting as a catalyst to accelerate action by oil companies, singly, or in combination, to develop the oil transshipment facilities necessary to handle ships of 250,000 to 325,000 DWT. It is in the Federal interest to see that an economically viable alternative is developed in U.S. waters which can offset the economic pressure on oil companies to develop foreign transhipment facilities in Canada, or the Bahamas. We can do this by doing the design work and experimentation necessary to remove the uncertainties about terminal construction in waters of 50' depth and over, and to develop design features, equipment and operational techniques that will insure that the selected design is approved by all regulatory agencies involved and has no adverse impact on the environment or the local residents, or business interests. If final design of the current offshore terminal cannot bring the capital and operating costs low enough, the Federal Government could make the concept viable for private development, by building the basic breakwater.

Role of Private Enterprise. Our preliminary studies indicate that there is enough economic benefit from being able to import oil in ships of 325,000 DWT, instead of the ships of 65-85,000 DWT to which U.S. ports are now constrained by economically unalterable channel size limitations, to finance the construction of the deepwater terminal outside of Delaware Bay.

Role of a Federal Corporation, or Some other Means. Once the basic, and potential users are identified, we will proceed with a study of management alternatives. We seek some form of supra-port authority with capability of raising funds. This would have a favorable tax and revenue collecting authority, and be organized to protect the interests of the contributing participants as well as the general public. This could take the form of a Navigational District or whatever form is most compatible with the local region.

78-255 O - 72 - 6

Question #14

With respect to each application for Title XI Mortgage Insurance on new construction received during fiscal years 1971 and 1972, please provide the following information: (a) the date of application, (b) the name of the shipowner and that of its parent corporation, if any, (c) the type and size of vessel involved, (d) the amount to be insured by the government, (e) the name of the shipyard which is the primary contractor and that of its parent corporation, if any, (f) the name of the mortgagee, (g) the disposition made of the application.

Answer

The following table indicates the latest available information on all Title XI mortgage insurance applications received during fiscal years 1971 and 1972. Due to the fact that said applications are in various stages of completion and that some are only represented by a letter application, all requested information is not available at this date. Likewise, dollar amounts may be subject to adjustment as some represent the owner's estimate only and/or final cost will not be known until actual consummation of the transaction.

TITLE XI MORTGAGE INSURANCE APPLICATIONS FOR FISCAL YEARS
1971 and 1972

	Owner	Parent	Type	Size	Amount	Shipyard	Parent	Mortgagee	Disposition
8/5/70	Seabulk Tanker Corp.	- -	4 Tugs 4 Barges	6500 HP 30,000 DWT	$25,854,000	[illegible]	- -	Unknown	Pending
[illegible]/70	650 Leasing Co.	Sun Ship	Ro/Ro Trailer.	14,200 DWT	18,000,000	Sun Ship.	Sun Oil	Philadelphia National Bank	Mortgage 1/13/72
[illegible]/70	General Marine, Inc. (ex L & L Marine)	- - -	1 Tug	3,000 HP	945,300	J.Ray McDermott	- - -	Guardian Life Ins. Co.	Mortgage 1/19/71
9/27/70	American Mail Line	American Pres. Lines	3 Sec. 1107 Mortgages		9,750,000	Todd-San Pedro Beth.-San Francisco	Bethlehem Steel	Pacific Natl. Bank of Wash.	Mortgages 1/5/71
[illegible]/70	Litton Great Lakes Corp.	Litton Indust.	1 Tug 1 Barge	14,000 HP 25,000 GT	20,125,000	Litton Erie (Barge)			Pending
[illegible]/70	American Pres. Lines	Natomas Corp.	11 2nd Morts. Reconstr.		21,866,000	Todd (Seattle & San Pedro)	- - -	Bank of Calif. N.A.	1 Mortgage 2/23/72 5 Commit. 5/3/71 3 Commit. 8/18/71 3 Pending
1/22/70	Ingram Ocean Systems	Ingram Corp.	1 Tug 1 Barge	11,000 HP 33,000 DWT	3,076,000 5,410,000	Southern Shipb. Alabama DryDock	- - - - - -	First Trust Co. of St. Paul	Mortgage 7/1/71 Mortgage 3/9/71
11/[illegible]/70	653 Leasing Co.	Sun Ship	1 Tanker	80,000DWT	17,800,000	Sun	Sun Oil.	Philadelphia National Bank	Mortgage 9/30/71
12/[illegible]/70	Wisconsin Barge Line	Consolidated Leasing Co.	1 Riverboat	166 Ft.	1,267,000	St.Louis Ship.	Pott Industries	Michtea Co.	Mortgage 1/7/72
[illegible]/14/70	Alter Company	- - -	1 Towboat	3200 HP	497,960	- - - -	- - - -	- - -	Withdrawn
9/[illegible]/70	A.G.S. Chartering Co.	- - -	14 Box Barges	1,500 G.T.	1,102,500	- - - -	- - - -	- - -	Withdrawn
2/[illegible]/70	Lone Star Navig. Co.	- - - -	1 River Pass.	256 Ft.	6,000,000	Todd-Houston	- - - -	- - -	Pending
[illegible]/71	Inter-Cities Navig. Co. (filed by Interstate Mtrs Trnsrp. & Inter-State Towing Co.)	Cities Service & Interstate Marine Transp.	1 Tug 1 Barge	5,600 HP 540 Ft.	4,590,000	Main Iron Works Beth.-Port Arthur	- - - - Beth. Steel	Girard Trust Bk. "	Mortgage 3/16/72
[illegible]/71	Kinsman Marine Transit	- - -	2 Ore Carriers	19,000 DWT	44,198,000	American Shipb. (Lorain,Ohio)	- - - -	Cleveland Trust Co.	Committed 5/20/71
[illegible]/71	Stewart Investment Co.	- - -	1 Tanker	78,000 DWT	9,900,000	- - - -	- - -	- - -	Pending
[illegible]/71	American Export-Isbr. Line	American Export Industries	3 Containers	10,890 DWT	21,150,000	Bath Iron Works	- - -	- - -	Committed 1/27/72

Date	Owner	Parent	Type	Size	Amount	Shipyard	Parent	Mortgagee	Disposition
[illegible]/71	Central Gulf SS Co.	Trans Union Corp.	3 LASH Ships 300 Lighters	39,100 DWT 375 DWT	$35,469,000 18,768,000	Avondale Ship.	Ogden Corp.	- - - -	Committed 6/9/71 & 3/20/72
[illegible]/71	Mid-South Towing Co.	Tampa Electric	1 Towboat 71 Barges	17,500 HP 1,500 GT	1,786,000 4,691,000	Nashville Bridge Jeff Boat & St.Louis	- - - - St.Louis-Fott Ind.	Exchange Nat. Bank of Tampa	Committed 4/1/71 Mortgage 3/30/72
3/26/71	Bankers Trust Co. (PPG)	- - -	1 Tanker	34,400 DWT	18,105,000	Beth.-Baltimore	Beth. Steel	First Natl. City Bank	Mort. 12/22/71
3/29/71	Interseas Tanker Corp.	Overseas Ship. Group, Inc.	1 Tanker	120,000 DWT	27,000,000	Beth.-Baltimore	Beth. Steel	- - - -	Pending
[illegible]/71	Franklin Steamship Corp.	American Steam. Co.	1 Bulk Carrier	25,000 DWT	12,730,000	Manitowac Shipb. Inc.	- - - -	First Natl. City Bank	Committed 1/17/72
[illegible]/71	Hannah Inland Water-Ways Corp.	- - - -	2 Barges	1,750 DWT	1,750,000	- - - -	- - - -	- - - -	Pending
[illegible]/71	Dearborn Storm	- - - -	1 Conversion	10,000 GT	7,200,000	- - - -	- - - -	- - - -	Mortgage 2/15/72
[illegible]/71	660 Leasing Co.	Sun Ship.	1 Tanker	80,000 DWT	10,312,000	Sun Ship.	Sun Oil	- - - -	Pending
[illegible]/71	Waterman Steamship Corp.	Waterman Marine	3 LASH Ships	39,100 DWT	38,327,820	Avondale Ship.	Ogden Corp.	- - - -	Comm. 6/4/71
[illegible]/71	M.F.St.Philip, Inc.	- - - -	1 Tug/Barge	33,000 DWT	4,125,000	- - - -	- - - -	- - -	Pending
[illegible]/71	Midland Enterprises	Eastern Gas & Fuel	1 Towboat 200 Barges		19,125,000	- - - -	- - - -	- - - -	Withdrawn
[illegible]/71	Bank of America(PPGL)	- - -	300 Lighters	375 DWT	9,187,000	Avondale	Ogden Corp.	Bank of Calif.	264 Mortgaged 36 Committed
[illegible]/71	Delta Steamship Co.	Holiday Inns	5 1107's	- - -	17,000,000	Avondale	Ogden Corp.	Whitney Natl. Bank of N.O.	Mort. 10/22/71
[illegible]/71	Aries Marine Ship. Co.	- - - - -	2 OBO	8,000 DWT	27,370,000	Nat. Steel/San Diego	(Kaiser Inc. (Morrison-Knudsen	- - -	Comm. 6/30/71
[illegible]/71	Walker-Huthnance Co.	- - - - -	1 Drill.Rig	4,750 GT	6,000,000	- - - -	- - - -	- - -	Pending
[illegible]/71	Sabine Towing & Trans. Co.	- - - - -	1 Tug	7,000 HP	1,500,000	Main Iron Works	- - - -	Houston Natl. Bank	Mort. 2/16/72
[illegible]/71	Gulfcoast Transit Co.	- - - - -	1 Tug	6,000 HP	3,196,375	- - - -	- - - -	- - - - -	Pending
[illegible]/71	Marine Drilling Co.	Dearborn Storm	1 Barge 1 Drill Barge	11,000 GT 6,000 GT	4,037,625 6,000,000	- - - -	- - - -	- - - - -	Pending

Date	Owner	Parent	Type	Size	Amount	Shipyard	Parent	Mortgagee	Disposition
6/3/71	Caspary-Wendell, Inc.	Santa Fe Int.	1 Dr.Ship	4,000 G.T.	$ 6,675,000	Levingston	- - -	- - - -	Committed 3/9/72
6/16/71	Edison Steamship Co.	American Steam-Ship	1 Bulk Carrier	25,000 DWT	12,565,000	American Ship. (Toledo)		First Natl. City Bank of N.Y.	Committed 1/17/72
6/23/71	Delta Steamship Co.	Holiday Inns	200 Lighters	375 DWT	3,587,472	- - - - -	- - - -	- - - -	Pending
6/23/71	Dolphin Steamship Line	- - - - -	1 Drill Barge	3,500 GT	9,000,000	- - - - -	- - - - -	- - - -	Pending
6/23/71	Dolphin International	- - - - -	1 Semi-sub. Rig	4,000 GT	9,000,000	- - - - -	- - - - -	- - - -	Pending
6/24/71	Marine Drilling Co.		1 Semi-sub. Rig	4,000 GT	11,250,000	- - - - -	- - - - -	- - - -	Pending
7/23/71	Astro-Marine, Inc.	- - - - -	2 Tugs	3,200 HP	1,925,000	Corpus Christi Marine	- - - - -	- - - -	Comm. 1/4/72
8/10/71	Hase Shipping Corp.	Seatrain Lines	1 Tanker	225,000 DWT	26,786,000	Seatrain Ship.	Seatrain Lines	- - - -	Pending
8/12/71	Haan Shipping Corp.	Seatrain Lines	1 Tanker	225, 000 DWT	26,786,000	Seatrain Ship.	Seatrain Lines	- - - -	Pending
8/20/71	Gulf Overseas Marine	Gulf Interstate	1 Tug/Supply	200 GT	700,000	Halter Marine	- - - -	- - - -	Comm. 3/15/72
8/30/71	Reading & Bates Off-shore Drilling Co.	- - - -	1 Drill Rig	- - -	6,000,000	- - - -	- - - -	- - - -	Pending
8/30/71	Waterman Steamship	Waterman Marine	3 LASH	39,100 DWT	39,510,000	Avondale	Ogden	- - - -	Pending
9/8/71	Sabine Towing	- - - - -	1 Tanker Jumboizing	30,400 DWT	5,638,000	Newport News	Tenneco, Inc.	- - - - -	Comm. 2/10/72
9/10/71	Western Company of North America	- - - - -	1 Semi-sub Rig	5,000 GT	12,741,000	Beth.-Beaumont	- - - -	- - - -	Comm. 12/9/71
9/14/71	Storm Drilling Co.	Dearborn Storm	1 Semi-sub	10,000 GT	11,825,000	Beth.-Beaumont	- - - - -	- - - -	Pending
9/15/71	J.Ray McDermott	- - - -	2 Barges/Pipe	19,000 GT	19,380,258	- - - -	- - - -	- - - -	Pending
9/17/71	Field Internstional	- - - -	1 Semi-sub	3,000 GT	13,125,000	- - - -	- - - -	- - - -	Pending
9/22/71	Archer-Daniel-Midland	- - - -	100 Barges	72,000 Cu.Ft.	9,000,000	- - - -	- - - -	- - - -	Withdrawn
9/22/71	Seal Company	Oceanographic & Seismic Service	1 Supply Vessel	4,300 HP	1,400,000	- - - -	- - - -	- - - -	Pending
9/22/71	Three R Trust	"	1 Supply Vessel	4,300 HP	1,487,500	Burton Yd. Port Arthur	- - - -	- - - -	Pending
9/27/71	RowanDrilling Co.	- - - -	1 Drill Barge	- - -	5,400,000	LeTourneau, Inc. (Levingston	- - - - -	- - - -	Pending
10/7/71	Sedco, Inc.	- - - -	4 Semi-sub.	9,000 GT	74,408,000	(Avondale	Ogden	- - - -	Pending

Date	Owner	Parent	Type	Size	Amount	Shipyard	Parent	Mortgagee	Disposition
10/7/71	Cleveland Cliffs Iron Wks	- - - -	3 Ore Carriers	630 Ft.	$ 36,643,000	- - - -	- - - -	- - - -	Pending
10/28/71	Dixilyn Corp.	- - - -	1 Semi-sub.		13,500,000	- - - -	- - - -	- - - -	Pending
11/1/71	American Mail Line	APL	1 2nd Mortgage		4,350,000	Todd-San Pedro	- - - -	Pacific Natl. Bank ofWash.	Comm. 2/1/72
11/5/71	Crestwave Offshore Services	- - - -	1 Drill Rig	230 Ft.	7,050,000	- - - -	- - - -	- - - -	Pending
11/3/71	Marlin Drilling	Tenneco	1 Drill Ship		12,000,000	- - - -	- - - -	- - - -	Withdrawn
12/3/71	Offshore Logistics	- - - - -	2 Cargo	2,500 HP	712,500	- - - -	- - - -	- - - -	Pending
12/16/71	Elpac, Inc.	Cappaert Enterprises	2 Supply 2 Tugs	3,500 HO 3,200 HO	1,750,000 1,400,000	Main Iron Works - - - -	- - - -	- - - -	Pending
12/16/71	Zapata Norness, Inc.	- - - -	1 Semi-sub	3,100 LT	14,250,000	- - - -	- - - -	- - - -	Pending
12/17/71	Moran Towing Co.	- - - -	5 Tugs	3,300 HP	5,685,500	- - - -	- - - -	- - - -	Pending
12/20/71	Wisconsin Barge Line	Consolidated Leasing of America	25 Barges		2,260,000	St. Louis Ship	Pott Industries	- - - -	Comm. 3/14/72
1/15/72	Port Arthur Towing	- - - -	1 pushboat 4 Barges	3,800 HP Various	1,818,375	- - - -	- - - -	- - - -	Pending
2/1/72	MFC Boston Corp.	First National Boston Corp.	6 Tankers	225,000 DWT	159,180,730	Gen.Dynamics/Quincy	General Dynamics	- - - -	Pending
12/30/71	Reading & Bates	- - - -	1 Conversion to Drill ship		7,200,000	- - - -	- - - -	- - - -	Pending
2/7/72	M/G Transport	Midland Company	70 Barges	Various	5,355,000	Jeff Boat	- - - -	- - - -	Comm. 3/15/72
2/3/72	Nolty J. Theriot	- - - -	2 Tugs	4,300 HP	3,150,000	McDermott Yard	J. Ray McDermott	- - - -	Pending
2/9/72	Todd Shipyard Corp.	- - - -	1 Drydock	85,000 DWT	12,000,000	Todd-Houston	- - - - -	- - - - -	Pending
2/11/72	Nordic-Austin, Inc.	- - - -	1 Tug/Supply	3,250 HP	960,000	- - -	- - - - -	- - - - -	Pending
2/15/72	Ingram Contractors, Inc.	Ingram Corp.	1 Conv. of Drill Barge		6,125,000	- - - -	- - - -	- - - - -	Pending
2/15/72	Santa Fe International	- - - - -	1 Conversion to Pipe-laying barge		11,250,000	- - - -	- - - -	- - - - -	Pending
2/29/72	States Steamship Co.	Pacific Transport	4 Cargo	18,910 DWT	64,000,000	- - - -	- - - -	- - - -	Pending

Date	Owner	Parent	Type	Size	Amount	Shipyard	Parent	Mortgagee	Disposition
3/1/72	United California Bank(PFEL)	- - -	96 Lighters	375 DWT	$ 3,587,472	Avondale	- - - -	- - - -	Pending
3/3/72	Precise Exploration, Inc.	- - - -	2 Work Rigs	725 GT	1,500,000	- - - -	- - - -	- - - -	Pending
3/14/72	Diamond M. Drilling	- - - -	1 Semi-sub	11,000 GT	13,500,000	- - -	- - - -	- - - -	Pending
3/15/72	Portable Marine Structures, Inc.	- - - -	3 Salvage Vessels		5,175,000	- - - -	- - - -	- - - -	Pending
3/27/72	Jack Neilson, Inc.	- - - -	1 Conversion to cargo		150,000	- - - -	- - -	- - - -	Pending
1/28/72	Greene Line Steamers	Overseas Nat. Airways	1 Riverboat	400 Pass.	8,750,000	Dravo	- - - -	- - - -	Pending

Question 15

Section 505 of the Act authorizes the incorporation of foreign components in the construction of a vessel built with construction differential subsidy upon a finding by the Secretary that certain circumstances exist. Has such a finding been required with respect to any components during fiscal year 1972 and do you now foresee any products or components for which such a finding may be required?

Answer No findings have been made during fiscal year 1972 to permit the inclusion of foreign components in any vessel built with construction differential subsidy. It is anticipated that such findings may be made either during the remainder of fiscal year 1972 or during fiscal year 1973 with respect to LNG vessels of the membrane type. These vessels would be built under foreign license and certain foreign materials presently unavailable in the U. S. would be incorporated in the vessels. Also, it is possible that findings will be made to permit the incorporation of foreign material in a tanker to be constructed at the Seatrain Shipbuilding Corporation shipyard in New York City. The shipyard has already made commitments to purchase a substantial portion of the material for the vessel. A small amount of this material unavailable in this country will be obtained from foreign sources. Should the final decision be made to subsidize this vessel, a finding authorizing the use of these foreign materials would be made. Overall, there have been very few foreign components used in construction of subsidized ships over the past many years.

Question No. 16

Section 804(b) of the Act authorizes the Secretary of Commerce under certain circumstances and for good cause shown to waive the foreign holding prohibitions of Section 804(a). In how many instances has this authority been utilized in fiscal years 1971 and 1972? Please provide a brief explanation.

Answer

The authority in Section 804(b) of the Merchant Marine Act, 1936, as amended, to waive the prohibitions against certain foreign flag activities by subsidized operators as set forth in Section 804(a) of said act was involved in two instances during fiscal years 1971 and 1972 involving Aries Marine Shipping Company and Margate Shipping Company.

Aries on June 30, 1971, was granted a Section 804(a) waiver for its affiliates to operate 13 foreign flag vessels for the economic life of each vessel, effective upon the award to Aries of a 20-year operating-differential subsidy contract. It was determined by this Agency that the construction and operation of two new OBO's would be a substantial contribution in futherance of the purposes and policy of the 1936 Act and it was unlikely that the operation of the foreign flag vessels by Aries' affiliated companies would have any significent adverse effect on any particular essential American flag bulk service since in the aggregate U.S. flag vessels carry only about 5% of the bulk cargoes in the U.S. foreign commerce.

In connection with the award of an operating-differential subsidy contract to Margate Shipping Company, covering the operation of three new tankers to be constructed by said company, this Agency waived the provisions of Section 804(a) of the Merchant Marine Act, 1936, as amended, pursuant to Section 804(b) of the Act for the foreign flag activities of certain related companies of Margate. This waiver was granted primarily on the same grounds as the Aries case, i.e., the negligible percentage of the U.S. foreign bulk cargo carried by American flag bulk carriers and the addition to the American Merchant Marine of the vessels to be constructed by Margate, and the determination that no significant adverse effect would result to any essential American flag bulk service. The waiver covers the 20 year period of Margate's operating-differential subsidy contract which was executed on January 4, 1972, and effective upon entry of first new vessel into the subsidized service. The waiver

Answer - No. 16

contains provisions respecting the continued operation or ownership of foreign flag ships by certain companies related to Margate which permits their continued operation during the remainder of existing charter periods (7 ships - 4 with renewal options); permits related companies to continue acting as husbanding agent for foreign flag ships during the life of the subsidy contract; and permits continued chartering of small ore carrying foreign flag vessels for limited periods of time during the life of the subsidy contract.

Question No. 17. The 1970 Act provided the Secretary with new authority over the administration of Section 901 of the Act. Please provide a summary of activities and conclusions to date under this provision.

Answer No. 17. Section 901 (b)(2) of the Merchant Marine Act, 1970, authorizes the Secretary of Commerce to regulate the administration of preference cargoes subject to Section 901 of the Act (Public Law 664) and to report to the Congress annually with respect thereto. This authority has been redelegated to the Office of Market Development, Maritime Administration where previously limited authority had been vested to deal with specific cargo preference matters, namely guideline rate recommendations on "fair and reasonable" charter rates for full U.S.-flag shipload fixtures of government - impelled cargoes and for administration of the ocean transportation requirements under Public Resolution 17 (Export-Import Bank-financed cargoes).

Immediately upon enactment of the 1970 Act, the Marad Office of Market Development queried all U.S.-flag shipping interests regarding their longstanding complaints about the administration of cargo preference by shipper agencies and alleged resulting inequities. Based on an analysis of the response to this inquiry and specific inadequacies of cargo preference administration criticized in Senate and House Committee reports on Section 901 of the Merchant Marine Act, it was decided that the Maritime Administration would, through the rulemaking procedure, regulate administration of cargo preference so as to systematically assure compliance with the requirements of Section 901 of the 1970 Act, maximizing U.S.-flag participation thereunder.

Basic to effective regulation of cargo preference administration is the collection of detailed objective data on preference cargo movements providing, within a time frame permitting necessary corrective actions to be taken, specific information on each shipment subject to the requirements of Public Law 664. Consequently, the first rule published by the Maritime Administration under its new authority established a cargo preference reporting system requiring each shipper agency subject to the requirements of Public Law 664 to issue regulations or to establish formal procedures requiring submission to the Maritime Administration within prescribed time limits nine items of information about each preference cargo shipment. This rule was published in the Federal Register on April 8, 1971 and was effective for shipments made on or after July 1, 1971.

This system of centralized and uniform collection of timely, accurate and detailed data on all preference cargo shipments will allow Marad to closely monitor and report on cargo preference administration, requiring shipper agencies to take corrective actions where indicated.

Marad's second rule regulating cargo preference administration was published in the Federal Register of June 2, 1971, effective July 1, 1971. This rule established that "fair and reasonable" participation by U.S.-flag liners in the carriage of cargoes subject to P.L. 664 would be measured not only in terms of the gross tonnages involved, but also according to the freight revenues generated by such cargoes. This rule assures to available U.S.-flag liner vessels cargoes generating ocean freight revenues at least equal, on an average revenue per long ton basis, to cargoes carried by any foreign-flag vessels participating in the same individual government - sponsored program.

A third Marad rule on cargo preference administration was published in the Federal Register October 1, 1971, effective November 1, 1971. This rule requires that full shiploads of preference cargoes required to be carried in U.S.-flag vessels pursuant to P.L. 664 be fixed prior to any fixtures on foreign-flag vessels. This rule minimizes uncertainty of employment for U.S.-flag tramp vessels in the preference cargo market.

The fourth and most recent rule issued by the Maritime Administration on cargo preference administration established an informal grievance procedure to quickly resolve problems between carriers and shipper agencies or other preference cargo - generating entities relating to disputes over terms and conditions of tenders, shipping procedures by government and private entities, etc. This rule, published in the Federal Register February 18, 1972, and effective March 1, 1972, directs complainants to contact the Marad Office of Market Development for consideration and help in answering questions or resolving grievances, and, if necessary, to arrange a meeting of all the parties involved to settle problems presented.

Additional rules on cargo preference administration will be proposed and issued as necessary to remedy inequities to U.S.-flag operators in the carriage of cargoes subject to Public Law 664.

Estimates as to the number of individual government - impelled shipments run as high as 300,000 per year. This obviously requires automated processing of collected data into formats that are manageable for surveillance and reporting purposes. We have designed computer systems and programs to manipulate cargo preference data to accomplish these ends.

Certain problems have been encountered in implementing an operational reporting system. These problems involve non-compliance in certain instances with our reporting requirements by both governmental and private entities and the technical complications of transposing data from a variety of documents received into machine-readable form.

We are working with shipper agencies to improve the accuracy and completeness of data reported and with Marad, Census and non-governmental ADP experts to facilitate the transfer of reported data from source documents to computer tape.

We hope to overcome these obstacles to gathering and processing cargo preference data as soon as possible so that our initial computer printouts will present an accurate compilation of facts upon which we can act and report on cargo preference administration.

There is no question as to the potential effectiveness of close surveillance and regulation of cargo preference administration and the subsequent beneficial impact of this regulation upon all segments of the U.S.-flag merchant fleet. In specific cargo preference situations where tight surveillance and compliance with regulations have been achieved, the result has been millions of additional freight revenue dollars for U.S.-flag carriers.

Question 18:

Please provide the amounts of the fiscal year 1972 appropriation for construction differential subsidy and research and development that are presently unobligated?

Answer:

The amounts presently available are as follows:

Ship Construction

Carryover from FY 1971		$66,577,830
Appropriation FY 1972		229,687,000
Total availability		296,264,830
Obligated to date:		
Ship replacement	$49,133,766	
Conversions	10,530,373	
Sub-total	59,664,139	
Less: Adjustments in trade-in allowances	-54,000	59,610,139
Available remainder		236,654,691

Research and Development

Carryover from FY 1971		$15,000
Appropriation FY 1972		23,750,000
Total availability		23,765,000
Obligations to date:	$7,437,000	
Commitments for pending contracts	6,624,000	14,061,000
Available remainder		9,704,000

Question 19:

The statement of purposes and provisions which accompanied S.3335 indicated that a total of 17 vessels would be funded in fiscal year 1973 at an estimated cost of $250,000,000 in government subsidy. Please provide a more detailed statement of how the estimated cost was derived, i.e. the anticipated types and costs of the vessels to be funded.

Answer:

The ship subsidy program reflected in the statement of purposes is illustrative only and represents MarAd plans as of the time the budget for 1973 was developed. The precise ship subsidy program for Fiscal Year 1973 will be the combined product of many factors including the developments during the balance of FY 1972. The currently requested fiscal year 1973 ship construction funding level of $250,000,000 was calculated on the basis of the information contained in the attached illustrative ship mix for fiscal years 1971-1973 and is expected to provide 1973 financing for 17 highly productive vessels. The Administration will seek supplemental funds for additional ships if industry response to the proposed construction program surpasses current estimates.

Ship Construction Subsidy
Program Projections (Funding)
Per 1973 Budget Request
Fiscal Years 1971-1973

MARITIME ADMINISTRATION
(Dollar Amounts in Thousands)

	Actual F.Y. 1971			Estimated F.Y. 1972			Estimated F.Y. 1973		
	No. of Vessels Funded	Total Cost	Govt. Cost (Obligation)	No. of Vessels Funded	Total Cost	Govt. Cost (Obligation)	No. of Vessels Funded	Total Cost	Govt. Cost (Obligation)
Obligations:									
Barge Carrier (LASH)	7	$199,660	$88,328	4	$122,000	$52,400	1	$31,250	$13,400
Roll on/Roll off				2	60,000	25,800	2	61,500	26,400
Ore-Bulk-Oil (OBO)-135,000 DWT				2	90,000	38,600			
Ore-Bulk-Oil (OBO)	2	60,912	27,461						
Tanker - 230,000 DWT				1	51,500	21,700			
Tanker - 80,000 DWT				2	56,000	24,200			
Tanker - 37,000 DWT							3	58,200	24,000
Very Large Crude Carrier (VLCC)				2	115,000	49,400	4	235,750	101,200
Liquid Natural Gas (LNG)				3	210,000	52,500	4	288,750	72,200
Ore Carrier				1	24,000	10,300			
Containership	3	51,533	21,496				1	23,000	9,500
Conversion	11	79,638	31,896	1	9,600	4,000	2	19,600	8,000
Changes in on-going contracts			2,231			2,411			2,400
Total funded program (obligations)	23	391,743	171,412	18	738,100	281,311	17	718,050	257,100
Unobligated balance, end of yr.			66,578			14,954			7,854
Total funding availability			237,990			296,265			264,954
Unobligated balance, start of year			-50,490			-66,578			-14,954
Appropriation			187,500			229,687			250,000
Outlays			139,233			161,353			198,400

Question 20:

The same statement also indicates that 5 of the 12 vessels to be contracted for in fiscal year 1973 will be funded in subsequent fiscal years. Please provide an estimate of the government subsidy cost for those five vessels.

Answer:

As indicated in the statement of purposes and provisions which accompanied S.3335, the illustrative ship construction program utilized in the development of the fiscal 1973 budget request anticipates that of the 12 new vessels expected to be contracted in 1973 within funds requested to date, 5 vessels will remain unfunded at the end of the period to be funded within subsequent year appropriations. The projected carryover liability under this plan is expected to total $67,000,000 as identified on the attachment hereto and consists of:

Type of Vessel	Number	Estimated CDS Cost
Liquid Natural Gas (LNG)	2	$37,800,000
Containership	3	29,200,000
	5	67,000,000

78-255 O - 72 - 7

Ship Construction Subsidy
Program Projections (Commitmen 1/
Fiscal Years 1971 - 1973
Per F.Y. 1973 Budget Request

MARITIME ADMINISTRATION
(Dollar Amounts in Thousands)

	Actual FY 1971		Est. FY 1972		Est. FY 1973		1971-1973 Projected Total	
	No. of Ships	Amount	No. of Ships	Amount	No. of Ships	Amount	No. of Ships	Amount
Contract commitments	23	$169,181	28	$474,050	12	$126,550	63	$769,781
New Vessels	12	137,285	27	470,050	10	118,550	49	725,835
Conversions	11	31,896	1	4,000	2	8,000	14	43,896
Contract funding:								
Unfunded start of period	...	...	...	...	10	195,150	...	...
Committed during period	23	169,181	28	474,050	12	126,550	63	769,781
Unfunded, end of period	...	...	-10	-195,150	-5	-67,000	-5	-67,000
Subtotal	23	169,181	18	278,900	17	254,700	58	702,781
Other requirements (changes)		2,231		2,411		2,400		7,042
Total funding (obligations)		171,412		281,311		257,100		709,823
Unobligated balance, start of period		-50,490		-66,578		-14,954		-50,490
Unobligated balance, end of period		66,578		14,954		7,854		7,854
Appropriation		187,500		229,687		250,000		667,187

Question No. 21:

Please provide a more detailed statement of the manner in which the $7.67 million requested for the Merchant Marine Academy at Kings Point will be expended.

Answer No. 21:

	(Dollars in thousands)	
Cadet Costs		
Uniform and textbook allowance	$445	
Cadet Travel	131	
Laundry	16	
Food service	707	
Library books	38	
Medical and dental supplies	19	
Athletic program supplies	6	$1,362
Maintenance, repair and operating requirements		
Maintenance staff	$735	
Protection and security staff	140	
Contract maintenance	301	
Supplies, materials, utilities and equipment	456	$1,632
Modernization program		
Buildings (including cadet housing)	$410	
Waterfront	315	
Other support facilities (physical education, medical, etc.)	250	$975
Improvement of instruction equipment		
Engineering department	$50	
Nautical science department	25	
Math and science department	5	$80
Program direction and administration		
Executive direction	$118	
Regimental staff	227	
Administrative staff	659	
Staff training	3	
Travel	14	
Superintendent's fund	2	$1,023
Instructional program		
Academic faculty	$1,995	
Academic supporting	472	
Library professional	66	
Library supporting	37	
Faculty training	12	
Travel	16	$2,598
		$7,670

Question No. 22. Do you as yet have any indications as to what impact the tax concessions in the Domestic International Sales Corporation (DISC) legislation will have on providing cargo for U.S. flag vessels in foreign trade?

Answer No. 22. This same question was addressed in a letter from Secretary Stans to Congressman Garmatz dated March 13, 1972, which is quoted below. The opinions expressed in this letter represent our current appraisal of the impact that the tax concessions in the DISC legislation will have on providing cargo for U.S. flag vessels in our foreign trade.

"As you realize, it is most difficult to measure the commercial decisions which the export industry will eventually make regarding this innovative approach to increasing their support of American flag ships. This is especially so since at this early date the program has scarcely started to make its effect felt. However, mindful that the actual tax deferment resulting from the use of a U.S. flag carrier would be the equivalent of 2½% of the freight amount on the individual shipment, we are inclined to consider that the amount involved is not sufficiently significant to control the routing of cargo on an individual shipment, as against other business considerations which are frequently taken into account by the exporter. Among these considerations is the routing preference of the foreign buyer, which can range from an expressed preference when goods are sold on C.&F. terms to outright control of the routing when sold for export on F.O.B. vessel or F.A.S. vessel terms. Other considerations include the position of the vessel, the transit time to destination, the quality of service provided by the carrier, the ocean freight rate quoted by the particular carrier and the desire of the exporter to maintain the cooperation of other carriers in any given trade by giving them a share of his cargo. It is felt that in many instances these factors will outweigh the comparatively slight benefit of a tax deferment equivalent to 2½% of the freight amount.

"We would also point out that this deferment is not likely to be passed along to the buyer in terms of price reduction, and therefore would not be an influencing factor on the consignee when he chooses to exercise a preference in the ocean routing of goods he purchases.

"On the other hand, it is evident that many exporters will form DISCs. These DISC exporters will be concerned with accumulating as much total deferment of tax as they can, which would include the deferment which can result from the use of U.S. flag vessels. Thus, while individual decisions to route foreign flag may be made on individual transactions, it seems likely that the DISC exporter will adopt a policy of utilizing U.S. flag vessels in liner services for his shipments unless circumstances dictate otherwise on particular shipments or groups of shipments. This being the case, the DISC freight provision will have created an important advantage for U.S. flag lines. This advantage would be that the DISC exporter will in practice give first preference to U.S. flag carriers on all shipments except those shipments on which a definite policy decision is made to ship foreign flag.

"We expect that U.S. flag carriers will capitalize on this advantage by aggressively marketing a competent, high quality service that will warrant the continued support of the DISC exporter.

"As to bulk and neo bulk carriers, considering the high cost factors influencing charter rates of our existing bulk carrying fleet, the DISC deferment will not materially affect their participation in the carriage of U.S. commerce for the present.

"Summarizing, while there is no reasonable means by which the future impact of the DISC freight provision can be measured now, we believe it will prove quite advantageous in promoting the use of U.S. flag ships in the liner trades. U.S. flag ships in the bulk trades will not realize benefits until they are on a cost basis which enables them to quote competitive charter rates."

Senator LONG. Mr. Blackwell we have been hearing increasingly about the overtonnaging on some trade routes. We need a rationalizing of cargoes if we are to fill our new container ships. What are your views with regard to this being done?

Mr. BLACKWELL. As you know, Mr. Chairman, we have gone through a very chaotic period recently on the North Atlantic because of very significant overtonnaging. Most of the carriers in this trade reverted to a whole series of malpractices of various types, cheating on rates, offering rebates, concessions, bonifications to shippers. The net result of that was not a basic benefit to the shipper. It seems from the analysis that we have been able to perform the net effect of the savings in freight basically accrued to the so-called middle men, the freight forwarders, particularly in Europe.

The shippers certainly like to know what their competitor is being charged. They want to be placed on an equal footing with their competitor. When you have unequal conditions in the trade, when you have chaos, when you can't look at an ocean freight tariff with any degree of integrity where the carrier can be assured he is paving x rate and his competitor is paying x rate, it puts each of those shippers in a precarious condition.

We don't know what to quote as prices. Transportation on many of the shippers to and from Europe are a substantial portion of the landed cost of the goods.

The rate war in the North Atlantic has inured to no one's benefit. The carriers have all lost a great deal of money. A good deal of their cargo has been diverted to Canadian ports. American carriers lose money, foreign carriers lose money.

I think it behooves all interested parties to do what they can to bring some degree of stability and sanity to that trade.

It appears that this message has even got through to the carriers because they seem to clean up their practices in the last 6 months and at the present time appear to be quoting the official rates in the tariff. As long as the current over capacity exists on that trade, there is going to be too much of a temptation to fill those ships. Unless something can be done, I am afraid that the trade will revert to its former practices.

Now, there has been an agreement filed with the Federal Maritime Commission which is the agency that has particular cognizance of the economic regulation of our international trade. And that agreement is moving but moving very slowly. I am afraid if something is not done soon to bring that to hearing and decide the matter, the North Atlantic is going to revert to its former sad state.

The Maritime Administration does not have any direct authority in this matter but in as much as some of those ships, all of those ships were built with construction differential subsidy, we have title XI on those ships and where we have a responsibility for promoting the American Merchant Marine we are desirous that that trade return to some state of normalcy and, if you will, tranquillity.

We hope that the Maritime Commission will act soon. On the other hand, we see the same evidences of a rate war developing in our Pacific trades. It hasn't reached the point that it has in the North Atlantic but the trade is slowly being overtonnaged not only with American capacity but with Japanese as well as third fleet traders. We know that the shipping lines are tentatively discussing certain

types of rationalization agreements whereby they can hopefully avoid the problems that existed in the North Atlantic.

Now, in both of those trades, as far as new entrants are concerned, new subsidized entrants with operating differential subsidy or where an existing carrier tries to increase its ceiling, we do have a hearing mechanism under section 605(c) of the act which requires that the Maritime Administration make a determination that the trade is inadequately served by U.S. fleet carriers before additional sailings or increased capacity is permitted on the trade. So that is one mechanism that the Maritime Administration has.

Senator LONG. I would suggest that you elaborate on that matter with your additional suggestions for the record, if any. We will print that information with this. I would also like to ask you about a couple of other things briefly.

What is your view with regard to the legislation pending before the House and the Senate to require 50 percent of all imports to be carried on U.S.-flag vessels? That obviously would help us, would it not?

Mr. BLACKWELL. Well, the Commerce Department, Mr. Chairman, is still preparing its position on that legislation and I really am not authorized to state what our position on the bill will be. I think I can quite properly state, however, that if that bill passed, it would be of demonstrable benefit to the American Merchant Marine and particularly to our tanker segment, but of course there are other considerations.

Senator LONG. Do you know approximately how many U.S.-flag vessels are now operating in foreign trade?

Mr. BLACKWELL. Yes, sir. There are now 276 U.S.-flag vessels providing commercial service in our foreign trade. There are almost an equal number of some 250 U.S.-flag commercial vessels in our so-called domestic trade. And there are currently under time charter to the Military Sealift Command roughly 100 commercial vessels for military use but they are, in fact, in our foreign trade if you want to call the carriage of military cargo for these purposes, foreign trade.

Senator LONG. You noted that there will be $817 million apart in tax deferred Capital Construction Funds. Do you have any estimate of how many ships will be built with those deposits?

Mr. BLACKWELL. Yes; it is a guesstimate or estimate as you phrase it, Mr. Chairman. We believe that the current funds will permit the building within a 5-year time frame of approximately 33 oceangoing vessels of all configurations, LASH, OBO, super tanker, medium size tanker, small tanker, and some specialized methane carriers. In addition to that, we expect that at least five ships of that type of general configuration would be converted from conventional ships into more highly productive larger, faster vessels.

As far as the other facets of the program are concerned, and this is particularly true for the inland waterway segment as well as the coastwise domestic segment, we anticipate that approximately 27 high-powered tugs and 37 relatively large barges that would accompany those tugs plus 17 reconstructed vessels would be built under the funds that have been committed so far.

I would like to say that this is in addition to the replacement programs that the 14 subsidized operators have with the Maritime Administration.

Senator LONG. The House added some $30 million to your authorization to allow for the purchase of some vessels for the reserve fleet. Couldn't these be purchases out of existing construction funds?

Mr. BLACKWELL. We are handicapped by technical language both in our appropriation and authorization—in our appropriations, excuse me, whereby we are precluded from acquiring—using CDS money to acquire ships of this type.

Senator LONG. Could you expand on the purpose of purchasing these vessels?

Mr. BLACKWELL. Yes; I would be glad to, Mr. Chairman. At the end of World War II, we had a reserve fleet capability of almost 1,600 ships. These were in the traditional World War II configuration. In time the Suez crisis, Korea, and the Vietnam war have taken their toll on that fleet. We have on a number of occasions broken those ships out to meet and to respond to specific national emergencies. That World War II reserve fleet is now down to roughly 135 ships which we attempt to keep in a state of readiness. If we had better ships, we would probably scrap these but these are the best we have and we think it is worth the money to maintain this fleet.

The military, and particularly the Military Sea Transport Command, has indicated over the years that for specific types of emergencies, the break bulk configurated ship is the most likely need of the military—for a quick response in an emergency period.

We would like to be able to offer the military somewhat better ships than ships that average 27 and 30 years old that are now presently in our reserve fleet. We have in our present American fleet a significant number of World War II—rather post World War II ships, ships that have been built in the last 10 years in the break bulk configuration with significant speed, 18 knots, with good heavy lift equipment, some 60,000 ton capacity and with reserve space of about 40,000 tons in each ship which the military and particularly the Navy feels ideal for military support operations.

We have converted a number of these ships into container ships or semicontainer ships. Those ships are economically obsolete. If such moneys were available we think it would be a prudent buy to spend the Government's money in obtaining those ships from the present operators who in a short time will not have a use for them in any viable economic operation, have the funds that we pay them go into new construction, and have the Maritime Administration retain those ships in a ready status so that they can be used within 10 or 15 days to meet a military contingency.

Senator LONG. Do you have any questions?

Senator STEVENS. As I understand it, Mr. Blackwell, one of the major features of this Merchant Marine Act of 1970 was to enable operators of nonliner vessels, including liquid and dry bulk cargo vessels, to qualify for the construction differential subsidies and operating differential subsidies and to be eligible for the other benefits of the act.

Am I correct in saying that this was done since about 85 percent of our waterborne commerce is in the bulk cargo, and it was hoped that this aid would result in the rejuvenation of a bulk fleet?

Mr. BLACKWELL. That is quite correct, Senator Stevens.

In fact, I attempted to stress this point in my prepared statement.

Senator STEVENS. What has been your experience during the past 16 months?

Are the shipping companies building these bulk carriers?

Mr. BLACKWELL. Yes, they built some. To be quite candid about it, we are not satisfied with the progress we have made in building ships for the bulk trades.

In the 16 months since the program has been on the books, we have built only five bulk carriers, two are 80,000-ton OBO's that can carry oil in bulk and ore. They are being built at the National Steel Co. shipyard in San Diego.

In addition to that we built three relatively small, in today's terms, tankers, 37,000 tonners for a company called Margate Shipping. That contract has already been awarded to the National Steel Co., shipbuilding facility in San Diego.

I think that however one looks at this, this is progress if you are interested in developing the merchant marine and particularly this bulk carrier segment. You have to recognize that the pace has been slow and there is reason to be disappointed.

In fact, I hate to say it, but if one looks at the present U.S.-flag participation in bulk trading, commercial bulk trading, not including the movement of Government cargo, there is not a single U.S.-flag bulk carrier operating in a trade from the United States to a foreign port, or back, or between two foreign ports.

Senator STEVENS. What is the problem with these two available subsidies?

Why won't our operators go after this type of business?

Mr. BLACKWELL. I think there are a number of problems.

One, to put together any type of shipbuilding scheme for bulk carriage, one ordinarily needs two or three ships. The ships are quite expensive. They will run in the range between $5 to $40 million. There are banking and financial requirements to be met. It takes an awful long time. There are long-term charters to be secured.

There are various encumbering procedures, if you will, at the Maritime Administration that have to be gone through, and perhaps quite important is the fact that almost with the inception of the President's program, the Maritime Merchant Marine Act of 1970, there has been a precipitous decline in world bulk and liquid bulk rates. The rates dropped by 200 and 300 percent.

Now, all these are, I think, factors why we have not moved the program along any more swiftly.

There is, I think, also another factor: You are quite correct that—in asking the question that if the program does in fact afford a potential American bulk operator, operating differential subsidy and construction differential subsidy which are designed to put him on a parity with his foreign-flag competitor, why isn't there more American-flag ships in these various services?

And the program is designed to, in fact, put him on a cost parity. But there are other considerations, too. He needs the type of operating flexibility, if you will, and an opportunity to attract cargo in the same type of free open market that a foreign-flag competitor can do today.

There is an encumbrance in the Merchant Marine Act of 1970 in section 905(a), which at least as we read it, does require the Maritime Administration through the Secretary of Commerce, to promulgate uniform rules in regard to the amount of foreign-to-foreign trading

that we will permit an operator with operating differential subsidy, with construction differential subsidy in this case.

And trying to stretch the law as far as we think we can, we have allowed in a recently promulgated rule in the Federal Register, as little as 20 percent of the vessel's time to be devoted to foreign-to-foreign commerce and still be authorized to receive construction differential subsidy.

But the fact is that when we impose that—while some people might consider a nominal restriction on a potential American bulk operator, he is operating in fact under an economic penalty that is quite unnatural because he is operating against a Greek ship that can go anywhere, a Norwegian ship that can go anywhere, a Japanese ship that can go anywhere, or a United Kingdom vessel that can go anywhere.

When that American attempts to get a long-term charter in the world market, this is a totally free market, he has to offer the potential user of that ship a charter with a trading provision. First of all, that potential user is turned off because he does not want to be encumbered by any trading restriction; and two, the price that he can obtain from the charter for that shipper is obviously lower because it is coming with a condition that is not attached to charters that other foreign-flag operators can offer that potential user.

So he is—the American is essentially hit both ways.

We have run some figures on the bulk business. I believe I have some here. The amount of bulk cargo that moves into and out of this country is absolutely staggering.

These are 1970 figures. If I may, I would read them for the record, Mr. Chairman, and Senator Stevens.

Coal—these are exports—coal, 63 million long tons, U.S. exports of coal; wheat, 17 million; corn, 13 million; soy beans, almost 12 million; logs, 10 million; phosphates, almost 10 million.

Imports: Residual fuel, 79 million long tons; crude petroleum, 49 million; iron ore, 42 million; kerosene and jet fuel, 7.7 million; sugar, 4.6 million.

These figures have increased year to year. Every study that the Maritime Administration has been able to conduct indicates that these figures are going to continue to increase. And in certain areas like crude oil, they are going to increase precipitously.

What I am suggesting is that with this fantastic bulk market that exists for moving bulk products to and from the United States, that the trading restriction is probably unnecessary in terms of meeting what we perceive to be the congressional intent because it seems to me that if you build an American bulk carrier and permit it to operate without any trading restrictions, in view of the staggering amount of bulk cargo that moves in and out of this country, those ships ultimately are going to find their way into the U.S. trade to carry that type of tonnage.

Senator Stevens. In effect, what you are saying is that the authorization of the 1970 act, the amendments giving the Secretary the right to permit these bulk carriers to compete with foreign flag bulk carriers is not sufficient?

You have got a policy position on whether you believe there should be greater flexibility, or whether that should be eliminated altogether?

Mr. Blackwell. I would have to seek administration approval to support and sponsor a change.

I think I can state quite unequivocably that the way the act was designed to work, it is not working that way.

I think if we want to build bulk carriers under the U.S. flag, built in U.S. shipyards, it would be wise for the administration and the legislative branch to make clear the meaning of 905(a). The language of the statute itself is reasonably clear. There are, however—there is certain language in the accompanying reports in the Senate, that throws some doubt on the interpretation.

If that problem can be cleared up, I would think it would be preferable to do it through a legislative change. But if it be cleared up in any—by any legislative mechanism, I think it would be a tremendous benefit to the American Merchant Marine, and I can assure you that we would build a great many more ships under this program.

Senator STEVENS. The committee's report says that approach was adopted by the committee, and that it has the merit of providing flexibility to the Secretary to permit U.S. flag carriers to compete effectively with foreign flag bulk carriers, while at the same time allowing the Secretary to protect the government's investment in these vessels by seeing the vessels do not become engaged exclusively or principally in foreign ore or foreign carriage unrelated to the foreign commerce of the United States.

From what you say, they could not be involved in bulk carriage for any sustained period without being related to the foreign commerce of the United States.

Mr. BLACKWELL. That is right.

Senator STEVENS. Why not take care of it administratively?

Mr. BLACKWELL. We think the language in that Senate report is quite clear. I don't think it makes sense to have any trading restrictions. That is my personal view.

What we have essentially is a subsidy, construction differential subsidy that goes to the shipyard. It does not go to the steamship operator. The shipyard gets that subsidy and the precise amount of that subsidy whether the ship is operating between the United States and England, between the United States, England, France, and back home, or theoretically between two foreign ports. It really should not make any difference where the ship is employed.

The basic thrust of the construction differential subsidy program is to build ships for under the U.S. flag in U.S. shipyards, manned by U.S. crews.

Senator STEVENS. I have belabored that.

I have only one other question. You mention the reserve fleet. I understand you are going to acquire these vessels, and by virtue of acquiring them, the owners would have the funds to build replacements and modernize the Merchant Marine?

Mr. BLACKWELL. Yes, sir.

Senator STEVENS. Is there any restriction as to their sale in this area?

Mr. BLACKWELL. We won't be selling foreign, I can assure you that, Senator.

There are some provisions for trading out vessels. This authority expires in June of this year. We are not going to trade out any ships and take in junk. We are not in the business of junk.

Senator STEVENS. Do you need authorization from Congress to sell them?

Mr. BLACKWELL. Yes, sir.

Senator STEVENS. What would be your opinion if we tried to write in that you would have to have an act of Congress before you could dispose of the Reserve Fleet?

Mr. BLACKWELL. I don't see the purpose of it, Senator.

We have made every effort to maintain that fleet and we are certainly not going to jeopardize the national security by selling any of it.

Senator STEVEN. What about not being able to dispose of it to foreign purchasers?

How is that?

Mr. BLACKWELL. The law precludes the sale of those ships to foreigners.

Senator STEVENS. You can't do it without an act of Congress, is that right?

Mr. BLACKWELL. Right.

Senator STEVENS. All right. I am satisfied.

Thank you very much, Mr. Chairman.

Senator LONG. Help me to visualize what some of these new ships are going to look like.

You talk about a 230,000 deadweight-ton tanker.

How many barrels is that, 230,000?

Mr. BLACKWELL. About seven barrels per ton. That would be a million and a half barrels of vessel. Those ships would run approximately 1,000 feet, some places 900 feet, and depending on the grading dock or building, the way they were built, of rafts of—from 72 feet to 65 and—about 66 feet.

Senator LONG. I see.

Those are very big ships, then.

Mr. BLACKWELL. The interesting thing about those ships, Mr. Chairman, is that they take about the same size crew as a 40,000 or even an 80,000-ton vessel.

Senator LONG. You refer to a crude oil cost of delivery approximately $8 per long ton. How much does that work out to per barrel? About a dollar a barrel?

Mr. BLACKWELL. That is right.

Senator LONG. About how many crew members would be on that very large crude carrier?

Mr. BLACKWELL. Twenty-eight.

We may get—it is possible those crews could come down to 22.

Senator Long. How would they do that?

Mr. BLACWELL. Through automation.

Senator LONG. I see.

Well, thank you very much for your statement.

Mr. BLACKWELL. Thank you, Mr. Chairman.

Senator LONG. The next items before the subcommittee are S. 3241 and H.R. 13188 which would authorize the Coast Guard's program for procurement of vessels and aircraft and the construction and acquisition of shore facilities and other major capital items for fiscal year 1973. We have with us today John P. Olsson, Deputy Under Secretary of the Department of Transportation; and Adm. Chester R. Bender, Commandant, U.S. Coast Guard, Department of Transportation. It is our practice to insert in the record at this point the formal Coast Guard documentation for the capital program.

(The material follows:)

DEPARTMENT OF TRANSPORTATION



COAST GUARD

PROGRAM
FOR
PROCUREMENT OF VESSELS AND AIRCRAFT
CONSTRUCTION AND ACQUISITION OF SHORE FACILITIES

FISCAL YEAR 1973

DEPARTMENT OF TRANSPORTATION

COAST GUARD

Program
for
Procurement of Vessels and Aircraft, and
Construction and Acquisition of Shore Facilities

Index

Title	Page Number
Digest of Budget Estimates by Activity for Fiscal Year 1972	AC-10 thru 13
General Statement	AC-14
Project Sheets	AC-15a, 15b, 15c thru 43

DEPARTMENT OF TRANSPORTATION
COAST GUARD

Digest of Budget Estimates by Activities for Fiscal Year 1973
(dollars in thousands)

Appropriation: Acquisition, Construction, and Improvements

	1971 Actual		1972 Estimate		1973 Estimate		Increase or decrease (-) for 1973	
	Full-time perm. pos.	Amount	Full-time perm. pos.	Amount	Full-time perm. pos.	Amount	Full-time perm. pos.	Amount
Program by activities:								
1. Vessels	...	$61,535	...	$15,446	...	$81,070	...	$65,624
2. Aircraft	...	12,210	...	29,364	...	11,600	...	-17,764
3. Shore stations and navigational aids	...	12,155	...	33,370	...	30,140	...	-3,230
4. Repair and supply facilities	247	8,100	275	12,202	258	9,470	-17	-2,732
5. Training and recruiting facilities	...	...	...	7,300	...	3,380	...	-3,920
6. Alteration of bridges	...	...	...	...1/	...	...	...	...
Total appropriation (adjusted) or estimate	247	94,000	275	97,682	258	135,660	-17	37,978
(Military)	(94)		(139)		(122)		(-17)	
(Civilian)	(153)		(136)		(136)		(0)	

1/ New appropriation, Fiscal Year 1972

Summary Explanation of Changes Requested for Fiscal Year 1973

	Page No.	Total	AMOUNT BY ACTIVITY V No. 1	A/C No. 2	SS&A/N No. 3	R&SF No. 4	T&RF No. 5
Program Increases:							
Requirements for this appropriation are determined by the cost of a selected list of specific projects described in detail in the justification. The projects are:							
A. Vessels:							
1. Replacement:							
a. Replace one icebreaker	AC-15a, 15b, 15c	$66,000	$66,000	...	...	...	...
2. Increase capability of vessels:							
a. Buoy tenders - renovate and improve	AC-16	2,870	2,870	...	...	...	...
b. CGC GLACIER - major repairs	AC-17	250	250	...	...	...	...
c. WIND Class Polar Icebreaker - renovate two (2) for interim service	AC-18	8,750	8,750	...	...	...	...
Subtotal, vessels		77,870	77,870	...	...	...	...

	Page No.	Total	AMOUNT BY ACTIVITY V No. 1	A/C No. 2	SS&A/N No. 3	R&SF No. 4	T&RF No. 5
Program Increases: (Continued)							
B. Aviation:							
1. Aircraft replacement and modification:							
a. C-130-Outer wing rework on (9) aircraft	AC-19	$1,600	...	$1,600	...	...	...
b. Long range search aircraft - procure (2)	AC-20	10,000	...	10,000	...	...	...
Subtotal, aviation		11,600	...	11,600	...	...	...
C. Shore units:							
1. Replace or relocate existing units:							
a. Marshfield and Otis AFB, Massachusetts - modernize facilities at Boston Radio Station	AC-21	700	...	...	$700	...	...
b. Brooklyn, New York - construct barracks and messing facility at Brooklyn Air Station	AC-22	1,420	...	...	1,420	...	...
c. Fort Hancock, New Jersey - rebuild Sandy Hook Station	AC-23	2,100	...	...	2,100	...	...
d. Portsmouth, Virginia - construct new CG Base Phase II	AC-24	5,350	...	...	...	$5,350	...
e. Islamorada, Florida - construct permanent facilities.	AC-25	640	...	...	640	...	...
f. Monterey, California - rebuild Monterey Station; construct moorings at Santa Cruz	AC-26	1,450	...	...	1,450	...	...
g. North Bend, Oregon - construct new air station	AC-27	2,500	...	...	2,500	...	...
2. Improve capability of existing stations:							
a. Cape May, New Jersey - expand electrical capacity at Recruit Training Center	AC-28	130	...	...	...	...	$130
b. Yorktown, Virginia - construct student barracks	AC-29	3,250	...	...	...	...	3,250
c. Cocoa Beach, Florida - establish C-130 facility at Patrick AFB	AC-30	920	...	...	920	...	...
d. Fort Pierce, Florida - rebuild Fort Pierce Station	AC-31	1,200	...	...	1,200	...	...
e. Port Isabel, Texas - renovate Port Isabel Station	AC-32	940	...	...	940	...	...
f. Dana, Indiana - renovate Loran C station barracks	AC-33	60	...	...	60	...	...
Subtotal, shore units		20,660	...	...	11,930	5,350	3,380
D. Pollution control:							
1. Abate pollution - CG vessels	AC-34	3,200	$3,200	...	...	...	...
2. Abate pollution - CG shore stations	AC-35	300	...	...	300	...	...
3. Procure hardware for National Response Center Information System	AC-36	100	...	...	100	...	...
Subtotal, pollution control		3,600	3,200	...	400	...	...

	Page No.	Total	AMOUNT BY ACTIVITY V No. 1	A/C No. 2	SS&A/N No. 3	R&SF No. 4	T&RF No. 5
Program Increases: (Continued)							
E. Aids to navigation:							
1. Waterways aids to navigation projects	AC-37	$1,500	...	...	$1,500	...	...
2. Continue lighthouse automation and modernization (LAMP) program	AC-38	850	...	...	850	...	...
3. Presque Isle, Me. - construct station for Loran C Development Project - Phase III	AC-39	3,650	...	...	3,650	...	...
4. Houston, Texas - establish Vessel Traffic System for Houston Ship Channel	AC-40	2,000	...	...	2,000	...	...
Subtotal, aids to navigation		8,000	...	...	8,000	...	...
F. Public family quarters	AC-41	6,430	...	...	6,430	...	...
G. Property, acquisition, design, and administration:							
1. Survey and design of facilities	AC-42	3,380	...	...	3,380	...	...
2. Engineering and logistics - support of construction projects	AC-43	4,120	...	...	...	$4,120	...
Subtotal, property, acquisition, design and administration		7,500	...	...	3,380	4,120	...
Total, Program Increases		135,660	$81,070	$11,600	30,140	9,470	$3,380
Other Changes:							
Reductions, nonrecurring costs, and savings:							
Projects contained in 1972 appropriation:							
1. Vessels		-15,446	-15,446	...	...	...	...
2. Aircraft		-29,364	...	-29,364	...	...	...
3. Shore stations and navigational aids		-33,370	...	...	-33,370	...	...
4. Repair and supply facilities		-12,202	...	...	...	-12,202	...
5. Training and recruiting facilities		-7,300	...	...	...	...	-7,300
Total, Other Changes		-97,682	-15,446	-29,364	-33,370	-12,202	-7,300
TOTAL INCREASE FOR 1973 OVER 1972 APPROPRIATION OR ESTIMATE		37,978	65,624	-17,764	-3,230	-2,732	-3,920

COAST GUARD--Acquisition, Construction, and Improvements

GENERAL STATEMENT

This appropriation funds for replacement and augmentation of Coast Guard's capital plant consisting of vessels, aircraft, operational shore units, and support facilities. Programs, for the most part, are directed toward continued execution of long-range plans for orderly replacement and improvement of obsolete facilities.

Achievement by Coast Guard forces in carrying out missions of search and rescue, aids to navigation, oceanographic research, and ocean station duties is dependent upon the condition and capability of operating facilities. The diversified missions assigned our units demand complex and unique equipment combined with speed and mobility. Replacement of facilities which are overage or of marginal capability is vital. Limited expansion to meet newly developing increasing requirements must also be accomplished.

To establish proper annual funding levels, objectives have been converted into long-range plans which are being implemented as funds are made available. Our goal is the achievement of a funding level which will avoid sharp peaks and valleys, one that will carry out long-range plans, and one that is within our technical capability to administer effectively. In preparing the overall program for 1973, the Coast Guard has placed particular emphasis on--

a. All aspects of marine environmental protection, from furthering our knowledge of the state of marine pollution to providing the means for cleanup of spills.

b. Trying to overcome the very serious personnel problems which threaten to constrain, even strangle, our potential for progress.

c. Continuing to improve the condition and productivity of our physical plant, to bring it to a level commensurate with meeting the demands of transportation in the 1970's.

To plan an effective construction program and to ensure timely accomplishment of projects when funds are appropriated, it is necessary that the land be available, that sites be surveyed properly, and that design be near completion. To prevent unforeseen legal entanglements delaying the letting of contracts, it is mandatory that property titles rest in the government when funds are appropriated for construction. The 1973 request includes funds for land acquisition, site surveys, and the detailed designing of projects planned in ensuing years. Construction projects also require personnel for contracting, planning, supervision and inspection to ensure the success of the endeavor. This line item provides funds for the salaries and travel of these engineers, technicians, and administrative personnel; administrative supplies and equipment; and contractual services.

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / A1a	CONSTRUCT ONE REPLACEMENT ICEBREAKER	

MISSION OR FUNCTION OF FACILITY:

Support of U.S. defense units, maritime commerce, research.
Marine transportation research.
Polar Search and Rescue.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

Our fleet of polar icebreakers consists of six WIND Class built between 1943 and 1947, and GLACIER built in 1955. The WIND's have been in continuous service for 27 years in the harsh polar environment. While usable until the mid 1970's, these ships cannot operate until 1980. Restoration for reliable operation up to five years is feasible (requested separately). It is not economically feasible to provide for substantially longer life by restoration. Even if in suitable condtion, the WIND's could not meet the demands of the '70's for they were designed for fringe-ice operation only and current requirements call for greater ice penetration than that.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

In ordinary ice, diesel-electric power will drive the screws. In very heavy ice, gas turbines will drive the screws. The three screws will be controllable pitch, to reduce the risk of blade damage when maneuvering in ice.

The ship can operate up to 240 days annually, but will require crew rotation to run that long. Shore support will be needed for crew men in port.

*66 more personnel will be required for rotation. The ship can also carry 1 doctor, 14 aviators, and 10 scientists.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Design Replacement Icebreaker	1967	$ 1,000
Design Replacement Icebreaker	1968	1,500
Construct One Replacement Icebreaker	1971	59,000

PERSONNEL STRENGTH

		OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
WIND Class	CURRENT	12	2	166	0	180
	PLANNED	9	2	112	0	*123

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST	$ 66,000
FUTURE COSTS - *TOTAL NEXT 4 YEARS*	$ 5,000

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
	The total cost of the project ($66 million) represents the average of all bids received for construction of one replacement icebreaker in FY 1971, and includes government furnished materials.			
1.	Hull Structure	-	-	$21,008
2.	Propulsion	-	-	12,820
3.	Auxiliary Systems	-	-	12,641
4.	Outfits, Equipment, Furnishings	-	-	12,758
5.	Indirect shipyard costs	-	-	6,773
	Total			66,000

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973 BUDGET ITEM NO. A1a	PROJECT TITLE: CONSTRUCT ONE REPLACEMENT ICEBREAKER (Continued)	NEAREST CITY & CONGRESSIONAL DISTRICT

FISCAL YEAR	1972	1973	1974	1975	1976	1977
OPERATING DAYS AVAILABLE (1)	1,080	1,060	1,060	1,080	870	1,110
OPERATING FLEET	GLACIER WIND WIND WIND WIND (2) WIND WIND	GLACIER WIND WIND WIND - WIND WIND	GLACIER WIND WIND - WIND-R WIND WIND	GLACIER WIND WIND WIND-R WIND-R WIND -	GLACIER NEW CLASS - WIND-R WIND-R -	GLACIER NEW CLASS NEW CLASS WIND-R WIND-R
UNDERGOING MAJOR RESTORATION	-	WIND	WIND	-	-	-
UNDER CONSTRUCTION	#1 NEW	#1 NEW #2 NEW	#1 NEW #2 NEW	- #2 NEW	-	
OPERATIONAL CHANGES		Overhaul first WIND. Place second WIND in overhaul late in year.	Complete second WIND overhaul late in year.	Decommission 1 WIND.	Commission 1 New Class. Decommission 3 WIND's	Commission 1 New Class.
BUDGET PROGRAMS	Fund mat'l. for restorations	Fund second NEW CLASS. Fund 2 restorations			Decision Deadline: Replace Restored WIND's	

NOTES: (1) Annual ship-days est. WIND: 180(1972) 160(1974) Restored WIND: 210* GLACIER 210* (1973-1977) NEW: 240*
170(1973) 150(1975) 180 (1972)

(2) In commission special due to damage, awaiting restoration. Not available for operating in FY 1972.

*with augmented crew

FACT SHEET

POLAR ICEBREAKER WAGB-10 CLASS

Characteristics

Length Overall	-	400'
Length at normal waterline	-	352'
Beam (normal)	-	78'
Draft (normal)	-	28'
Displacement (normal)	-	11,000 tons
Displacement (full load)	-	12,200 tons
Shaft Horsepower	-	18,000 Diesel/60,000 Gas turbine
Number of shafts	-	3
Speed (Diesels)	-	17.0 knots max. (16.0 knots cruising)
Officers and Men (accommodations)	-	138
Scientists	-	10

Capabilities

Icebreaking	
Continuous at 18,000 SHP	- 4.0 ft.
Continuous at 60,000 SHP	- 6.0 ft.
Ramming	- 21 ft.
Cargo Capacity	- 500 measurement tons
Towing	
Convoy Ships	
Large Scientific System with Vans	
Endurance	
-90 days average-normal operating conditions	
-12 days @ 60,000 SHP continuous full power (turbines)*	
-30 days @ 18,000 SHP continuous full power (diesels)*	
-20,000 nautical miles @ 13 knots	
-270 days per year away from homeport (150% of current norm.)	
Helicopters - 2 single turbine amphibious	
Ship's Boats, including Arctic Survey Boat	

*Note: Continuous full power is not normally used for several days running, but rather for short periods of time up to half a day in extreme ice conditions.

Features

1, 2, and 4 man staterooms
Enclosed Bridge Wings
2 Compartment Subdivision Standard
Passive Roll Stabilization System
Sewage Treatment Plant
Controllable Pitch Propellers
Multi-system Precision Navigation
AC-DC Power Transmission thru rectifiers for main propulsion
On board data processing

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. A2a

PROJECT TITLE
BUOY TENDERS - RENOVATE AND IMPROVE

NEAREST CITY & CONGRESSIONAL DISTRICT

MISSION OR FUNCTION OF FACILITY:
Aids to Navigation
Search and Rescue
Enforcement of Laws and Treaties

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The Coast Guard operates 36 offshore buoy tenders of the 180 ft. class and 7 coastal tenders of the 133 ft. class, all of which are at least 27 years old. 180' WLB habitability is below current standards; cargo handling and propulsion machinery is obsolescent. 133' WLM's are experiencing serious engineering plant difficulties due to a scarcity of parts for both the engines and the DC electrical system.
A study to provide criteria for the replacement of these ships recommended extensive renovation, in lieu of immediate replacement, to extend the service life of these vessels as much as 15 years.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
WLB major renovation - extensive habitability improvements, replacement of engines, replacement of cargo handling equipment, installation of bow thrusters, structural preservation and renewal where necessary, and increased electrical capacity.
WLB austere renovation - extensive habitability improvements and electrical propulsion system overhaul.
WLM reengining - reengining and conversion from DC to AC electrical system.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Buoy Tender Modernization and Improvement	1969	$ 665
Buoy Tender Modernization and Improvement	1970	925
Buoy Tender Modernization and Improvement	1971	820
Buoy Tender Modernization and Improvement	1972	1,290

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	5	3	54	0	62
PLANNED	5	3	54	0	62

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST → $ 2,870

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 3,029

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	WLB Austere Renovation	Ea.	3	$ 1,430
2.	WLB Major Renovation - procurement of long lead time materials	Ea.	2	1,300
3.	WLM Reengining - procurement of long lead time items for reengining and conversion of 1 vessel	Ea.	1	140
	Total			$ 2,870

Page No. AC-16

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / A2b	CGC GLACIER--MAJOR REPAIRS	

MISSION OR FUNCTION OF FACILITY:
Polar operations and Search and Rescue
Support of U.S. defense units, maritime commerce, and research.
Marine transportation research.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
GLACIER's living spaces were air-conditioned and ventilation systems were improved in the FY 1969 project. In this phase of the Major Repair project crew habitability will be further improved. Simple repainting will not suffice to improve the appearance and livability of the berthing space. GLACIER's internal piping is in need of substantial replacement. The FY 1972 phase funded some replacement. The ship's laundry compartment is filled with worn out equipment and piping.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
GLACIER's fore and aft berthing spaces will receive new deck surfacing and partitions, and some new furnishings.

As part of the project to replace internal piping and attachments, the laundry compartment equipment and piping will be replaced.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Major improvements to living spaces and communications areas (part of project on all polar icebreakers).	1969	$ 1,600
CGC GLACIER--Major Repairs, Phase I	1972	1,290

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT					
PLANNED					

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST →	$ 250
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Improvements to crew berthing spaces			120
2.	Laundry equipment replacement and repairs			130
	Total			250

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. A2c

PROJECT TITLE
WIND CLASS POLAR ICEBREAKER -- RESTORATION

NEAREST CITY & CONGRESSIONAL DISTRICT

MISSION OR FUNCTION OF FACILITY:
Polar operations and Search and Rescue
Support of U.S. defense units, maritime commerce and research
Marine transportation research

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The national icebreaker fleet consists of GLACIER and six WIND Class ships. The WIND's have served in the harsh polar environment about 27 years and are overage and deteriorated. Most major machinery components are beyond saving by overhaul. Cracking in bow plating is common.

Plans for the national icebreaker fleet rely on operation of two restored WIND Class ships beyond FY 1975.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
This project includes repairs or replacements for major machinery components and systems, and restoration of structural deficiencies. The goal is to restore two WIND Class ships to a degree that their reliability and safe operation can be extended.

The project will concentrate on those areas where casualties and failures now occur with regularity.

First year funding allowed design and purchase of long lead time materials. This request allows purchase of other material and installation.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Improve habitability and operational capability	1967	$ 3,760
Improve habitability and operational capability	1968	2,710
Improve habitability and operational capability	1969	4,260
Major Restoration--Phase I	1972	5,250

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	12	2	166	0	180
PLANNED	12	2	166	0	180

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST →	$ 8,750
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT			UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
	Total Project (Two ships)	(FY 72 & FY 73)	FY 1973 Phase			
1.	Drydocking and hull	$ 906	Drydocking and hull			$ 906
2.	Bow repairs	1,000	Bow repairs			1,000
3.	Propellers and shafts	1,936	Install propellers and shafts			1,336
4.	Main propulsion	5,470	Install main propulsion			2,342
5.	Ship's electrical system	1,464	Electrical system			1,464
6.	Boilers & Evaporators	804	Boilers & Evaporators			804
7.	Auxiliary systems	1,870	Install Auxiliary Systems			764
8.	Design	550	Design			134
	Total	$14,000	Total			$ 8,750

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973 BUDGET ITEM NO. B1a	PROJECT TITLE: C-130 OUTER WING REWORK	NEAREST CITY & CONGRESSIONAL DISTRICT

MISSION OR FUNCTION OF FACILITY:

Search and Rescue
Marine Environment Protection
Aids to Navigation
Marine Science
Enforcement of Laws and Treaties
General Support

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

Structural repair problems associated with fatigue cracking, extensive corrosion and severe integral fuel tank leakage, all associated with the HC-130B outer wings, require a corrective action program beyond field or overhaul level capability.

A USAF sponsored fatigue test identified certain fatigue sensitive areas requiring retrofit parts replacement. All military C-130's will have the improvements incorporated.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Outer wing modification for remaining 9 of 12 B-model C-130's:

a. Wind Fatigue Reinforcement. Perform extensive fatigue rework of outer wing section panels and fasteners including addition of reinforcing members fasteners to provide joints with improved fatigue capability, painting and inspection.

b. Corrosion & Internal Fuel Tank Repair. A thorough & searching inspection using non-destructive methods will be performed on outer wing assemblies. Integral fuel tank and coatings will be replaced with latest state-of-the-art techniques and materials providing a more leak free tank with quarter response to corrosion.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
C-130 Center Wing Replacement (6)	1970	$ 720
C-130 Center Wing Replacement (6)	1971	815
C-130 Center Wing Replacement (3)	1972	600
C-130 Outer Wing Rework (3)	1972	600

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT					
PLANNED					

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST →	$ 1,600
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	C-130 outer wing rework program for nine (9) aircraft. (includes addition of reinforcing members, fasteners to provide joints with improved fatigue capability, coolants, painting and inspections.).....	Ea.	9	$1,600

Page No. AC-19

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. B1b

PROJECT TITLE
PROCURE TWO C-130 LONG RANGE SEARCH AIRCRAFT

NEAREST CITY & CONGRESSIONAL DISTRICT

MISSION OR FUNCTION OF FACILITY:
Search and Rescue
Enforcement of Laws and Treaties
Marine Environmental Protection
Aids to Navigation
Marine Sciences
General Support

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
One C-130 aircraft will provide long range search and rescue, law enforcement and surveillance capability in the Caribbean and Gulf of Mexico. The other will be assigned to Kodiak, Alaska to meet growing law enforcement requirements, as well as requirements in Search and Rescue and other mission areas there.

Procurement of these two aircraft will bring the Coast Guard's C-130 inventory to a total of 21.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Two C-130 long range search aircraft including the Coast Guard avionics package.

These aircraft are the same type as those now being utilized as law enforcement patrol aircraft over Alaskan waters where they play a direct part in enforcing Federal statutes and International Fishing Agreements.

No additional ground support equipment or spares is requested as both aircraft will be assigned to air stations which presently operate C-130's and are sufficiently equipped to accommodate these aircraft.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Procurement of Long Range Aircraft (6)	1958-60	$ 20,950
Procurement of Long Range Aircraft (3)	1961	10,450
Procurement of Long Range Aircraft (3)	1962	10,405
Procurement of Long Range Aircraft (1)	1966	2,615
Procurement of Long Range Aircraft (3)	1967	9,204
Procurement of Long Range Aircraft (3)	1972	14,190

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	72	8	364	0	444
PLANNED	81	9	435	0	525

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST → $ 10,000

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
	Basic Aircraft			
1.	Procure basic C-130 aircraft. 2@ $4,700,000	Ea.	2	$9,400
2.	Procure and install CG avionics. 2@ $300,000	set	2	600
	Total			$10,000

Page No. AC-20

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C1a	MARSHFIELD AND OTIS AFB, MASS. - IMPROVE AND MODERNIZE BOSTON RADIO STATION	Marshfield, Mass. - 12th

MISSION OR FUNCTION OF FACILITY:

Communications Support
Command and Control over operating forces involved in all missions of the Coast Guard.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

The transmitting and receiving sites of Radio Boston form an integral part of the Eastern Area Communications System. Additional requirements have been imposed due to the closing and consolidation of other Coast Guard radio stations and increased support of other Government agencies. Both the transmitter and operations buildings are inadequate to house the on board equipment, facilities and personnel required to support the operational mission. The transmitter building is a 1-story masonry structure approximately 20 years old. The operations building is a 1-story masonry structure approximately 30 years old. Both are in good structural condition.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Transmitter Site: Addition for transmitters, repair shop, and storage; add air conditioning; expand primary power for added load; replace MF transmitter, and teletype equipment; add 2 high-power HF transmitters; restore and add new antennas; expand antenna matrix control system.
Receiver Site: Addition for operations space; modify existing space for offices, repair shop, parts storage; add air cond.; add primary power; replace receivers; convert to low-level teletype; improve inter-site communications; provide short-range receiver antenna; provide on-line secure capability.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	1	4	74	0	79
PLANNED	1	4	74	0	79

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	54	$ 24	$ 199	$ 223
(B) BEING ACQUIRED	-	-	-	-
(C) LEASES AND EASEMENTS	608	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	662	24	199	223
THIS REQUEST →				$ 700
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →				$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Transmitter Site:			
	Building alterations and additions (includes space addition, alteration, and air conditioning).....	SF	1,800	$ 58
	Utilities and site development (includes primary power expansion, grading, and landscaping).....	-	-	46
	Electronic equipment and antenna (includes replacement transmitters and teletype equipment, additional transmitters, new antennas, and antenna matrix control system expansion).....	-	-	221
2.	Receiver Site:			
	Building alterations and additions (includes space addition, alterations, and air conditioning).....	SF	1,800	96
	Utilities and site development (includes primary power addition, grading, and landscaping)	-	-	8
	Electronic equipment and antenna (includes replacement receivers, teletype conversion, inter-site comm. improvement, and on-line secure teletype, and new antenna).....	-	-	271
	Total.....			$ 700

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)
Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. C1b.

PROJECT TITLE: BROOKLYN, NEW YORK - CONSTRUCT NEW AIR STATION BARRACKS

NEAREST CITY & CONGRESSIONAL DISTRICT: Brooklyn, N.Y. - 11th

MISSION OR FUNCTION OF FACILITY:
Search and Rescue — Aids to Navigation
Law Enforcement
Maritime Pollution Control

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The existing barracks at CGAS Brooklyn is a frame building constructed for temporary use during WWII. It contains a galley, mess hall, sick bay, electronics workshop and office space. The wooden columns are out of line and cracked; the sheetrock walls are bowed and cracked; the exterior asbestos siding is broken in many places; water pipes frequently fail due to corrosion; and the electrical system is inadequate. Maintenance is a major problem, and renovation of the structure would not be economical. This building constitutes a fire hazard due to its seriously deteriorated condition and the age of the frame structure.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
A new masonry barracks building for enlisted personnel will be constructed to replace the existing frame building at Brooklyn Air Station. This building will also provide dining and recreational areas, barber shop, medical and dental facilities, and other administrative facilities.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	30	3	140	0	173
PLANNED	30	3	117	0	150

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	9.7	$ 39	$ 1,332	$ 1,371
(B) BEING ACQUIRED	62.8	-	-	-
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	72.5	-	-	1,371

THIS REQUEST →	$ 1,420
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Construct barracks and galley mess building..... (Includes shops, medical/dental facility and exchange spaces)	SF	31,200	$1,124
2.	Galley equipment and furnishing.....			79
3.	Renovation of watchstanders berthing in hangar.....			90
4.	Demolition.....			11
5.	Pile foundation.....			32
6.	Utilities.....			30
7.	Antenna relocation.....			4
8.	Paving, grading, landscaping, and recreation areas.....			50
	Total.....			$1,420

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. C1c

PROJECT TITLE
FORT HANCOCK, NEW JERSEY -- RENOVATE SANDY HOOK STATION

NEAREST CITY & CONGRESSIONAL DISTRICT
Fort Hancock, N.J. - 3rd

MISSION OR FUNCTION OF FACILITY:
Search and Rescue
Law Enforcement
Aids to Navigation (including loran station)
Electronic Support
Group Office

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The existing station consists of old, deteriorated buildings. It must provide an operating facility capable of serving the maritime public in the critical approaches to N.Y. harbor. Most buildings were built prior to 1905 and maintenance is burdensome due to their number, age, and physical separation. Berthing spaces are overcrowded; plumbing is deteriorated; and the electrical system is barely capable of handling the required load. The boat shop and haulout facility are not adequate to handle assigned boats, and are in need of extensive repair. Winter maintenance on the boats is nearly impossible in a make-shift facility.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
This project will consolidate operations and support facilities now widely spread at Sandy Hook. The new facilities will be large enough to accommodate the increase in personnel required to meet the rigors of work load and provide for operation of this complex station and group office. A new station building, to be constructed adjacent to the moorings, will contain operations, administrative, berthing spaces, and messing facilities. Space will also be provided for monitor and control facilities for all aids to navigation equipment including loran. A shop building will be erected in the moorings site area. New piers and floats will be built.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	3	3	68	0	74
PLANNED	4	6	90	0	100

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	44	$ 76	$ 653	$ 729
(B) BEING ACQUIRED	21.5	-	-	-
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	65.5	76	653	729

THIS REQUEST →	$ 2,100
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Raze existing buildings			$ 321
2.	Station/Group building	SF	28,820	1,060
3.	Shop and maintenance building	SF	4,760	150
4.	Moorings and covered boat slips			280
5.	Furnishings and equipment			126
6.	Electronics			63
7.	Contractor mobilization and demobilization			100
	Total			$2,100

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C1d	PORTSMOUTH, VIRGINIA -- CONSTRUCT NEW COAST GUARD BASE, PHASE II	Portsmouth, Va. - 2nd

MISSION OR FUNCTION OF FACILITY: Aids to Navigation - General Support

Operate small craft; furnish mooring facilities; service and maintain Coast Guard small boats, vehicles machinery, engines and designated shore stations; minor repair and modification of Coast Guard vessels.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

The existing facilities have substandard barracks, deteriorated piers, inefficient layout of high maintenance cost buildings, and physical separation of the old Coast Guard Base and the Berkley Mooring.

Phase I provided for site preparation, initial waterfront development (including one 600' pier), provision of utilities, and construction of an access road, security fence and temporary parking area. Relocation of a water main, required prior to Phase II, will be accomplished in FY 1972.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

This project consists of additional waterfront development including a second 600' pier and small boat harbor, construction of streets, barracks, messing facilities, operations building and armory, provision of utilities and outfitting.

Future phases will include buoy processing shop, industrial facilities, Administration building, infirmary, BOQ, supply depot, commissary and support facilities and ultimately will provide a modern consolidated facility in the Portsmouth area.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
New Base Portsmouth - Phase I	1971	$ 4,600
New Base Portsmouth - Water main relocation	1972	410

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	(No additional personnel required in connection with this phase. Final personnel allowance will be 19 commissioned				
PLANNED	officers, 161 enlisted, and 82 civilians to be consolidated from the old Coast Guard Base and Berkley Mooring.)				

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	187.3	$ 402	$ -	$ 402
(B) BEING ACQUIRED	-	-	-	-
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	187.3	402	4,300	4,702
THIS REQUEST →				$ 5,350
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →				$ 9,000

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Bulkhead	LF	1,150	$ 1,060
2.	Dredging and small boat harbor	CY	300,000	670
3.	Pier	LF	600	1,080
4.	Access road, streets and outside utilities			1,275
5.	Barracks	MN	150	600
6.	Operations building	SF	11,256	330
7.	Armory	SF	1,000	25
8.	Furnishings (barracks and office) and equipment			135
9.	Galley/Mess	MN	150	150
10.	Relocation of Norfolk Station			25
	Total			$ 5,350

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. C1e

PROJECT TITLE
ISLAMORADA, FLORIDA -- REPLACE STATION ISLAMORADA FACILITIES

NEAREST CITY & CONGRESSIONAL DISTRICT
Islamorada, Fla. - 12th

MISSION OR FUNCTION OF FACILITY:
Search and Rescue
Law Enforcement
Aids to Navigation

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
This project is necessary to provide adequate facilities in the middle and upper Florida Keys area to serve a rapidly growing boating population. The existing facility is a 60' long houseboat. It is inadequate from several standpoints including lack of space for personnel. It cannot withstand high wind and sea conditions likely to occur during the annual hurricane season from July to October. Search and rescue missions have increased dramatically in recent years, necessitating an increase in personnel and boats and the replacement of our temporary facilities with permanent ones.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
The proposed facility will include a multi-purpose station building consisting of barracks, recreation and messing facilities for the assigned personnel. It will also include communications, administration, shops, storage and emergency power facilities. The building will be raised on columns for flood protection and construction will be of a hurricane resistant type. The existing concrete and concrete block bulkhead will be repaired and the existing wooden wharf will be rebuilt. A boat ramp and fueling facilities will be provided. A tertiary sewage treatment plant providing post-chlorination will be constructed. Electric and telephone lines will be placed underground to prevent storm damage.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	0	18	0	18
PLANNED	0	0	30	0	30

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	-	$ -	$ -	$ -
(B) BEING ACQUIRED	2.7	100	-	100
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	2.7	100	-	100

THIS REQUEST → $ 640

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Multi-purpose Station Building	SF	7,460	$300
2.	Communications			50
3.	Waterfront Improvements			100
4.	Site work			190
	Total			$640

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. C1f

PROJECT TITLE
MONTEREY, CALIF. -- REBUILD MONTEREY STATION--CONSTRUCT SANTA CRUZ UNMANNED MOORINGS

NEAREST CITY & CONGRESSIONAL DISTRICT
Monterey, Calif. - 12th

MISSION OR FUNCTION OF FACILITY:

Search and Rescue
Law Enforcement
Aids to Navigation
Port Safety
Captain of the Port

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

The Monterey Bay area has a fast growing boating population. The Station, which is now located in a "temporary" Navy WW II building, is already inadequate to respond effectively to the SAR cases now occurring. There is not sufficient space for the men or equipment needed. Due to its wooden construction and deteriorated electrical system, this building is a fire hazard. Other problems, nearly as serious, are crowded living conditions and leaky, unsanitary plumbing.

There are no existing Coast Guard SAR facilities in nearby Santa Cruz. The SAR load is about 180 cases per year and is expected to increase due to the increasing capacity of marinas in the area.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

A new station building will be constructed adjacent to the water on existing land fill. It will contain operations, administrative and berthing spaces, and messing facilities. A shop and storage building will be constructed adjacent to the moorings. New boat moorings large enough to accommodate 1-44' MLB and 2-41' UTB's will be constructed.

At Santa Cruz, a mooring will be built to accommodate a 41' UTB or 44' MLB. A small general purpose building will be erected on this site.

The new station will accommodate the increase in personnel required to meet the greater work load, provide for newly assigned Captain-of-the-Port duties, and operate the mooring at Santa Cruz.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	1	1	35	0	37
PLANNED	2	2	66	0	70

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	4.5	$ 49	$ 29	$ 78
(B) BEING ACQUIRED	4.7	60	-	60
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	9.2	109	29	138

THIS REQUEST →	$ 1,450
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
	Monterey Station			
1.	Site preparation			$ 90
2.	Utilities			69
3.	Small boat moorings			161
4.	Buildings, including fallout shelter	SF	21,581	738
5.	Equipment, furnishings and boats			320
6.	Fuel system			11
	Santa Cruz Unmanned Moorings			
7.	Site preparation			10
8.	Utilities			14
9.	Building	SF	1,000	28
10.	Moorings			9
	Total			$1,450

Page No. AC-26

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C1g	NORTH BEND, OREGON --CONSTRUCT AIR STATION	North Bend, Ore. - 4th

MISSION OR FUNCTION OF FACILITY:
Search and Rescue
Enforcement of Laws and Treaties
Marine Environmental Protection

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
During the summer there is an intense concentration of small boats in the Coos Bay area. Also, a large fleet of commercial fishing boats operates year round. Helicopters are needed to supplement Coast Guard surface forces in the area, and are vital to effective SAR and law enforcement operations in this area. Aircraft from Astoria Air Station, 200 miles to the north, cannot meet the quick response requirements in the Coos Bay area. Equipped with aircraft capable of longer range flights, Astoria can provide offshore search and surveillance coverage for the Coos Bay area. Thus the two stations will complement each other. Seasonal deployments from Astoria have been tried and found wanting because of the high cost and inherent limitations of trying to operate away from support facilities.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Construct hangar and support facilities for establishment of a new air station. Hangar will include lean-to's for office and maintenance spaces. A fuel storage system and fire protection system for hangar and facilities are also included. Taxiways, ramps and aprons will be constructed. Space will be provided to accommodate group personnel.
This air station will operate 3 HH-52A helicopters. No new aircraft procurement is required as the helicopters to be assigned will be diverted from contingency reserve.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	0	0	0	0
PLANNED	18	8	68	0	94

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	10.6	$ 8	$ -	$ 8
(B) BEING ACQUIRED	-	-	-	-
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	10.6	8	-	8

THIS REQUEST →	$ 2,500
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Building construction.....	SF	48,000	$1,257
	(Includes hangar, shops, offices, covered vehicle storage, utility building)			
2.	Site development.....	-	-	518
3.	Exterior utilities.....	-	-	161
4.	Support equipment and furnishings.....	-	-	310
5.	Communications electronics.....	-	-	254
	Total.....			$2,500

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C2a	CAPE MAY, N.J. -- EXPAND ELECTRICAL CAPACITY AT RECRUIT TRAINING CENTER	Cape May, N.J. - 2nd

MISSION OR FUNCTION OF FACILITY:

Training of enlisted recruits

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

The expansion and replacement construction program at this unit has resulted in a need to expand the main electrical substation, which has reached its 3380 KVA capacity. Further increases in electrical demands anticipated in connection with increased recruit training requirements will overload this 30 year old system.

* Personnel strength (except recruits) include only those directly associated with the electrical substation operation.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Renovate existing electrical substation. Increase the electrical capacity and provide for future electrical needs through the installation of additional switchgear and a 15 KVA transformer.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Construct station administration building	1967	$ 828
Construct 300,000 gallon water tank	1968	260
Construct gym and medical/dental bldg.	1969	4,797
Construct addition to boiler heating plant	1972	210

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	~~CIVILIAN~~ RECRUITS	TOTAL
CURRENT	0	0	2 *	1,500	1,502
PLANNED	0	0	2 *	2,000	2,002

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	444.9	$ 894	$ 14,694	$ 15,588
(B) BEING ACQUIRED	-	-	-	-
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	444.9	894	14,694	15,588

THIS REQUEST →	$ 130
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Switchgear and transformer			$70
2.	Manhole, duct and cable			40
3.	Building renovations			20
	Total			$130

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C2b	YORKTOWN, VIRGINIA -- CONSTRUCT STUDENT BARRACKS	Yorktown, Va. - 1st

MISSION OR FUNCTION OF FACILITY:

Specialized enlisted and officer training officer candidate school.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

The World War II "temporary" wooden barracks used for housing students were scheduled for demolition upon completion of the 1968 barracks project at Yorktown. However, regular service training requirements began increasing at that time at such a rate that continued use of these barracks was required. These structures are now almost thirty years old, are fire and safety hazards for their inhabitants, and are well below the standards required for student housing.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Construct an enlisted student barracks of approximately 95,000 square feet to house 670 students using current habitability standards.

*Personnel allowance includes only those personnel directly associated with barracks maintenance and security.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Construct engineman school	1967	$ 398
Construct two 500-man barracks	1968	2,650
Construct galley mess building	1969	1,005
Construct fire station/operations building	1970	430

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT*	0	0	12	0	12
PLANNED*	0	0	12	0	12

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST →	$ 3,250
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Construct barracks building	SF	95,000	$2,855
2.	Furnishings and outfitting	-	-	277
3.	Demolition, grading and pavings	-	-	50
4.	Utilities	-	-	68
	Total	-	-	$3,250

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C2c	COCOA BEACH, FLA. - ESTABLISH C-130 FACILITY AT PATRICK AFB	Cocoa Beach, Fla. - 5th

MISSION OR FUNCTION OF FACILITY:

Search and Rescue
Marine Environmental Protection
Aids to Navigation
Marine Sciences
Enforcement of Laws and Treaties
General Support

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

Missions in the southwestern Atlantic, Caribbean, and Gulf of Mexico areas require increasing amounts of long range search and surveillance flight time of the type only available with C-130 aircraft. To provide the needed capability and complement the time now being provided from the other East Coast air station with C-130's additional aircraft were approved in the FY 72 appropriation and 2 are requested in FY 73.

Miami Air Station, the site originally planned for these aircraft, is in an area of high traffic density and impacted housing, making operation of large aircraft difficult and unpopular. Costly additions would have been required and housing for crews would not be available. By locating these aircraft at Patrick AF Base a cost avoidance of about $1 Million can be realized and we can take advantage of already existing extensive support facilities.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Modify facilities at Patrick AFB to meet the necessary operational, maintenance support and personnel requirements for 3 C-130 aircraft. Construct a maintenance nose dock. Renovate existing hangar for operation and administrative spaces, communications space, shops, supply storage, watchstander quarters, and maintenance facilities.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT					
PLANNED *	20	2	123	-	145

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST →	$ 920
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Space aleration to existing buildings			$325
2.	Equip. and support material			275
3.	Nose dock			320
	Total			$920

*(This is the ultimate station personnel allowance. Increases for the C-130's in the FY 72 and FY 73 budgets are shown on the respective aircraft AC&I sheets. The personnel will actually be budgeted in FY 72-75 to coincide with delivery dates for the aircraft.)

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)
Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. C2d

PROJECT TITLE
FORT PIERCE, FLORIDA -- REBUILD FORT PIERCE STATION

NEAREST CITY & CONGRESSIONAL DISTRICT
Fort Pierce, Fla. - 11th

MISSION OR FUNCTION OF FACILITY:
Search and Rescue
Law Enforcement
Aids to Navigation

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The present physical plant is in two locations - the operations/administrative spaces on a 13 acre plot and the barracks on a 1.2 acre plot - separated by nearly a mile. The buildings are of wood frame construction in advanced stages of deterioration. The barracks were constructed in 1936 as a lifeboat station for 10 men, and the operations building was constructed for the Lighthouse Service in 1930 as a buoy depot. The physical layout and condition of the existing facilities prohibit proper renovation of this totally inadequate plant and inhibit effective operations.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
The new station will be consolidated at the 13 acre site. Construction will include a single story administration/operations/berthing/messing building. The facilities will accommodate the increase in personnel required to meet the increasing work load and will contain the recreational spaces for the station crew and the crew of a WLIC based at Fort Pierce. A shops building will contain engineering shops, work space, ATON and marine type storage. The north side of the station property will be bulkheaded and filled. The existing sheet steel bulkhead will be encased in concrete. A waste disposal plant will be constructed.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	1	25	0	26
PLANNED	0	1	34	0	35

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	14.2	$ 7	$ 242	$ 249
(B) BEING ACQUIRED	-	-	-	-
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	14.2	7	242	249

THIS REQUEST → $ 1,200

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Waterfront improvements			$ 444
2.	Station building, shops and storage, including fallout shelter	SF	9,760	370
3.	Site work			112
4.	Communications			53
5.	41' Utility boat	Ea.	1	175
6.	Outfitting and furnishings			46
	Total			$1,200

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C2e	PORT ISABEL, TEXAS--RENOVATE PORT ISABEL STATION	Port Isabel, Texas 15th

MISSION OR FUNCTION OF FACILITY:
Search and Rescue
Law Enforcement
Aids to Navigation
Port Safety

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The existing barracks and administrative building is wood frame on a concrete platform. The building requires considerable time and funds to keep it at an acceptable level of repair. Total berthing space available is 890 SF, in a single room, for less than 25 SF per man. The minimum acceptable standard is 100 SF per man. To ease the acute shortage of barracks space, a temporary annex was built on ground level. This is very susceptible to severe weather and flooding durihg hurricanes. The waterfront facilities are in good condition and are generally adequate. However, during certain seasons the wind builds up a chop that makes the boat basin unusable much of the time.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY: A new barracks/office/mess building will be constructed near the waterfront area. It will be elevated for storm protection. Adequate space will be provided to accommodate an increase in personnel required to meet operational needs. The existing boathouse will be altered so that a storage room will become an Electronics Repair Shop. The north wall of the boat basin will be extended and increased in height to protect the basin. A sewage pumping station will lift sewage discharges to the municipal treatment system. All communications equipment will be relocated to the new station building and necessary antenna systems will be erected.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	1	44	0	45
PLANNED	1	1	58	0	60

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	27.5	$ -	$ 505	$ 505
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED	27.5	-	505	505

THIS REQUEST →	$ 940
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Multi-Purpose station building including fallout shelter	SF	9620	$478
2.	Waterfront improvements			181
3.	Utilities			40
4.	Communication			86
5.	Paving, grading and landscaping			100
6.	Convert storage room to electronics repair shop			10
7.	Furnishings and equipment			45
	Total			$940

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)
Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / C2f	DANA, INDIANA -RENOVATE LORAN-C STATION BARRACKS	Dana, Ind. 7th

MISSION OR FUNCTION OF FACILITY:
Loran-C transmitting station

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The existing barracks is a converted wood frame farm house that is over crowded and does not meet current safety and habitability standards.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Utilize existing farm house kitchen/dining area, dayroom and berthing of seven (7) men. Procure and install adjacent to existing structure one mobile home for additional berthing space. Cost includes renovation of farm house, mobile home procurement and installation, exterior utilities site development outfitting.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	1	1	21	0	23
PLANNED	1	1	21	0	23

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	-	$ -	$ -	$ -
(B) BEING ACQUIRED	-	-	-	-
(C) LEASES AND EASEMENTS	101	-	449	449
(D) TOTAL AVAILABLE OR FUNDED	101	-	449	449

THIS REQUEST →	$ 60
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Renovate existing Dana Loran-C station berthing facilities			$45
2.	Procure and install one mobile home			15
	Total			$60

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / D1	ABATE POLLUTION FROM COAST GUARD VESSELS	

MISSION OR FUNCTION OF FACILITY:
The facilities in loved in this project include many types of CG vessels involved in all mission of the Coast Guard.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The Federal Water Pollution Control Act, as amended, requires vessels to have marine sanitation devices which meet standards of performance to be issued by the Environmental Protection Agency (EPA). Most Coast Guard vessels have no equipment of this type. Installation of equipment was started in FY 1972 on selected vessels. This is a follow-on program.

*An increase of 63 enlisted personnel will be required when sewage treatment devices are installed. This phase relates to holding tanks only.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Alter Coast Guard vessels by installing piping, sewage retention tanks and other necessary modifications so that treatment devices can be quickly installed when they are procured. Initial installation of equipment will permit vessels to retain wastes aboard while operating in restricted areas and to discharge wastes ashore into sewage systems while moored.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Procure and install sewage system 72 vessels	1972	$ 3,200

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT					
PLANNED *	0	0	0	0	0

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST →	$ 3,200
FUTURE COSTS - *TOTAL NEXT 4 YEARS* →	$38,668

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Procure and install sewage storage system on 123 vessels	Ea.	123	$3,060
2.	Oily water separator program (proto-type)	Ea.	1	140
	Total			$3,200

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / D2	ABATE POLLUTION FROM COAST GUARD SHORE STATIONS	Miami, Fla.:11, Galveston, Tx:9

MISSION OR FUNCTION OF FACILITY:

Marine Environmental Protection
Aids to Navigation
Law Enforcement
Search and Rescue
General Support

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

Executive Order 11507, issued on 4 February 1970, requires all Federal facilities to meet the water quality standards and related plans of implementation, adopted pursuant to the Federal Water Pollution Control Act. Many Coast Guard stations do not meet these requirements and they require corrective action.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Connect shore station sewers with municipal system at Miami Beach and of sewage treatment plant at Galveston. Dockside sewer connections will be made to collect and dispose of sewage from Coast Guard vessels.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Construct sewage disposal facilities at 3 stations	1972	$ 360

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	0	0	0	0
PLANNED	0	0	0	0	0

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST	$ 300
FUTURE COSTS - *TOTAL NEXT 4 YEARS*	$ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Base Miami Beach sewage system			$189
2.	Base Galveston sewage system			111
	Total			$300

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. D3

PROJECT TITLE
NATIONAL RESPONSE CENTER INFORMATION SYSTEM EQUIPMENT

NEAREST CITY & CONGRESSIONAL DISTRICT
Washington, D. C.

MISSION OR FUNCTION OF FACILITY:
Marine Environmental Protection

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
The Federal Water Pollution Control Act, as amended has directed development of a National Contingency Plan. The Plan published 20 August 1971 establishes the requirement for the National Response Center for control of pollution by oil and hazardous polluting substances at Coast Guard Headquarters, Washington, D. C. The existing Flag Plot facility of CG Headquarters marginally meets this requirement; however, it is not adequate to provide the control and coordination needed in the event of a major environmental disaster or a run of smaller casualties. It was designed for traditional CG command and control functions only.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Expand existing physical facilities, hardware, and equipment for coordination and control of a pollution incident in which national level involvement is required. Procurement will include communication network and terminal equipment. The system also will be used for marine casualties involving hazardous materials.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
		$

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	5	0	0	6	11
PLANNED	5	0	0	18	23

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST → $ 100

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 400

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Switching equipment			$ 31
2.	Data link terminal equipment			40
3.	Dictaphone recorder			4
4.	Visual displays and graphic			17
5.	Ancillary equip. and furnishings			8
	Total			$100

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. E1

PROJECT TITLE: WATERWAYS AIDS TO NAVIGATION PROJECTS

NEAREST CITY & CONGRESSIONAL DISTRICT:

MISSION OR FUNCTION OF FACILITY:
Aids to Navigation

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
This request results from the continuing authority and responsibility to provide for the navigational needs of the maritime public and the armed forces. New aids are established, as required, to mark Corps of Engineer navigation projects while existing aids are improved to keep pace with changing maritime user requirements.

The Coast Guard operates more than 45,000 aids to navigation which are generally in excellent condition. Their importance to the mariner necessitates particularly rigorous maintenance standards.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Subprojects in this request comprise requirements for buoy, fixed marks, lights, sound and other signals to assist in marine navigation. Projects are based on Corps of Engineer Projects. In addition, smaller projects are required at various locations to meet changes resulting from acts of nature. Fluctuations in material procurement and work schedules, and the completion of Corps projects may require substitution and modification of planned accomplishments. The projects listed are representative. The list is not all-inclusive, nor does it indicate priorities.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Waterways Aids to Navigation Projects	1967	$ 2,168
Waterways Aids to Navigation Projects	1968	2,208
Waterways Aids to Navigation Projects	1969	2,200
Waterways Aids to Navigation Projects	1970	2,100
Waterways Aids to Navigation Projects	1971	1,260
Waterways Aids to Navigation Projects	1972	1,400

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT					
PLANNED					

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST → $ 1,500

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 8,000*

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT		UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
	Representative Waterways Aids to Navigation Projects				
	C & D Canal, Delaware	$138,400			
	Murrels Inlet, South Carolina	71,000			
	Jacksonville Harbor, Florida	42,500			
	Matagorda Bay Texas	80,300			
	Trinity River, Texas	50,600			
	Snake River, Washington	134,000			
	Maunalua, Hawaii	53,350			
	Monterey Horbor, California	21,500			
	Weymouth - Fore River, Massachusetts	80,000			
	* Future costs are associated with projects that will not be pursued in FY 1973	TOTAL			$1,500

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. E2

PROJECT TITLE
LIGHTHOUSE AUTOMATION AND MODERNIZATION PROGRAM (LAMP)

NEAREST CITY & CONGRESSIONAL DISTRICT

MISSION OR FUNCTION OF FACILITY:
Major coastal aids to navigation.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
For about a decade the Coast Guard has been converting lighthouses to permit unmanned operation whenever possible. The resulting savings from personnel reductions usually offsets the cost of automating the lights in four or five years. The elimination of many isolated manned light stations not only saves personnel costs but reduces personnel hardships.

Before automation, the typical station consists of a light tower, fog signal, radiobeacon, power machinery, shop building, and living spaces operated by four to six men. After automation the aids to navigation are operated and monitored automatically.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Manned light stations, many isolated along the coast and on offshore islands, will be converted to automatic operatiion. Most of the lights are to be automated in three phases with each phase accomplished in one fiscal year. The first phase requires engineering design and procurement. Phase two involves installation, calibration and monitoring. The final phase consists of equipment checks razing unnecessary structures and securing the remaining buildings before removing personnel. Approximately 25% of the personnel from the automated station are retained to provide necessary maintenance to the station.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Automate Various Light Stations	1968	$ 1,011
Automate Various Light Stations	1969	591
Automate Various Light Stations	1970	864
Automate Various Light Stations	1971	615
Automate Various Light Stations	1972	1,000

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	0	123	0	123
PLANNED	0	0	35	0	35

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED	*All land is owned. No additional			
(C) LEASES AND EASEMENTS	required			
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST → $ 850

FUTURE COSTS - TOTAL NEXT 4 YEARS → $4,253

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	1st District: Libby Island Light			$130
2.	3rd District: Cape May Group - Phase III			160
3.	5th District: Little Creek Group			85
4.	9th District: Cape Vincent Group - Phase III			25
	St. Ignace Group - Phase III			100
5.	12th District: Base YBI - Phase III			15
6.	14th District: Makapuu Point			75
7.	17th District: Cape Decision, Cape Spencer, Cape St. Elias, Cape Hinchinbrook : Phase III			260
	TOTAL			$850

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / E3	PRESQUE ISLE, MAINE - CONSTRUCT STATION FOR LORAN-C DEVELOPMENT PROJECT - PHASE III	Presque Isle, Ma. 2nd

MISSION OR FUNCTION OF FACILITY:

Long range Radio Aids to Navigation (LORAN-C)

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

The present electronic equipment in loran-C station is overage and obsolete. Replacement equipment is required in 27 stations to maintain Department of Defense requirements for accuracy and availability.

The Department of Defense has indicated a requirement for loran-C in its present or an expanded configuration until at least 1982. Presently there are three generations of electronic equipment installed that are becoming more and more expensive to maintain. Pulse shapes cannot be standardized and off-air time will increase. The experience level and numbers of electronic technicians is dropping.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Construct a loran-C test and evaluation station near Presque Isle, Me. This station will be linked with an existing station at Nantucket, Mass. to provide an additional 180,000 sq. nautical miles of loran-C coverage off the NE U. S. Coast and improve the existing coverage from 1:10 to 1:3 signal to noise ratio. The facility will provide a realistic environment in which to develop and test new concepts of operation made possible by the development of the new solid state loran-C electronics. Future benefits include reduced manning, improved maintenance procedures, remote control and reduce operating expenses at existing loran-C stations.

*Allowance for Presque Isle Station only

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Loran-C Development Project - Phase I	1971	$ 475
Loran-C Development Project - Phase II	1972	3,250

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	0	0	0	0
*PLANNED	0	1	11	0	12

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	254	$ 46	$ -	$ 46
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED	254	46	-	46

THIS REQUEST	$ 3,650
FUTURE COSTS - *TOTAL NEXT 4 YEARS*	$31,000

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Procure transmitting equipment (including spares)	SF	3,725	$1,230
2.	Procure communications equipment			495
3.	Procure monitor equipment			150
4.	Procure and construct multi-tower antenna			1,040
5.	Sitework			235
6.	Construct operations/transmitter building and facilities			375
7.	Delivery and installation of equipment and contingency			125
	Total			$3,650

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. E4

PROJECT TITLE: HOUSTON, TEXAS--ESTABLISH VESSEL TRAFFIC SYSTEM

NEAREST CITY & CONGRESSIONAL DISTRICT: Houston, Texas 8th

MISSION OR FUNCTION OF FACILITY:
Traffic management/collision avoidance — Port Safety
Environmental Protection
Expedite safe traffic flow

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
Paragraph five of the President's message to Congress on 20 May 1970, tasked the Secretary of Transportation with establishing traffic systems to "make ports such as New York, New Orleans, and Houston safer than they are at present."

The port of Houston is the third largest in the United States, handling over 62 million tons of cargo per year of which 40 million is bulk liquid. Seventy percent of cargo handled in Houston is classified dangerous and 90% of poison transported by water in the U. S. moves through Houston.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
This project will provide a communication network with electronic surveillance of limited areas to support a vessel traffic system. A traffic center will be built to contain communication facilities and surveillance displays. The center will be manned by a continuous watch. VHF-FM with microwave relays will provide reliable communications along the length of the system.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Construct Houston Station	1970	$ 2,442

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	0	0	0	0	0
PLANNED	8	0	29	0	37

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED	8.4	$ 460	$ 2,050	$ 2,510
(B) BEING ACQUIRED	-	-	-	-
(C) LEASES AND EASEMENTS	-	-	-	-
(D) TOTAL AVAILABLE OR FUNDED	8.4	460	2,050	2,510

THIS REQUEST → $ 2,000

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Traffic control central building	SF	3,000	$ 310
2.	System towers	Ea.	8	100
3.	Electronic equipment			1,000
4.	Electronic installation			390
5.	Electronic spare parts			200
	Total			$2,000

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)
Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR / BUDGET ITEM NO.	PROJECT TITLE	NEAREST CITY & CONGRESSIONAL DISTRICT
1973 / F	PUBLIC FAMILY QUARTERS	

MISSION OR FUNCTION OF FACILITY:

Provide housing for Coast Guard personnel and dependents in areas where living accommodations are inadequate and do so within the standards established in OMB Circular No. A-18.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

In 1970 a survey indicated that 4,206 of 13,845 married Coast Guardsmen were inadequately housed. DOD adequacy standards which include distance from duty station and cost, as well as the character of the adjacent community, were used in evaluating survey data. The primary thrust of the housing program continues to be the provision of adequate quarters for enlisted personnel and junior officers. Consonant with DOD provisions, and subject to OMB restriction on size and configuration, not more than one set of quarters for flag officers will be programmed in any given year.

Assets: 2307 owned, 1570 leased, 750 DOD or other agency.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

Construct approximately 223 units of housing at various locations. The final selection of sites and exact number of units is subject to progress in land acquisition, market conditions, and in some cases, status of DOD projects. Where feasible, joint construction with other government agencies has been and will continue to be used in order to reduce costs through large contract negotiations.

*Personnel Allowance includes only those personnel directly associated with operating and maintainance of Coast Guard owned housing units.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Construct 181 units at various locations	1967	$ 5,500
Construct 235 units at various locations	1968	6,301
Construct 190 units at various locations	1969	6,000
Construct approx. 200 units at various locations	1970	5,000
Construct approx. 104 units at various locations	1971	2,750
Construct approx. 204 units at various locations	1972	5,740

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT*	0	1	22	23	46
PLANNED*	0	1	45	33	79

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST	$ 6,430
FUTURE COSTS - *TOTAL NEXT 4 YEARS*	$ 28,000**

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Miami, Florida	Ea.	100	$2,500
2.	Cordova, Alaska	Ea.	20	790
3.	Homer, Alaska	Ea.	20	790
4.	Merrimac River Station, Massachusetts	Ea.	8	200
5.	Sandy Hook Station, New Jersey	Ea.	21	530
6.	Fort Pierce Station, Florida	Ea.	11	280
7.	Cape Hatteras, North Carolina	Ea.	23	550
8.	Seward, Alaska	Ea.	20	790
	Total			$6,430

**Future costs are not follow-on costs for this project but estimate level of funding required for the public quarters program for this period.

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. G1

PROJECT TITLE
SURVEY AND DESIGN OF VARIOUS FACILITIES

NEAREST CITY & CONGRESSIONAL DISTRICT

MISSION OR FUNCTION OF FACILITY:
The various facilities supported encompass all Coast Guard programs.

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:
Advance surveys, design, and planning in 1973 are required to insure proper budgeting for construction or major alteration projects in future years. The projects for which this preliminary work must be accomplished are part of the long-range plan for facility requirements of the Coast Guard.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:
Survey and design funds are required to plan an effective vessel and shore construction program to insure timely accomplishment of projects when funds are appropriated. The 1973 survey and design funds will be used for advance engineering studies and design of future major construction projects. The FY 1973 program also provides for feasibility studies and preliminary and contract design for future construction and major alterations to vessels. Funds will also be used for site surveys and the purchase of real property to insure site availability for future facilities provided no excess property is available from other agencies.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Survey and Design of Various Facilities	1968	$ 2,000
" " " " " "	1969	4,035
" " " " " "	1970	2,309
" " " " " "	1971	1,000
" " " " " "	1972	1,800

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT					
PLANNED					

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST → $ 3,380

FUTURE COSTS - *TOTAL NEXT 4 YEARS* → $ 0

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Design for future construction and alteration of vessels	-	-	$300
2.	Site acquisitions	-	-	940
3.	Architect-engineer designs (including advance planning)			2,140
	Total			$3,380

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

FISCAL YEAR 1973
BUDGET ITEM NO. G2

PROJECT TITLE
ENGINEERING AND LOGISTICS - SUPPORT OF CONSTRUCTION PROJECTS

NEAREST CITY & CONGRESSIONAL DISTRICT

MISSION OR FUNCTION OF FACILITY:

REASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:

Each construction project requires contracting supervision, inspection and overhead expenses which are necessary to ensure the success of the endeavor. These expenses are basically those, independent of advance planning and design, that are incurred to administer the current year AC&I program.

NARRATIVE DESCRIPTION OF REPLACEMENT FACILITY:

These administrative expenses include:

a. Salaries of engineers, inspectors, and supply personnel assigned to the program.
b. Travel and per diem costs of engineers, technicians, etc., required in the inspection and supervision of construction.
c. Administrative supplies, equipment, and other miscellaneous expenses not identifiable with specific projects.

APPROPRIATION HISTORY

PROGRAM	APPROPRIATED YEAR	APPROPRIATED AMOUNT ($000)
Support of construction projects	1968	$ 3,711
" " " "	1969	4,062
" " " "	1970	4,191
" " " "	1971	3,200
" " " "	1972	4,432

PERSONNEL STRENGTH

	OFFICER	WARRANT	ENLISTED	CIVILIAN	TOTAL
CURRENT	61	14	64	136	275
PLANNED	65	18	39	136	258

REAL PROPERTY SUMMARY ($000)

	ACRES	LAND COST	VALUE OF IMPROVEMENTS	TOTAL
(A) OWNED		$	$	$
(B) BEING ACQUIRED				
(C) LEASES AND EASEMENTS				
(D) TOTAL AVAILABLE OR FUNDED				

THIS REQUEST → $ 4,120

FUTURE COSTS - TOTAL NEXT 4 YEARS → $ 18,000*

COST ESTIMATE OF WORK

ITEM NO.	PROJECT ELEMENT	UNIT OF MEASURE	QUANTITY	ESTIMATED COST ($000)
1.	Personnel compensation and benefits	-	-	$3,570
2.	Travel	-	-	300
3.	Other	-	-	250
	Total			$4,120

*Future costs are not follow-on costs for this project but an estimated level of funding required to support AC&I projects now planned for this period.

DEPARTMENT OF TRANSPORTATION, U. S. COAST GUARD
CGHQ-4265 (REV. 12-71)

Previous editions are obsolete

Senator LONG. We will now hear from John P. Olsson, Deputy Under Secretary of the Department of Transportation.

STATEMENT OF HON. JOHN P. OLSSON, DEPUTY UNDER SECRETARY, DEPARTMENT OF TRANSPORTATION, AND ADM. CHESTER R. BENDER, COMMANDANT, U.S. COAST GUARD

Mr. OLSSON. Mr. Chairman, I am John Olsson, the Deputy Under Secretary of the Department of Transportation. I appreciate the opportunity to appear before you again this year on behalf of Secretary Volpe and the U.S. Coast Guard, in support of S. 3241, the bill now before you which would authorize appropriations for the Coast Guard for fiscal year 1973.

Mr. Chairman, since I appeared before this committee last March, the Coast Guard, under the able leadership of its commandant, Adm. Bender, has continued to provide invaluable service to this Nation. The Coast Guard has effectively performed its varied missions to insure that our waterborne commerce moves safely and efficiently. In addition to its historical responsibilities for search and rescue, providing aids to navigation, and enforcing safety regulations, the Coast Guard has been given greater responsibilities for marine environmental problems and recreational boating safety.

These expanded responsibilities have been recognized in our authorization request for fiscal year 1973. The amount requested in the President's budget for "Acquisition, construction and improvements," totals $135.7 million for 1973, $38 million more than the 1972 appropriation. To our knowledge this A.C. & I. request is the largest amount requested for this appropriation. It recognizes the needs of the Coast Guard for modernizing and improving their shore facilities, as well as including funds for a second large new icebreaker, and two C–130 long-range aircraft.

Under the new authority granted by the Federal Boat Safety Act of 1971, which this committee played such an important role in developing, the Coast Guard will administer the first full year of a coordinated national boating safety program during 1973 to improve recreational boating safety and assist the States in establishing expanded boating safety programs. Recreational boating is one of the fastest growing activities in this Nation, with a total of about 7 million boats now operating on our lakes, inland waterways, and coastal waters. Our 1973 request for $7.5 million for "State boating safety assistance," is the full amount authorized and will provide the financial assistance to meet this growing need for improved safety at the State level.

Another recently enacted legislative measure—the Vessel Bridge-to-Bridge Radiotelephone Act of 1971—requires most vessels to have the capability of communicating their intentions to one another through voice radio. This legislation is another measure which will aid the Coast Guard in its continuing efforts to improve the safety of marine traffic in our ports and waterways. In addition, activity will continue on the development of other marine traffic systems for use in congested ports and waterways. Such systems will assist in reducing the possibility of collisions involving ships containing hazardous materials and polluting substances. This activity would, of

course, be expanded upon enactment of the "Ports and waterways safety measure," which passed the Senate and has also passed the House and is now awaiting conference. The general area of protecting the marine environment and preventing marine pollution is becoming an increasingly important mission for the Coast Guard. During the past year, for example, the Coast Guard received reports of 9,000 marine pollution incidents of varying sizes. The regional response centers and special pollution strike force teams have proved to be an important element in the protection of our marine environment. Both in its operations and in its research and development programs the Coast Guard will continue to give this mission a high priority within its overall responsibility and concern for pollution abatement.

Finally, I should also like to briefly mention the Coast Guard's fine performance in two other areas of activity; first, in protecting the rights of our Nation's fishing industry, and second, in search and rescue operations. As the world competition for resources from the see becomes greater, the protection of our fishing industry will gain even more importance. Similarly, search and rescue operations are projected to increase by 5-percent annually. During the past year the Coast Guard answered 45,000 calls for search and rescue assistance, assisted a quarter of a million people, and saved 2,500 lives and an estimated $4.5 in property. This is a record of which we can all be proud.

Mr. Chairman, I have gotten to know and respect the Coast Guard as a highly efficient and effective organization. I speak for Secretary Volpe and the entire Department when I say that we are proud of the outstanding record of service which the Coast Guard continues to provide to our Nation. I would also commend this committee for its unfailing support of the Coast Guard and its deep interest in assuring that the Coast Guard has the necessary resources to maintain its high level of performance.

We believe that the Coast Guard request for fiscal year 1973 is reflective of the responsibilities—both old and new—which the Coast Guard must meet; and that it is responsive to the needs which these responsibilities create. We appreciate your past support of the Coast Guard and we urge your assistance in assuring that the Coast Guard is able to continue and enhance its outstanding record of service.

Now I have the privilege of introducing Adm. Chester Bender, Commandant of the U.S. Coast Guard, who will describe in more detail some of the most recent activities of the Coast Guard and the specific items which are included in the authorizing legislation.

Thank you.

Admiral BENDER. Mr. Chairman, it is a privilege to appear before you today for our authorization hearings. Before I discuss this bill, Mr. Chairman, I would like to review some of the changes in the Coast Guard which have resulted from recent legislation.

The new amendments to the Federal Water Pollution Control Act, which were incorporated in the Walter Quality Improvement Act of 1970 have been the most significant factor in our pollution control effort to date. The programs developed as a result of this legislation, together with subsequent delegations of authority by the President through Secretary Volpe to the Coast Guard, and the strong support of this committee and our appropriations committee have increased our activities in this field tenfold.

Coast Guard efforts have been channeled into three principal programs: detection and enforcement involving oil spills, development of cleanup capability, and tightening of marine safety regulations. Approximately 500 new positions were budgeted for these activities in the current fiscal year. The six patrol aircraft for which reactivation funds were appropriated this year are flying on the Atlantic, Pacific, and gulf coast. Purchase of our Air Deliverable Antipollution Transfer system or ADAPTS, and our Open Water Oil Stick Containment system have been held up pending the results of some R. & D. tests. It appears now that our specifications can be firmed up and we will proceed with the procurement of our production models.

Since the signing of the Federal Boat Safety Act of 1971 in August 1971, the Coast Guard has been moving to implement its many provisions by Federal regulations, issued under the Administrative Procedure Act. In one area, we have been able to utilize the law immediately without implementing regulations. Section 13 authorizes Coast Guard boarding officers to direct the operator of a boat being used without sufficient life-saving or firefighting devices, or in an overloaded condition, to terminate his use and return to a safe mooring. This authority has been delegated to Coast Guard District Commanders with excellent results. In two districts in which we analyzed results, the authority was used almost 300 times with only two objections on the part of the boating public. The President's budget contained a request for supplemental appropriations for fiscal year 1972 for 72 personnel to implement the act and $3 million for State boating safety assistance.

I would also like to mention the improvements that have been made to our inventory of ships and aircraft since we appeared before this committee last year. Three new 378-foot HEC's have been added since the last authorization hearings. We also taken delivery on a 157-foot coastal buoy tender and three medium range recovery helicopters during this period.

Of course, also during this period the President's economic program to hold down the cost of living and stabilize the dollar was going into effect. The Coast Guard could not go ahead with its new program under the existing personnel ceilings if it were to retain all of its ongoing functions. Therefore, the lower priority programs, those which we felt could be curtailed with little impact on basic services, were selected for deletion or reduction. In many cases these changes had been planned for implementation over the next several years.

In our ocean operations program, on the 15th of January, Ocean Station Victor, which is situated halfway between Midway Island and Tokyo, Japan, in the Pacific, was discontinued and three high endurance cutters for the operation of that station are being decommissioned; in fact have been decommissioned.

We have also decommissioned three other high endurance cutters which had been assigned to ocean station duty. In addition, the cutter, *Rockaway*, was decommissioned the 20th of January.

In our aids to navigation program, the *Kukui*, a logistics vessel for loran stations in the Pacific area was decommissioned. C–123 aircraft at Naples, Guam, and Miami that were utilized in support of

isolated loran stations were eliminated. Commercial air support for these stations is being arranged. One loran station (Miyako Jima) will be operated by the Japanese after the reversion of Okinawa.

The cutter, *Tanager*, which had been used for reserve training on the west coast was decommissioned, as were two buoy tenders.

Now, turning to matters unrelated to these events, on December 21 of last year, the cutters, *Castle Rock* and *Cook Inlet*, were decommissioned at Saigon and turned over to the Republic of Vietnam. This signaled the end of our activities afloat in Vietnam. These two vessels are being replaced by the two new 378-foot HEC's being delivered this year.

Last year, Mr. Chairman, I spoke about thinking of our priorities as the three "P's"—people, plant, and protection. This year we have assigned a high priority to projects which will enhance the living and working conditions of our people, to projects which will permit us to make best use of the people and experience we have, and to projects which will permit us to offset lost experience with more training. We also are stressing those projects which will enable us to do our share in restoring and preserving the marine environment.

I should like to emphasize that our efforts in protecting and enhancing the marine environment are not limited to those coming under the aegis of this authorization. For the Coast Guard, the President's budget provides nearly $11 million under Research and Development for this purpose. Included among the efforts for which these funds will be used are: development of a high speed delivery technique for our oil containment system, prototype development of two different oil recovery systems, evaluation of oil slick cleanup agents as a backup for mechanical recovery systems and continuation of development of suitable sewage treatment equipment for our vessels. The costs of operating reactivated aircraft for pollution surveillance and to pay our augmented strike forces are funded from our operating expense appropriation, as are some other projects for abating pollution from Coast Guard facilities.

Let me touch briefly on the major expenditures for which we are requesting authorization:

VESSELS

The largest item is a second polar icebreaker for which we are asking $66 million. Our need for this vessel is well known to this committee. By use of an augmented crew, this ship will provide 240 operating days to our icebreaker fleet.

We are also requesting $8,750,000 to complete the major restoration, authorized last year, of two of our present fleet of icebreakers. The 1972 appropriaton provided funds for design work and purchase of long lead time materials. This request provides for purchase of other materials and for installation costs. We also need $250,000 to effect further repairs to the *Glacier*, the youngest and largest of our present fleet.

A pressing need, for which we are requesting $2,870,000 is renovations to five of our 180-foot class oceangoing tenders and one coastal tender. All of our 180-foot tenders are of World War II vintage. The habitability and working conditions on these ships subject the crew to particularly unacceptable living conditions. We envisioned that major renovations to 14 and austere renovations to 12 of this fleet will pro-

vide early improvements in living conditions, and extend the life of these ships sufficiently to allow time to evaluate new buoy servicing techniques recommended by our Aids to Navigation Study, and to develop the most effective design before we begin to construct replacement for these vessels.

AIRCRAFT

We are also requesting an authorization of $10 million for two additional long-range search aircraft. One of the planes will be used in the Caribbean and Gulf of Mexico and the other will be employed over Alaskan waters. Procurement of these two aircraft will bring the Coast Guard's C–130 inventory up to a total of 21. It is anticipated that this will complete our requirements for C–130's. If these aircraft are not procured during fiscal year 1963, we might not have another chance, for it is very possible that they will not be in production in later years.

There may appear to be an inconsistency in requesting these aircraft at the same time that we are eliminating C–123 aircraft at Naples, Guam, and Miami. I would like to point out, Mr. Chairman, that the C–123's are old and have been scheduled for phase out. Further, and more important, the 123's are a single-mission aircraft—used only for logistic support—whereas the C–130's are multimission aircraft suitable for search and rescue and other Coast Guard missions as well as for logistic support.

SHORE UNITS

Our requests for the other units also conforms to the sense of priorities I have enunciated. Perhaps a few deserve special mention.

One of these is the Coos Bay Air Station at North Bend, Oreg. There has been a great demand for our services in the Pacific northwest where search and rescue activities and fishing surveillance are increasing at a substantial rate.

Another item of importance is the establishment of a vessel traffic system at Houston, Tex. Seventy percent of the 62 million tons of cargo handled per year in Houston is classified as dangerous. The vessel traffic system is designed to avoid collisions which could allow these dangerous materials to contaminate the environment or to cause personnel injuries. This project will provide a communication network with electronic surveillance of limited areas. VHF–FM with microwave relays will allow a continuous watchstander in the traffic control center to maintain communications along the length of the system.

It should be noted that the theme of improving living and working conditions permeates the shore units program. New berthing spaces are programed for; Brooklyn Air Station, N.Y.; Sandy Hook, N.J.; Portsmouth, Va.; Islamorada, Fla.; Monterey, Calif.; Yorktown, Va.; Fort Pierce, Fla.; Port Isabel, Tex.; and Dana, Ind.

Let me emphasize that improvements to these shore stations will result in increased operational capability as well as better living conditions for our men. The new station at Fort Pierce, for example, will provide space for personnel who will man an additional 41-foot boat at this station which is the only search and rescue unit between Port Canaveral and Lake Worth, a distance of 175 miles.

To protect our environment, $3,600,000 is requested to continue prior years' projects to abate pollution from Coast Guard ships and shore

stations and to procure hardware for a National Response Center at Washington, D.C., which will enable us to coordinate and control pollution incidents in which national level involvement is required.

I have also noted the emphasis being placed upon research and development in the area of marine environmental protection. The output of our R. & D. programs should result in better equipment which we will ask you to authorize in the future.

We have forecast an average military active duty personnel strength of 39,074, an increase from 38,851 authorized last year. Line 14 of page 4 of S. 3241 should therefore read 39,074 in lieu of 30,074.

EXTENSION OF LEASED HOUSING AUTHORITY

There is one final topic that I would like to address briefly. The Coast Guard's statutory authority to lease housing facilities in partial and important satisfaction of our public housing need will expire on June 30, 1972, the end of the current fiscal year. In years past, that authority was periodically extended in the annual authorization bill, predecessor to the bill here under consideration. In 1970, however, the fundamental lease authority was incorporated into section 475 of Title 14 by enactment of Public Law 91–278. That public law originated as an administration omnibus type proposal which contemplated a permanent Coast Guard lease authority in order to avoid what had been the periodic but inevitable need for extension. This committee, however, determined it appropriate at the time to continue the pattern of biennial review and amended the proposal so that the lease authority expires this year.

We are presently engaged within the executive branch in renewing the original proposal. Until that issue can be presented to the Congress and because of the imminence of the expiration of this much-needed authority, we consider it expedient to request that the authorization bill which you have before you be amended to extend the lease authority for an additional 2-year period. I am prepared now to provide language to the committee to accomplish this result.

In conclusion, Mr. Chairman, it is earnestly requested that you give favorable consideration to these requests. My staff and I will be pleased to develop further any areas you may desire.

Senate LONG. Admiral Bender, the committee would welcome the proposed language for extending the Coast Guard authority to lease housing for the use of its personnel. When can you get that language to us?

Admiral BENDER. We have it prepared now, Mr. Chairman.

Senator LONG. Fine. It will be received and made available to the subcommittee.

In previous years you have been requested to detail for the committee the development of the proposed Coast Guard budget, including the amount originally requested by the Coast Guard, the amount recommended by Department of Transportation, and the amount finally approved by OMB. Will you provide this detail this year?

Admiral BENDER. Yes, Mr. Chairman, we have a copy of that material with us today, which you may have.

Senator LONG. It will be inserted in the record at this point.

(The information follows:)

DEPARTMENT OF TRANSPORTATION, U.S. COAST GUARD

ACQUISITION, CONSTRUCTION AND IMPROVEMENTS

[In thousands of dollars]

Item	Coast Guard budget request to OST	Department request to OMB [1]	President's budget [1]
A. VESSELS			
1. Replacement:			
(a) Replace 1 icebreaker	72,000	66,000	66,000
(b) Construct 1 75-foot inland construction tender	1,200	1,200	----------
Subtotal	73,200	67,200	66,000
2. Increase capability of vessels:			
(a) Buoy tenders, renovate and improve	4,265	3,110	2,870
(b) Coast Guard Cutter Glacier, major repairs	250	250	250
(c) Wind class polar icebreaker, renovate 2 for interim service	9,750	8,750	8,750
(d) Vessel secure communications, replace secure radio teletype on HEC's, icebreakers	630	630	----------
(e) Precision navigation, procure systems for 10 vessels	1,870	----------	----------
(f) Expendable bathythermographs, procure systems for all ocean station vessels	230	----------	----------
(g) High endurance cutters, renovate 4 vessels and renew engineering equipment on 18 vessels	5,200	----------	----------
(h) Locate, procure and install systems on all high endurance cutters	1,540	----------	----------
(i) Distillate fuel, convert 18 high endurance cutters for distillate fuel	670	----------	----------
(j) Gyro compasses, replace on 11 vessels in high and medium endurance and icebreaker classes	600	----------	----------
(k) Oasis, complete engineering design and tprototype testing of operational automated shipboard information system for high endurance cutters	200	----------	----------
(l) Vessel communications modernization, continue program to upgrade communications capability on aging vessels	680	----------	----------
Subtotal	25,885	12,740	11,870
B AVIATION			
1. Aircraft replacement and modification:			
(a) C–130, outer wing rework on 9 aircraft	1,600	1,600	1,600
(b) Long range search aircraft, procurement	[2] 15,850	[2] 15,850	[3] 10,000
(c) Develop prototype replacement aircraft for existing obsolete fixed wing aircraft	2,000	----------	----------
(d) Aircraft radar system, procure search radar systems for C–130 aircraft	4,270	----------	----------
Subtotal	23,720	17,450	11,600
C. SHORE UNITS			
1. Replace or relocate existing units:			
(a) Marshfield, Mass., modernize facilities at Boston radio station	1,250	700	700
(b) Brooklyn, N.Y., construct barracks and messing facilities at Brooklyn Air Station	1,410	1,410	1,420
(c) Fort Hancock, N.J., rebuild Sandy Hook Station	2,500	2,500	2,100
(d) Portsmouth, Va., construct new Coast Guard base, phase II	5,500	5,350	5,350
(e) Islamorada, Fla., construct permanent facilities	640	640	640
(f) Monterey, Calif., rebuild Monterey Station; construct moorings at Santa Cruz	1,360	1,360	1,450
(g) Coos Bay, Oreg., construct new air station	2,500	2,500	2,500
(h) Provincetown, Mass., rebuild Race Point Station	2,280	2,280	----------
(i) New York, N.Y., construct logistics building at Coast Guard base	7,000	3,000	----------
(j) Portsmouth Va., construct new radio station	5,800	5,800	----------
(k) San Diego, Calif., replace barracks at San Diego Air Station	1,430	1,670	----------
(l) Astoria, Oreg., expand and renovate existing facilities for HH3 operations at Astoria Air Station	3,250	2,760	----------
(m) Juneau, Alaska, repair Coast Guard pier	360	420	----------
(n) Chincoteague, Va., renovate Chincoteague Station	1,310	----------	----------
(o) Elizabeth City, N.C., replace medical facility at Elizabeth City Air Base	910	----------	----------
(p) St. Petersburg, Fla., replace barracks at St. Petersburg Air Station	1,325	----------	----------
(q) Galveston, Tex., construct industrial facilities at Base Galveston, phase II	2,500	----------	----------
(r) Long Beach, Calif., construct industrial facilities at Base Terminal Island, phase II	1,400	----------	----------
Subtotal	42,725	30,390	14,160

See footnotes at end of table.

DEPARTMENT OF TRANSPORTATION, U.S. COAST GUARD—Continued

ACQUISITION, CONSTRUCTION AND IMPROVEMENTS

[In thousands of dollars]

Item	Coast Guard budget request to OST	Department request to OMB [1]	President's budget [1]
2. Improve capability at existing stations:			
(a) Cape May, N.J., expand electrical capacity at recruit training center	100	120	130
(b) Yorktown, Va., construct student barracks	2,750	3,000	3,250
(c) Cocoa Beach, Fla., establish C–130 facility at Patrick Air Force Base		920	920
(d) Fort Pierce' Fla., rebuild Fort Pierce Station	1,200	1,200	1,200
(e) Port Isabel, Tex., renovate Port Isabel Station	1,000	1,000	940
(f) Dana, Ind., renovate barracks at Loran Station			60
(g) New London, Conn., construct dining hall and barracks at Academy	3,800	3,800	
(h) Cape May, N.J., construct dining hall at recruit training center	2,000	2,000	
(i) New Orleans, La., expand facilities to accommodate HH3 operations at New Orleans Air Station	330	330	
(j) Cheboygan, Mich., rebuild moorings for Coast Guard Cutter Mackinaw	1,160	1,160	
(k) Keokuk, Iowa, construct depot building	150	170	
(l) Loran C Stations, construct 2 barracks	420	420	
(m) Miami, Fla., expand facilities for C–130 operations at Miami Air Station	1,800		
(n) Mobile, Ala., construct maintenance building at aviation training center	465		
(o) Woods Hole, Mass., construct boat repair and maintenance facility at Base Woods Hole	150		
(p) Maui, Hawaii, construct operations building at Maui Light Attendant Station	140		
(q) Curtis Bay, Md., construct supply building at Coast Guard Yard	1,500		
(r) Electronics repair capability, expand existing facilities at 6 locations for maintenance of modern equipments	1,710		
(s) Yorktown, Va., establish boating safety school	350		
(t) Alexandria, Va., construct barracks at Washington Radio Station	1,335		
Subtotal	20,360	14,120	6,500
D. POLLUTION CONTROL			
1. Abate pollution, Coast Guard vessels	4,200	3,900	3,200
2. Abate pollution, Coast Guard shore units	300	300	300
3. Procure hardware for national response center information system	1,500	100	100
4. Procure oil slick containment system	2,500	500	
5. Complete development and begin procurement of open sea oil recovery system	2,000		
6. Procure open sea spill monitoring equipment	360		
Subtotal	10,860	4,800	3,600
E. AIDS TO NAVIGATION			
1. Waterway aids to navigation projects	2,750	2,000	1,500
2. Continue lighthouse automation and modernization (LAMP) program	1,600	850	850
3. Loran–C improvement project, procure replacement equipment, includes construction of station at Presque Isle, Me., phase I	9,650	7,440	3,650
4. Houston, Tex., establish vessel traffic system for Houston ship channel	2,270	2,000	2,000
5. Attu Island, Alaska, rebuild airstrip bridge serving Loran Station	880	1,200	
6. Point Loma, Calif., construct revetment for erosion control at lighthouse	150		
7. Loran Stations, Western Pacific, install air-conditioning and new generators at 9 Loran Stations	290		
Subtotal	17,590	13,490	8,000
F. PUBLIC FAMILY QUARTERS			
Public family quarters	8,430	6,430	6,430
G. PROPERTY ACQUISITION, DESIGN AND ADMINISRTATION			
1. Survey and design of facilities	3,930	3,630	3,380
2. Engineering and logistics, support of construction projects	5,300	4,150	4,120
Subtotal	9,230	7,780	7,500
Grand total	232,000	174,400	135,660

See footnotes at end of table.

DEPARTMENT OF TRANSPORTATION, U.S. COAST GUARD—Continued

ACQUISITION, CONSTRUCTION AND IMPROVEMENTS

[In thousands of dollars]

Item	Coast Guard budget request to OST	Department request to OMB [1]	President's budget [1]
MILITARY PERSONNEL STRENGTH AUTHORIZATION			
Forecast of average military active duty strength	39, 762	39, 225	39, 074

[1] Specific projects determined by Coast Guard.
[2] 3 aircraft.
[3] 2 aircraft.

Senator STEVENS. Could I add five questions to that? That will save some time this afternoon.

Senator LONG. Fine.

Now there is another matter of particular concern to the State which I represent. It has to do with our constituents who had some difficulty reaching an understanding with regard to training and qualifying as maritime personnel. I believe you are aware of the fact that we have a major offshore drilling industry in Lousiana. Many of these people are of French descent and do not speak English very well. They are very good, practical, maritime operators. In fact, we think, for drilling offshore wells, they are the best anywhere in the world. At the same time, to qualify these people in the formal sense is somewhat difficult. They have a practical understanding of what the problems are. They have been navigating in those waters, particularly off Louisiana, to the extent that they have the practical education which makes them superior to those with a formal education.

Do you think you could find at least one or two of your responsible officers for assignment to the New Orleans-Morgan City area long enough to become familar with the problems involved and to help us develop a practical training program for these people so that they know what they need to know?

Admiral BENDER. I am sure our 8th Coast Guard District, with headquarters in New Orleans, could provide people to go over and work with these people, to assist them.

Senator LONG. I think one of the things you will need is an able officer who can stay with it for awhile. This thing of getting a good man and, about the time you start getting results, having him transferred can be a problem. We need someone to be assigned there who has some ability to work with people and who can be assigned to a long enough tour of duty so he can see the thing through and be satisfied, before being transferred, that we have a good program that is working well and which can then be turned over to and administered capably by others.

Some letters have been written to me in connection with that. I will submit those to you.

We have transmitted written questions demanding an inspection of mechanical, tug-barge linking systems. This is a question which also concerns me. Does the Coast Guard currently have this matter under review and are you open for consideration of new developments?

Admiral BENDER. Yes, Mr. Chairman. We have this matter under

continuing review and we certainly are open to new developments in our review. It has been, as you know, our conclusion that these units that are linked together in a positive way should be considered as one vessel and that the accident that occured up in Long Island Sound reaffirmed our opinion in this regard. That is, it seemed to bear out our conclusions. Nevertheless, we are very eager to continue the review and hear all comments and new developments as they arise in order to arrive at a fair interpretation. We recognize the merits of the system wherein the two vessels are linked together because it provides better control, perhaps all-weather capability, and we would like to promote, to the best of our ability, anything that improves the operation of our merchant marine.

Senator LONG. Any further questions?

Senator STEVENS. Mr. Chairman. I have this problem with these two new cutters, Admiral, that funds have just been provided for. The Appropriations Subcommittee has approved reactivating them and putting one on the east coast and one on the west coast. That would increase the necessity for your personnel ceiling by 150 per vessel and that would mean if this committee is going to concur in that authorization, we would have to add to your authorization 300 men. Is that right?

Admiral BENDER. We must add 300 men to the authorization. Since the two vessels have already been constructed there is no need to add these vessels to the authorization.

Senator STEVENS. Could you submit for us whatever type of language which would take care of that business? The Appropriations Committee just added this in a supplemental today.

Admiral BENDER. Yes, sir.

Senator STEVENS. Could you tell me if there is any legislation required for your operations in taking over the Kodiak Naval Station particulary in terms of real estate or in taking over the contracts the Navy has concerning the GCA or the communications related to Kodiak? Is there authorization required for that?

Admiral BENDER. The only additional authorization that I would see applicable to Kodiak would be authorization there, again, for additional personnel. All these other provisions are automatically activated.

Senator STEVENS. I would be pleased if you would submit to us for the record these requirements. The Navy is moving out of Kodiak Naval Station. The Coast Guard is taking over its operation. I want to make certain there is nothing that drops between the chairs in terms of your authority to operate there.

Admiral BENDER. We will do that; yes, sir.

(The information follows:)

The only additional authorization required at Kodiak would be an increase in our average military active duty personnel strength. An increase of 135 military personnel is required at Kodiak in FY 1973. However, we do not plan to recruit their replacements immediately, so an increase of only 75 in our average strength is required.

To summarize the average military active duty personnel strength to be authorized:

Initial request	39,074
Kodiak	75
Two 255 HECs	300
Authorization required	39,449

Senator STEVENS. I have one other question, that again reflects back to a question I asked you earlier in the Appropriations Committee regarding these AC–130's. I hope you will let us know if your authorization needs to be increased to take over the workload of long-range fishery surveillance as a result of the new position of the State Department.

Admiral BENDER. We intend to keep your earlier comments in mind.

Senator LONG. Would you tell us something about this surveillance project the Coast Guard is completing at Houston, Tex.?

Admiral BENDER. We have, in the 1973 budget, funds to provide a vessel traffic system for the Houston ship channel.

This will be different from the other two, the one at San Francisco and the one at Puget Sound. This is brought about by the fact that the Houston ship channel is so narrow and winding in many locations that we expect the need for two radar surveillance posts as well as good communications throughout the full length of the channel. The channel is simply not wide enough to utilize the program that we have in mind in Puget Sound where we are establishing separate sealanes with a buffer zone in between. The Houston channel is too narrow to do that.

We anticipate, however, that with the two radar sites and the good communications setup and a central control center that we can do much to enhance the safety of this channel which is, as I mentioned in my statement, employed by so many vessels carrying dangerous cargo.

Senator LONG. You foresee a possibility there might be need of a similar facility at the port of New Orleans at some future point?

Admiral BENDER. Yes, Mr. Chairman. The port of New Orleans is one of those ports we are investigating to determine what the requirements may be. We look upon it as a very likely candidate for a system of similar nature.

Senator LONG. Thank you very much. Senator Stevens?

Senator STEVENS. I had a call from the Alaska head of the National Wildlife Federation, who pointed out to me that the FCC requirement to change radios in small craft is going to put a considerable number of small craft in Alaska in jeopardy. He stated that either we are going to have to increase the number of your vessels or get the FCC to change this requirement because line-of-sight transmission would not work through islands. They are going around all these myrids of small islands. Have you made a study of the safety factors of the FCC's required change by 1975? I understand they have to convert to these new radios and no new vessels, fishing or pleasure craft, can be sold without these new radios. Yet, they tell me, they are not going to work in Alaska?

Admiral BENDER. I cannot say we have made a full study. We are aware of the provisions. I would point out the requirement to have the VHF does not preclude having medium frequency radio on board as well. It would obviously create an additional cost. The Coast Guard is installing, during the same period of time, some VHF radio stations in Alaska. Again I have to acknowledge that the extent of the Alaska coastline is such that there would be areas where it would be difficult to reach the Coast Guard on VHF alone.

Senator STEVENS. He also pointed out to me that the people who are making the vessels are not going to put these radios on and the public is going to go down to Seattle and New Orleans and some of these fancy boat places, and buy these new boats and bring them up to Alaska and find out they do not work. They will work in New Orleans or Puget Sound where it is nice and flat. It is not going to work around the mountains that go right down to the sea. He says that it is going to increase your workload fantastically. Is there any way that you could have a study made using some of your equipment to tell us whether or not these people are right, one that will perhaps indicate that the FCC has imposed a condition on Alaska that should not be there?

Admiral BENDER. I do not believe we could make a good study as yet because the Coast Guard's own stations for VHF are not as yet installed. We could make an evaluation based on certain presumptions. It would not be a real solid test until the stations are in operation.

Senator STEVENS. At the very least, if this is a safety requirement, I would rather see you put out a regulation that all Alaskans have two radios, rather than see half of them out there with one that is not going to work. I think they will abide by the regulations. Whatever you say is safe, they will do. My information indicates they will not be safe in Alaska waters. I appreciate anything you can do to help us in that regard.

Admiral BENDER. Yes, sir. we will be in touch with you on this, Senator.

Senator STEVENS. Under the Federal Boat Safety Act of 1971, you have been delegated authority to set safety standards for the construction of boats and associated equipment. What has been done to implement this authority?

Admiral BENDER. In advance of additional resources to implement the new Law we have developed initial safety standards to meet the drowning hazard which accounts for over 90 percent of boating deaths. These will require calculation and posting on the boat of safe loading information and, for outboard powered boats, the maximum safe power rating. Both these "consumer information" standards will give the boatman information he needs to operate his boat in a safer manner. We have also developed a standard requiring the smaller boats to float when flooded to mitigate the consequences of capsizing and swampings. We have required the carrying of Coast Guard approved personal flotation devices (lifesaving devices) on almost all recreational boats. We are now completing a new personal flotation device program to give the boatman better information as to the safety performance of Coast Guard approved personal flotation devices and to revise the present requirements for carrying the devices to be more responsive to the needs of the diverse boating public. We have developed standards compliance regulations to establish the procedures to be used by manufacturers to certify compliance with safety standards and manufacturers defect notification regulations to assure the consumer is informed of noncompliance with applicable standards on his boat and also of other defects creating a substantial risk of injury. In summary, we have developed the necessary implementing regulations for the safety standards program and a group of initial

standards relating to the principal cause of boating deaths. A listing of the status of standards and regulations will be provided for the record.

(The information follows:)

Standard	Method	Public hearing	Final rule	Proposed effective date
20 feet and under:				
Capacity	Proposed rule	May 17, 1972	July 1, 1972	Oct. 1, 1972
Safe powering	do	do	do	Do.
Flotation	do	do	do	Aug. 1, 1973
Hull identification number	do	do	do	Oct. 1, 1972
Manufacturer certification	do	do	do	Do.
Regulations:				
Lifesaving devices for all boats	do	do	do	Apr. 17, 1972
Termination of hazardous operation	do	do	do	July 1, 1972
Numbering and casualty reporting	do	do	do	Jan. 1, 1973
Notification of defects	do	May 3, 1972	do	July 1, 1972

Senator STEVENS. In your budget $2 million is allocated for a vessel traffic control system at Houston, Tex. However, during consideration of H.R. 8140, the proposed Navigable Waters Safety and Environmental Quality Act of 1972, you provided the committee with a fiscal year 1973 estimate of $4.25 million for vessel traffic control systems. Is the $2 million the only amount in the authorization request for vessel control systems? You also indicated to the committee with respect to H.R. 8140 that Coast Guard plans call for installation of traffic systems in nine port areas in the next 5 years. Could you name these ports as well as other ports being considered for traffic control systems?

Admiral BENDER. The $2 million is the only amount in the authorization request for vessel traffic systems (VTS). However, our operating expense appropriation, which does not receive prior authorization by this committee, contains funds for operation of the Puget Sound and San Francisco vessel traffic systems. The former was developed under our acquisition. Construction and improvements appropriation and the latter was developed as a research and development effort. Our original estimate included funding of a VTS in Valdez, Alaska, but the project is held in abeyance pending approval of the Trans-Alaska pipeline.

The nine ports for which a vessel traffic control system is presently contemplated planned for implementation during the next 5 years are:

Puget Sound.
Houston.
San Francisco.
Valdez (Upon approval of Alaska Pipeline).
New York.
New Orleans.
Chesapeake Bay (Including Hampton Rds., Norfolk & Baltimore).
Boston.
Los Angeles/Long Beach.

The Coast Guard is presently evaluating proposals for a contractual study which will be awarded May 12, 1972. This study will provide a methodology for determining a priority list of port and waterway areas which would require some form of a vessel traffic system. Until this study is completed, and its results applied an accurate priority list

cannot be developed. In the interim the above mentioned list of nine ports is a tentative plan which is being used for planning purposes.

Other ports which may be considered, based on the results of the above mentioned contractual study are:

1. Philadelphia—Delaware Bay.
2. Sabine—Neches Waterway.
3. Portland, Maine.
4. Port Aransas—Corpus Christi.

Senator STEVENS. With respect to your authority to lease housing facilities, could you indicate to the committee how many units are being leased and the total annual cost to the Government? What is the average annual rental cost and how does this compare with the average cost authorized for the Department of Defense?

Admiral BENDER. As of 31 March 1972, the Coast Guard has a total of 1,618 units of leases in effect. At the current time, we are spending $40 per month above the average basic allowance for quarters recoupment for each lease. This makes the annual cost to the Government $480 per lease, or $776,640 for 1,618 leases. Recent indications from lessors in response to lease continuations beyond the current fiscal year is that the average cost during fiscal year 1973 will increase to a new level of $52–55 per month.

The Coast Guard's current annual rental cost per lease for fiscal year 1972 is $2,280; as compared to the Department of Defense cost figure of $2,400.

The Department of Defense has introduced legislation requesting that the within CONUS leasing authorizations for fiscal year 1973 be increased as follows:

Average cost—$200 to $215.

Maximum cost—$275 to $300.

Senator STEVENS. In the authorization which has already passed the House of Representatives, $12.5 million was authorized for bridge alterations, although separate legislation was proposed for this purpose. Do you or does the Department have any objection to including the bridge item in the authorization bill?

Admiral BENSON. Neither the Coast Guard nor the Department has any objection to including the bridge item.

Senator STEVENS. Thank you Mr. Chairman, I have no further questions.

Senator LONG. The chairman of the full committee (Mr. Magnuson) and several other members who are not able to be here this afternoon, have submitted questions which I am happy to ask on their behalf.

(The questions and answers thereto follow:)

QUESTION SUBMITTED AT REQUEST OF SENATOR MAGNUSON

NEED FOR ATTENTION TO PERSONNEL MATTERS

Question. Mr. Secretary, we share the concern that the Department has expressed this year and last about the serious deterioration of the personnel retention rate of the Coast Guard.

What efforts are being made at the Departmental level to meet this problem?

Answer. Senator, the Secretary supports those efforts which the Commandant directs toward improving the personnel retention rate of the Coast Guard, most particularly items which require budgetary actions. Some examples of what the Coast Guard is currently doing or attempting are:

In order to reduce forced family separation we are placing increased emphasis on providing family housing in areas where construction is nonexistent or priced beyond the financial means of the members stationed in the area.

Personnel assigned to duty stations in the more populated areas are receiving additional assistance in locating community support housing through the referral/locator service of our HAIL program. Additional HAIL billets have been included in this year's budget request.

The Coast Guard is presently in the process of developing a true Special Services Program service-wide in the Coast Guard with compatible personnel staffing which will parallel the other Armed Forces' Special Services Programs. The Special Services Program will be organized to provide a varied program of wholesome, constructive leisure time activities which will effectively contribute to the mental and physical well-being of Coast Guardsmen and their dependents. Funding for the Special Services Program will primarily be appropriated and supplemented with non-appropriated funds.

At the present time, appropriated and non-appropriated funds are being provided service-wide for Morale and Recreation Programs. These programs provide mainly for recreation and athletic activities and participation in the Navy Fleet Motion Picture Program for entertainment movies on a reimbursable basis.

Centralization of assignment control of all enlisted ratings to: 1) Increase stability of assignments, 2) ensure equal distribution of more desirable/less desirable assignments, and 3) give an individual a greater degree of control over his career with more effective career counselling than has been the case in the past.

Broadening of the humanitarian assignment policy which allows a man to be assigned to an area where he can alleviate a personal hardship which will allow permanents change of station to the desired rea when it is in the best interests of individual and the Service.

NEED FOR ADDITIONAL PUBLIC FAMILY QUARTERS

Question. Please provide for the Committee a listing of those Coast Guard Stations where inadequate housing is presently being provided to 25% or more of the Coast Guard personnel assigned to the station.

What is the Coast Guard's present plan for improving these inadequate facilities?

Answer. The attached listing by districts, compiled from the June 1970 family housing survey, indicates all geographical locations where the number of families residing in inadequate housing is 25 percent or greater.

Within each district, all station locations where there are fewer than 25 families have been reported under the heading "all others". These small stations are given individual attention during the planning process when we are attempting to determine future construction requirements.

A new survey was conducted during the final week of February 1972. The data from this survey is being tabulated, but final results are not yet available.

It is our intention to seek AC&I funds at the $7 million level to construct new housing in those areas of greatest need, with emphasis being placed on resort, remote and semi-isolated areas where our personnel are unable to locate community housing that is reasonably priced and suitable for year-round occupancy. In the larger cities where a greater housing market is available, we will work through our housing assistance and locator/referral (HAIL) program to locate privately-owned community housing for our personnel, taking advantage of the recent Basic Allowance for Quarters increases and the leased housing program to upgrade their living conditions.

COAST GUARD FAMILIES INADEQUATELY HOUSED, BY GEOGRAPHICAL AREA

	Families		Inadequately housed		
	Officers	Enlisted	Officers	Enlisted	Percentage
1st district:					
Boston	187	481	89	220	46.3
New Bedford	18	75	6	35	44.1
New Castle	17	70	7	39	52.9
Rockland	3	40	0	11	25.6
Southwest Harbor	6	42	3	10	27.1
Woods Hole	18	68	2	23	29.1
All others	48	375	25	154	42.3
2d district:					
Memphis	9	33	2	10	28.6
St. Louis	39	89	15	40	43.0
All others	40	248	11	95	36.8
3d district:					
Atlantic City	4	41	1	17	40.0
Fort Tilden	40	144	19	79	53.3
Gloucester City	13	65	4	29	42.3
New London	152	320	32	87	25.2
All others	38	188	15	59	32.7
5th district:					
Baltimore	87	273	25	116	39.2
Cape Hatteras	2	48	0	21	42.0
Elizabeth City	68	382	28	117	32.2
Morehead City	18	97	3	27	26.1
Washington, D.C	624	210	315	62	45.2
Wilmington	29	146	5	41	26.3
All others	3	112	0	29	25.2
7th district:					
Charleston	20	69	6	39	50.6
Jacksonville	24	93	5	29	29.1
Key West	13	45	0	20	34.5
Miami	142	352	90	228	64.4
St. Petersburg	34	150	12	43	29.9
All others	18	211	2	62	27.9
8th district:					
Brownsville/Port Isabel	6	43	2	18	40.8
Cropus Christi	35	133	12	64	45.2
Galveston	32	168	7	65	36.0
Houston	31	62	4	26	32.3
Mobile	100	295	20	92	28.4
New Orleans	157	306	55	98	33.0
Panama City	8	34	2	14	38.1
Pensacola	13	44	5	16	36.8
Port Arthur/Sabine	21	36	8	24	56.1
All others	1	118	0	39	32.8
9th district:					
Buffalo	11	34	2	13	33.3
Charlevoix	6	42	4	21	52.1
Chicago	24	65	19	43	69.7
Cleveland	73	92	24	30	32.7
Detroit	29	88	17	22	33.3
Duluth	14	39	9	9	34.0
Grand Haven	5	37	1	16	40.5
Milwaukee	11	31	7	6	31.0
Port Huron	7	23	5	5	33.3
Saulte Ste. Marie	11	59	2	16	25.7
Sturgeon Bay	5	28	4	10	42.4
Traverse City	23	67	6	32	42.2
11th district:					
Long Beach/Los Angeles	135	387	42	139	34.7
San Diego	42	146	16	54	37.2
12th district:					
Humboldt Bay	6	43	3	10	26.5
Monterey	32	23	15	18	60.0
San Francisco (East Bay)	60	321	23	129	39.9
San Francisco (West Bay)	185	357	107	101	38.4
13th district:					
Astoria	39	149	10	50	31.9
Port Angeles	38	151	10	61	37.6
Seattle	143	336	33	91	25.9
14th district:					
Barbers Point	28	95	0	31	25.2
All others	70	284	27	102	36.4
17th district:					
Juneau	52	90	27	43	49.3
Ketchikan	20	104	8	64	58.1
All others	32	139	17	84	59.1
Oklahoma City	17	54	3	20	32.4
Headquarters units (all others)	39	66	12	37	46.7

PROTECTION OF THE MARINE ENVIRONMENT

Question. The protection of our marine environment is one of the Coast Guards most challenging tasks. What percent of the Coast Guard's total effort is expended in the effort to protect our marine resources?

If an adequate job is to be done during the balance of this decade, what priority will have to be given to providing additional long range aircraft and replacing the aging fleet of high endurance cutters?

Answer. About 8.5 percent of our direct costs are attributable to protecting our environment and marine resources.

The priority of replacement of the HEC's and need for long range aircraft is re-examined each year at every phase of our budget cycle. At this time we do not foresee the need for additional long range aircraft—though replacements keeping us at our present level will almost certainly be required. With regard to the priority of replacement of the HEC's—our mission requirements are changing such that we are finding a need for new emphasis in marine environmental protection and enforcement of laws and treaties. The impact of this new emphasis, possible tradeoffs with existing programs and capability of new satellite technology are under study now. Priority of replacements will be keyed to all of these considerations and redefined each year.

Question. Can you estimate for the Committee what percentage of the total man years of the Coast Guard are involved in Marine Environmental Protection?

Answer. Slightly less than seven percent of our man-years are involved in Marine Environmental Protection. These man-years represent time spent specifically for this function. However, all Coast Guard personnel are alert for marine environmental problems such as oil slicks, when on other missions.

POLLUTION ABATEMENT

Question. Is the present pace of the Coast Guard Pollution Abatment Program in vessels proceeding rapidly enough to allow the Coast Guard to claim that its vessels will comply with the requirements of the Executive Order promulgated in accordance with the Federal Water Pollution Control Act at the same time that civilian vessels will comply? Please provide the expected program for the balance of the Coast Guard Fleet indicating by fiscal year the number of vessels to be converted and the cost of conversion program for each year?

Answer. The Federal Water Pollution Control Act, as amended, contains provisions governing control of sewage from vessels. This mandate is consistent with Executive Order 11507, which directs that federal agencies assume a leading role in pollution abatement. The Coast Guard sewage control program for vessels will meet the requirements of the Act, the same requirements which civilian vessels must meet. Our schedule for vessels is as follows:

Fiscal year	Vessels	Amount
1973	33	$3,200,000
1974	44	3,532,000
1975	41	3,678,000
1976	41	3,752,000
1977	41	6,730,000
1978	36	5,970,000
Total	236	26,862,000

The above figures are for sewage only. We also have a program to install oil-water separators aboard all cutters beginning in 1974. Presently, CG vessels are expected to meet the requirements of laws and regulations prohibiting discharges of oil. However, due to existing technology and vessel systems, compliance is extremely difficult and imposes considerable hardship on personnel and interference with operational missions. This program is designed to permit compliance with present and predicted future requirements without restricting normal operations. Estimated costs to execute this program are as follows:

	Amount
Fiscal year 1974	$2,000,000
Fiscal year 1975	4,000,000
Fiscal year 1976	5,000,000
Fiscal year 1977	5,000,000
Total	16,000,000

Question Shore Station Pollution Abatement: Please detail the number of stations which do not meet the Federal requirements of Executive Order 11507 regarding Federal activity compliance with the Water Pollution Control Act. Indicate the present Coast Guard plans with respect to the construction of sewage disposal facilities at each of these activities and cost in terms of present dollars?

Answer. Executive Order 11507 regarding federal agency compliance with the Federal Water Pollution Control Act, as amended, specifies that "Actions necessary to meet the requirements . . . of this order pertaining to air and water pollution at existing facilities are to be completed or under way no later than December 31, 1972." The Order also contains a provision for agency requests to the Director, OMB, for extensions of time for a project beyond the December deadline. The Director may approve such requests if he deems the project "not technically feasible or immediately necessary to meet the requirements . . ." Viewed in this context, the Coast Guard will meet the EO 11507 mandate if (1) Coast Guard FY 73 appropriations, as proposed at the Congressional stage, are enacted into law prior to 31 December 1972 and (2) Director, OMB, approves extensions for any pending projects not included within the FY 73 budget.

Approval of the fiscal year 1973 budget will enable the Coast Guard to meet water pollution requirements of the Federal Water Pollution Control Act, as amended, at all its shore stations by the EO 11507 deadline with three exceptions—Kodiak, Governor's Island, and Coast Guard Yard. At Kodiak, pollution abatement is one problem of many which must be addressed incident to transfer of that station from the Navy to the Coast Guard. At Governor's Island and Coast Guard Yard, Coast Guard projects have reached the point beyond which no progress can be made without action by state or local governments. For these exceptions, requests have been or will be made to Director, OMB, for extensions of time on "technical feasibility" grounds.

At the beginning of fiscal year 1972. 384 Coast Guard facilities required sewage system installation. By the end of fiscal year 1973, projects will be complete or underway at all of these facilities at a total cost of $5,460,000. The fiscal year 1973 budget contains $300,000 which, together with funds previously appropriated, will meet the total cost figure.

The air pollution problem has been more difficult to deal with than the water pollution problem, primarily because air quality standards have only recently been developed. Air quality criteria for sulfur oxides and particulate matter were issued in 1969. These criteria served as the basis for development of standards promulgated by state and regional authorities.

In those cases where specific standards have been developed, we are meeting the requirements of EO 11507 with the exception of sand blasting facilities. Sand blasting facilities are in a somewhat different category than most facilities emitting particulate matter and standard control techniques cannot be used. We have, therefore, requested extensions of time for our sand blast facilities from OMB on grounds of technical feasibility. We are presently evaluating all feasible alternatives to control emissions from our sand blast facilities and anticipate requesting funds for modification of all facilities in the fiscal year 1974 budget.

Question. Please provide for the Committee an expanded statement of the mission and proposed operation of the National Response Center which is being established at Coast Guard Headquarters?

Answer. The National Response Center was officially established at Coast Guard Headquarters by the original National Oil and Hazardous Substances Pollution Contingency Plan in November 1963. To date, the Center has consisted of the Coast Guard Flag Plot with support as required by two Headquarters staff elements: the Marine Environmental Protection Division and the Cargo and Hazardous Materials Division. These divisions have greatly increased data acquisition, expertise, and reference library services since the Center was established.

The Center directly supports the National Response Team in its dual role as: The National body for planning and preparedeness prior to a pollution incident and the National level emergency response team activated for specific pollution incidents of appropriate gravity. The team comprises representatives of several primary and advisory agencies designated by the National Contingency Plan:

Primary:

Department of Defense.
Department of the Interior (Geological Survey).
Department of Transportation (Coast Guard).
Environmental Protection Agency.

Advisory:
Department of Commerce.
Department of Health, Education, and Welfare.
Department of Justice.
State Department.
Office of Emergency Preparedness.

The Center is the focal point of national response to oil and hazardous substances pollution incidents. It is the central repository of information on pollution incidents, technical data on hazardous substances, and inventory of response resources. It provides coordination and dissemination of information on major incidents to all interested parties and agencies. It is manned continuously and has quick access to qualified personnel who can provide assistance and advice on a wide range of subjects which response activities may entail.

Fiscal Year 1973 funds will permit installation of an advanced telephone switching system designed to provide rapid communications and conferencing capability among the Center watch standers, National Response Team members, and field personnel. Also planned are graphic display equipment, improved data storage, and augmented library services. The ten billets and positions (4 military, 6 civilian) will provide professional, watchstanding, administrative, and clerical personnel.

Anti-Pollution Activities

ADAPTS

Question. What is the current status of the ADAPTS system?

Answer. The R&D phase of the ADAPTS system is completed. Procurement of operational equipment has begun. A contract for purchase of pumps and associated transfer equipment should be awarded in mid-June with delivery of operational units expected by December 1972. The procurement process for oil storage containers ("bags") will begin as soon as corrective design changes are incorporated into the specification. We expect to award a proceurement contract for bags in late 1972, anticipating delivery by mid-1973. Procurement of air delivery systems has begun. Pumps and transfer equipment will be placed into service (without waiting for bag delivery) to be used for offloading into tank vessels in situations which so permit.

We estimate that systems will become operational as follows:

1. pumps/transfer systems (air transportable; vessel or helicopter deliverable)—late 1972
2. complete ADAPTS (air transportable; deliverable by vessel or by air drop from C–130 aircraft)—October 1973

Question. What improvements to this system were accomplished during fiscal year 1972?

Answer. The specification for pump and transfer equipment packaging was modified to allow delivery to the scene of an incident by HH–3F helicopters.

Question. Where are the systems presently based?

Answer. A prototype pump and transfer system is located at Coast Guard Air Station, Brooklyn, New York, for deployment to the scene of an appropriate incident. No bags are presently available.

Question. What progress has been made on multiple basing of the system?

Answer. A complete ADAPTS (pump, transfer system, and bags) will be located at each of two locations, one on the East Coast, one on the West Coast. Pumps and transfer systems will be located at seven air stations capable of their delivery by helicopter.

OPEN SEA BARRIER

Question. What is the present status of the open water oil slick containment system?

Answer. This system is still in the developmental stage. We conducted open-sea tests in March 1972. Results were generally favorable although some relatively minor design modifications are required. Development of techniques for delivery by air and by rapid surface means are underway. We will procure the system (after design modifications), contemplating use of buoy tenders for delivery to the scene of an incident until the more rapid methods are developed.

Question. To what extent is the system multiple based?

Answer. We will site barrier systems in major ports on all coasts. When air

delivery capability is proven, we will locate barriers at two air stations for delivery by C–130 aircraft.

Question. Where is the nearest main unit for this system to the Puget Sound area?

Answer. Siting plans provide two barrier systems in the Puget Sound area itself.

Question. What is the Coast Guard plan for expanding the multiple basing of this system?

Answer. The goal is to provide uniform coverage along all coasts.

Question. What progress is being made in expanding this system during fiscal year 1972?

Answer. Full scale prototype testing is complete. Minor design improvements should be completed by the end of fiscal year 1972. During 1973, air delivery capability will be developed and second generation modifications will be effected. In addition, the mooring system will be perfected together with a control system for deployment by helicopter. Following that, development of a detailed specification is required. Actual procurement of operational systems is planned for fiscal year 1974.

SURVEILLANCE

Question. What plans does the Coast Guard have for improving its marine environmental surveillance capability?

Answer. Six HU–16E amphibians were reactivated and are flying now specifically for this purpose. These aircraft will be equipped with oil sensing equipment capable of clear weather detection, day or night. These sensors will be installed commencing in November 1972. The effectiveness of this equipment is greatly diminished by fog and haze conditions. R&D is proceeding on improved sensing capability with a goal of all weather, day or night detection capability.

PERSONNEL STRENGTH

Question. To what extent has the Coast Guard Search and Air Rescue mission been impaired as the result of the undermanning of Coast Guard shore establishments? I understand that the Coast Guard approved manning standards for watch standers is a 68 hour work week, what is the present average work week of watch standers at Coast Guard Stations?

Answer. Undermanning of our shore units has resulted in our not being able to respond as quickly in some cases as we would wish because of lack of personnel and boats. Undermanning results in a lower overall competence at our personnel and a lower maintenance level for our equipment.

The present average work week at Coast Guard Stations is 90 to 100 hours during the busy boating season which, in some areas, now extends throughout the year.

MARINE TRAFFIC CONTROL

Question. What is the current state of Coast Guard planning with respect to a marine traffic system for Alaskan Waters?

Answer. In anticipation of possible approval of the Trans Alaska pipeline from Prudhoe Bay to Valdez, Alaska the Coast Guard has started to develop a plan for a vessel traffic system in Prince William Sound including the Port of Valdez, Alaska. This system which would cost approximately $750K could move from its present conceptual stage to a firm planning and implementing stage in a minimum amount of time. It is understood that it will take 12 months from the time that the Secretary of the Interior approves the pipeline project until the pipeline is completed. At this time oil will be available at Valdez for vessel shipment. This should be sufficient time to develop, install, and man a vessel traffic system.

The traffic control would be located in Valdez and the radar and communications equipment would be located at an unmanned remote site on the northwest side of Valdez Narrows to provide VHF Comms & Radar coverage of the area from the terminal, at the Port of Valdez thru the Valdez arm to Blight Reef. Weather observations would be available at the Port of Valdez. Two way traffic will be allowed in all areas except Valdez Narrows where tankers and other deep draft vessels will be regulated to maintain one way traffic.

Question. What is the current status of aids to navigation in this area?

Answer. Existing aids to navigation in this area consist of day marks, buoys, lights, radio beacons and Loran. They are identified and explained in detail in

the baseline data developed by the Coast Guard for the Department of the Interior in 1971 (attached as enclosure 1).

Some of the aids to navigation additions which have been proposed are:

(1) A lighted buoy at Wessels Reef, north of Middleton Island.

(2) A light and radar reflector at Seal Rocks, at the entrance to Prince William Sound.

(3) A light at Schooner Rock, off the NE tip of Montague Island.

(4) A lighted buoy to mark the four fathom shoal off Knowles Head.

(5) A light and radar reflector at a suitable location on or near Blight Reef, at the lower end of Valdez Arm.

(6) A light at Rocky Point, midway through Valdez Arm.

(7) A range increase, characteristic change and radar reflector at Middle Rock Light, at the northern end of Valdez Narrows.

Additional lights would be considered if the plans for establishing an anchorage in Prince William Sound become firm. Although the vessel traffic system, COTP and aids to navigation changes described are now in the planning stage. They can be placed in operation well within the time frame contemplated for completion of the pipeline.

Baseline Data

AIDS TO NAVIGATION—OPEN OCEAN

Navigation on the open ocean is dependent on many integrated items such as the equipment, charts, publications, time and the skill of the navigator. The equipment capabilities, limitations, and errors must be known and taken into account. A trained navigator using prudent seamanship should be able to determine his position within one or two miles using the presently available electronic and/or celestial navigation systems.

Electronic systems such as the Loran-A receiver, radio direction finder, and fathometer gives today's navigator a capability of accuracy only if the receivers are calibrated, the navigator is skilled in interpreting the information, and the intrinsic errors are known and compensated. Reduced visibility does not affect the one to two mile accuracy of electronic aids between Alaska and the U.S. Pacific Coast. In some instances, Loran-A accuracy is better than one mile.

Celestial system utilizing correct publications, known sextant errors and the correct time, allow fix accuracy within two miles. The importance of time is demonstrated by the fact that a one second error in time causes a ¼ mile error in the line of position. Restricted visibility makes celestial navigation impossible.

NAVIGATION IN RESTRICTED WATERS

Topography and the present aids to navigation systems make it possible for a prudent mariner to follow the natural and improved channels and to pilot via a chain of charter objects.

Piloting is the direction of vessel movement with reference to land, seamarks, visual bearings, soundings, and radar. Piloting requires the greatest experience and keenest judgment of any form of navigation.

Day light piloting consists of using visual bearings of charted objects such as structures, daymarks, mountain peaks, tangents of land, etc. Radar and the fathometer assist in verifying the fixes, and accuracy is within a few yards if all errors are corrected. Two such errors are compass errors and parallax which is that error caused by a considerable distance between the bridge wings due to the width of a large vessel. Current and wind must also be taken into consideration.

Night piloting consists of taking visual bearings on charted, lighted objects. Radar and the fathometer become more important due to the reduction of aids available for bearings. The accuracy of radar varies due to many factors, but fix accuracy should be sufficient to allow safe passage in water; capable of accommodating super tankers. Again, current and wind must be taken into consideration.

Radar and the fathometer are most important when visibility is reduced. As mentioned, radar has its limitations but a trained navigator using prudent seamanship should be able to transit any area that can accommodate super tankers.

PORTS AND WATERWAYS OF THE ROUTE—VALDEZ TO PRINCE WILLIAM SOUND TO THE OPEN OCEAN

The 1964 earthquake had wide spread effect on the Prince William Sound area (See figure 2 for locations of some of the localities referred to in these

descriptions). Port-earthquake tidal observations indicate bottom changes ranging from a sinkage of 6 feet to a rise of 32 feet. Caution is advised because many areas, yet to be resurveyed, may be considerably different than represented on nautical charts or in the Coast Pilot. Departing Valdez, a vessel transits Port Valdez, a body of water approximately 11 miles long in an east-west direction. Topographical features are good for radar navigation and the water is deep with no known dangers. Diurnal range of the tide is 11.8 feet. Some ice is present from Shoup Bay when the wind and tide are favorable. Tital current is weak and variable.

Separating Port Valdez and Valdez Arm is Valdez Narrows. The Narrows is approximately 0.8 miles wide with a pinnacle on the western side of the channel. This pinnacle is marked by Middle Rock Light, which is 30 feet above the water and visible for 6 miles. (All distances for lights refer to a dark clear night). The best water past this pinnacle is on the eastern side of the channel which is 0.5 miles wide at this point. Approximately 1¼ miles to the southward on the left is Entrance Point day beacon (not lighted). Radar returns in this area should be good due to the topography. The Narrows is approximately 2½ miles long in a southwesterly direction and the currents are too weak and variable to be predicted. Leaving the Narrows, Valdez Arm is entered. This is a natural channel with deep water, very good topography for radar returns and many charted objects for visual hearings. At Rocky Point, about 7½ miles from Entrance Point daybeacon, there is another daybeacon, a red and white checkered diamond on a wooden frame. Three and one half miles further is Busby Island Light, flashing white 25 feet above the water and visible for 6 miles. Middle Rock Light and Busby Island Light should be visible at the same time but, being in an almost straight line, are not too advantageous for position fixing. However, with radar fixes, navigation should be no problem here. Departing Valdez Arm, Prince William Sound is entered. The Sound has an area of approximately 2500-square miles and is very deep.

Glacial ice is rarely found in the open waters of Prince William Sound, but thick fog and sudden wind squalls are common (See section on climate and whether). The Sound presents a very irregular shoreline and abrupt slopes on land should provide good radar returns. However, it should be noted that squalls make radar navigation very difficult because the radar returns tend to be obliterated by the squall. Loran A coverage in the open waters of Prince William Sound is good and may be used as backup for piloting and radar navigation. The diurnal range of tide is between 11.2 feet and 12.4 feet. Approximately 4¼ miles from Busby Island in 54 feet of water is Blight Reef Lighted buoy. This buoy marks a reef which is about 1½ miles long in a N.E.–S.W. direction. With Bligh Reef Lighted buoy abeam, a southerly course is taken towards Hinchinbrook Entrance. Goose Island Light, 41 feet above the water and visible for 6 miles, can be seen prior to returning at the buoy. The possibility of an anchorage area exists about six miles S.E. of Goose Island and just south of Knowles Head and Knowles Bay. The next lighted aid is Johnstone Point Light, 57 feet above the water and visible for 13 miles. Both of these lights will be visible for bearings, visibility permitting, enroute to Hinchinbrook Entrance. While proceeding through Hinchinbrook Entrance, Johnstone Point Light is obstructed from view before Cape Hinchinbrook Light is sighted, but radar should permit safe navigation during that short interval. Cape Hinchinbrook Light is 235 feet above water and visible for 23 miles. A fog signal and radiobeacon are at the light. Current in this entrance flows in and out of Prince William Sound with a velocity of about 1 knot. About 7 miles S.W. of Cape Hinchinbrook, Seal Rocks are located. These rocks are 30 and 37 feet high and should present a good return on radar. The current in this area almost constantly sets S.W., and may reach 2.5 knots. Approximately 30 miles to the S.E. from Seal Rocks is Wessels Reef. This reef is 2 miles long in a N.E.–S.W. direction and is awash at low water. An unlighted buoy marks the northern side of the reef. Due south from Wessels Reef is Fountain Rocks at 15 miles and Middleton Island at 20 miles. Fountain Rocks breaks in heavy weather and uncovers 2 feet. Shoals may exist in this area. Middle Island is about 4½ miles long, low and grass covered with its highest point of land at 126 feet. There is an aero beacon and a rotating white and green light on the island. Middleton Island should be given a wide berth.

Question. Detail for the Committee the difference between the Marine Traffic Control System planned for the Houston Ship Canal and the Marine Traffic control System planned in Puget Sound.

Answer. The control system planned for the Houston Ship Canal will be a communication system with electronic surveillance of selected areas of the channel. The Puget Sound System will not incorporate electronic surveillance but will have a vessel separation scheme.

The Houston Ship Channel is a 400 foot wide waterway extending approximately 50 miles from the entrance in Galveston Bay to Houston. Approximately 22 miles of the waterway, from Morgans Point to the Houston Turning Basin, follows the natural winding path of early streams through Buffalo Bayou. Vessels moving on the Houston Ship Channel have extremely limited maneuvering room and are therefore limited in the actions which can be taken to avoid a collision. Because of the limiting depth of the waters adjacent to the dredged channel, vessels other than shallow draft craft cannot maneuver outside the marked channel. Recognizing the limitations placed on the vessels, by geographical features, the system placed into operation in Houston must contain effective positive traffic control features. Surveillance of two specific segments of the waterway were considered necessary to maintain this effective control. The first area is in lower Galveston Bay where four channels converge in Bolivar Roads. To manage traffic movements effectively in this area, the traffic controller must be provided with a capability to view traffic movements continuously in the convergence area. The second area of surveillance is approximately from Morgans Point to Boggy Bayou Basin, a distance of 11 miles. This area contains a series of sharp bends. Groundings and minor collisions occur most frequently in this portion of the Ship Channel. To control traffic safely in this area, it is necessary that the controller have electronic surveillance over this portion of the ship channel. The VHF–FM communication network, surveillance system, and position reporting system comprise the major operational elements of the Houston Traffic System.

Puget Sound is a deep water passage with sufficient channel width to allow vessel pilots and masters the option of maneuverability. Because of the natural depth and width of the waterway, vessels are not severly constricted in their movements. Traffic volume, depth and width of the waterway, do not indicate a present need for electronic surveillance. These same features do permit buoyed traffic separation lanes. A VHF–FM communication network, traffic separation scheme, and position reporting system comprise the major operational elements of the Puget Sound Vessel Traffic System.

System element	Puget sound	Houston
Communications	100 percent VHF–FM coverage to support ship-shore requirement.	100 percent VHF–FM coverage to support ship-shore requirement.
Aids to navigation	Buoyed traffic separation lanes	No additional requirement created by system.
Surveillance	None currently planned	Coverage of 2 waterway segments planned.
Control center	Existing Coast Guard facility modified to accomodate space requirement of center.	New construction to accomodate center required.

Question. Please detail for the Committee the progress you have had in implementing the Puget Sound Vessel Traffic System.

Answer. The Puget Sound VTS will rely on the reported positions of participating vessels, and incorporates a VHF–FM communications network, traffic separation scheme and a control center at Pier 90 Seattle, Wash. All phases of the implementation of this system as proceeding as scheduled. (The system is scheduled to be placed in operation during the fall of 1972.) The facilities which will house the system's control center are being renovated at this time and construction is progressing on the four remote communication sites. Proposals for the Vessel Separation System have been submitted for approval by the 13th Coast Guard District. The buoys for this system have been ordered, and are expected to arrive in Seattle in early summer. Discussions have been held with National Ocean Survey (formerly Coast and Geodetic Survey) concerning the changes needed in charts and navigation publications. Frequencies for the communications system have been requested and should be available on time. Negotiations with Canada have been requested in order to insure that the U.S. system will be compatible with a proposed Canadian System scheduled for operation this year in the Straits of Georgia.

Question. In 1972 there was appropriated $1,000,000 for this project. What use has been made of these funds?

Answer. The $1,000,000 appropriated for this project has been used as follows:

Obligations	
1. Communications equipment	$273,000
2. Control center renovation and equipment	137,000
3. Personnel	70,000
Subtotal	480,000
Obligations planned	
1. Buoys	$250,000
2. Miscellaneous personnel costs including training	10,000
3. Secondary emergency center (Port Angeles)	50,000
4. Final equipment for primary center) (Seattle)	40,000
5. Contractual study of later stage developments	100,000
6. Contingency	70,000
Subtotal	520,000
Grand total	$1,000,000

Question. What further improvement do you contemplate will be likely in the Puget Sound Vessel Traffic Control system?

Answer. Upon enactment of the Ports and Waterways Safety Act, the Coast Guard would have the authority to make participation in this system mandatory for certain classes of vessels if considered warranted. Experience may also indicate that positive control measures may be required in certain areas of high risk potential such as Rosario Strait, particularly when super tankers commence transiting this area.

The physical facilities of the system are planned for improvement in FY 75 when the Control Center will be moved to pier 36. The initial Control Center will be located with COTP Seattle at Pier 90. Both units are planned for relocation in FY 75. This move will provide for additional space and if experience indicates changes in design can be made.

Other improvements such as expansion of the system westward in the Straits of Juan de Fuca and installation of more sophisticated equipment may be made after operational experience is gained and definite needs are identified.

Question. Please detail for the committee the expected allotment of personnel to handle the Puget Sound Traffic control system?

Answer. The allotment of personnel to staff Puget Sound VTS has been established and approved. Officers will consist of 1 CDR, 1 LCDR, and 4 LTS. The enlisted personnel are as follows: 1 QMCS; 1 QMC; 2 QM1; 3 QM3; 2 RDC; 3 RD1; 2 RD2; 1 YN2.

Fifteen enlisted men and 6 officers for a total of 21 billets.

PROTECTION OF FISHING INDUSTRY

Question. Admiral, the fishing industry is very important to our national economy and members of that industry are frequently critical of the Coast Guard's efforts to protect our fishery resources.

Question. What do you see the Coast Guard's role to be in this area?

Answer. Our particular role, operationally, is in the area of patrolling in the air and on the sea, to detect and deter violators of law and to provide search and rescue assistance as necessary. We monitor fishing activity to assist in the development of new fisheries regulations or international agreements. Where gear conflicts arise, we have set up—for example, in New England—a system for the collection and dissemination of data as to the location of fixed gear. Our responsibility in the enforcement and surveillance area also make it critical for us to provide an input on new proposals for conservation measures, in order to avoid unenforceable regulatory schemes.

Question. Does the Coast Guard have sufficient equipment and personnel to provide adequate surveillance of the fishing treaty boundaries on the High Seas?

Answer. It is difficult to state what is adequate surveillance of the fisheries areas as it is intended primarily as a deterrent to violation. Our resources are generally adequate for surveillance but at peak periods of activity we are spread somewhat thin. If the pressure of foreign fishing fleets continues to build, we

will undoubtedly require more resources in the future. The addition of aircraft, as planned in Alaska, and the use of augmented air crews allowing greater on-scene time, will be essential. Also we are making new use of our High Endurance Cutters in the conservation and fisheries area, where they were not regularly used in the past. Thus, the recent seizure of two Japanese vessels off Sitkalidak Island, Alaska, was effected by USCGC MELLON (WHEC 717)—the first time a HAMILTON class cutter conducted such a mission. MELLON was in Alaskan waters as part of a conscious program to "beef up" the Alaska Patrol team.

Question. What efforts are made to protect American vessels and equipment from foreign trawlers and other vessels?

Answer. At present, the First Coast Guard District, with headquarters in Boston, has developed the most sophisticated answer to this problem. We collect data from fishermen as to where their fixed gear will be positioned. Then we broadcast these positions to the foreign fleets as part of our Broadcast Notice to Mariners. Foreign vessels have gone far to copy these reports, and to avoid areas so "posted". Then, when reports of interference arise—whether the interfering vessel is domestic or foreign—an investigation is conducted. When a foreign vessel appears to have engaged in a conflict, a complaint will be documented and transmitted to the State Department for diplomatic action. Within the last few days we have taken steps, also, to issue a Broadcast Notice to Mariners with respect to new fixed gear and possible conflict areas off Atlantic City, New Jersey.

In addition to these efforts, we have issued strong instructions to our operational units to cover the possibility that tempers may flare in gear conflict situations. We sometimes hear fishermen threaten to resort to retaliation. Such retaliation is, of course, in no one's interests, and where violence is threatened, we will do all in our power to prevent tragedy, even to the point of interposing our units.

A final important item in this respect is the Convention on the Conduct of Fishing Operations in the North Atlantic Ocean. Implementing legislation for this treaty has been prepared, and once passed, will provide clearer rules for navigation and gear marking, as well as the conciliation of disputes. We will still have much to do, however, since we would anticipate some patrol requirements to emerge, and since we would want to make the on-scene conciliation provisions a reality by being near possible hot-spots whenever we can.

Question. Now that the Navy has announced the closing of its support base in Kodiak Alaska, what is the future of Coast Guard presence in this area?

Answer. The U.S. Navy operation of the Kodiak Naval Station will terminate on 30 June 1972 at which time the Coast Guard plans to assume operation of a portion of the station and establish U.S. Coast Guard Base Kodiak. Surveillance activity in support of Alaskan fisheries was a major factor considered in our decision. We are proposing an operation which will result in no reduction of Coast Guard surveillance capabilities at Kodiak.

AIDS TO NAVIGATION

Question. Is adequate progress being made in the rehabilitation and modernization of the Loran-C system?

Answer. Yes—Since the late 1950's Loran-C has progressed thru 3 generations of equipment. During the past 4 years the U.S. Coast Guard, in concert with civilian manufacturers, has been developing a new 4th generation of "solid state" electronics for the Loran-C system. The state of the art concepts employed in this generation include the ability to reduce personnel manning levels and electronic maintenance costs while providing a more reliable signal with a better pulse shape.

Question. What efforts has the Coast Guard made to determine the usage of this system by Merchant Marine Vessels?

Answer. In 1969 Geonautics Inc. conducted a survey for the Coast Guard as part of an aids to navigation study. Responses to this survey indicated that among major U.S. transoceanic and coastal shipping companies 29% of their vessels use Loran-C regularly and 14.5% use it occasionally. Very few operators of the U.S. Fishing Vessels queried stated that Loran-C was necessary. However, this is due to the availability of Loran-A coverage and the lack of Loran-C coverage. We feel that with the expansion of Loran-C coverage, availability of a low cost receiver and the phasing out of the Loran-A system, numerous fishing vessels will utilize and depend on the Loran-C system.

Question. What progress has the Coast Guard made in increasing the accuracy of the Loran-C for U.S. mariners along the North Pacific/Alaskan Coastal area?

Answer. No physical progress has been made in this area. However, if Loran-C were selected as the National Radionavigation System, as proposed by Coast Guard planning, the Gulf of Alaska/Pacific Northwest area would receive .25 nautical mile accuracy coverage by the completion of Phase II of the planning, (as early as 1975–76).

Question. The Coast Guard planning indicates that one principal justification for the Loran-C System is to meet the needs of the Department of Defense. Apparently these needs are not assured after 1982.

Answer. The DOD has many irons in the first including Omega and NAVSAT. The reliability and accuracy of these systems 10 years hence cannot now, practicably be determined. Other radionavigation systems may not be able to replace Loran-C by 1982 and/or Loran-C may still be required for redundancy. Although it is difficult to predict the status of a radionavigation system ten years in advance, we feel fairly certain that Loran-C will be a DOD requirement in one form or another well after 1982.

Question. Please indicate what the Merchant Marine reliance on the Loran-C is presently estimated to be.

Answer. Based on the sampling of the study mentioned in question (2), 40% of Merchant Marine vessels rely on Loran-C for navigation at some time. Again, it is difficult to project what reliance the Merchant Marine would have on Loran-C if it were extended to cover all coastal/confluence zones of U.S. waters, and Loran-A were terminated.

Question. What is the Merchant Marine need for the Loran-C after 1982?

Answer. A study as to the Merchant Marine's need for the Loran-C after 1982 has not been conducted. However, with the termination of the Loran-A System by that time, the availability of Loran-C over U.S. waters and the introduction of a low cost Loran-C receiver, one could postulate that a sizable percentage of Merchant Mariner's would use and depend on Loran-C.

Question. What plans does the Coast Guard have to meet this need in the future?

Answer. The Coast Guard has developed a "Loran 70's Program" that outlines our plans for Loran-C were it acepted as the National Radionavigation System. Ideally, we would construct 10 new and modify 4 existing Loran-C stations that would provide Loran-C coverage (¼ nautical mile accuracy) at least 200 nautical miles from the U.S. East and West Coasts and over the Gulfs of Alaska and Mexico and the Great Lakes. In concert with this Loran-C Expansion, the Loran-A system would be phased out. The cost of this program would be somewhat less than $45 million dollars.

Question. Explain why the Loran-C Transmitting Station now located at Dana, Indiana is a temporary facility?

Answer. The Loran-C station located at Dana, Indiana was established to meet the needs of the USAF. It is presently located on U.S. Army property under terms of a 5 year lease that expires in 1977. There is a possibility that the Army may have a future need for this property and we may be requested to relocate. Additionally, the Air Force requirement for the station may terminate. However, if Loran-C were selected as the National Radionavigation System the station presently located at Dana would remain in the general vicinity to provide Loran-C coverage over the U.S. Great Lakes.

BOATING SAFETY

Question. Please summarize the efforts of the Coast Guard to implement the provisions of the Federal Boat Safety Act explaining in detail the expected utilizations of funds and personnel requested in the 1973 budget for this effort?

ANSWER

Standards

Accomplished 1972—3 basic standards promulgated as proposed regulations. Manufacturer's compliance requirements published. Defect notification responsibilities published.

Fiscal year 1973 request—Personnel: 10 civilians, Field Staffs 2 civilians, HQ data processing support. Funds: $422K—Purchase and testing of boats for compliance. Administrative support for compliance & defect review.

State Boating Safety Assistance

Accomplished 1972—Policy & Procedure Guide developed. Applications for 1972 funds sent to states in anticipation of appropriation. All 55 eligible jurisdictions except Samoa have expressed interest.

Fiscal year 1973 request—Personnel: 2 civilians, Administrative-clerical, 1 civilian, legal support, 2 civilian, accounting support. Funds: $7.5 million, 1973 Assistance funds, $20K—Field audit costs.

Boating Safety Advisory Council

Accomplished 1972—Two meetings of entire council. One executive council meeting.

Fiscal year 1973 request—Personnel: 1 civilian, clerical support. Funds: 65K—Expenses for 4 regular and periodic executive meetings.

Auxiliary

Accomplished 1972—29 states have requested patrols on their waters by Auxiliarists. Funds sent from existing programs to fund 1972 state patrols by Auxiliarists.

Fiscal year 1973 request—Personnel: I military, field director. 8 civilian, clerical, district. Funds: $150K, funding of state water patrols. $131K, administrative costs for increased Auxiliary membership.

Education and enforcement

Accomplished 1972—Resident petty officer training school begun. Full-scale marketing plan for boating safety publicity. Internal reorganization in CG field organization.

Fiscal year 1973 request—Personnel: 21 military, District and HQ Staff, 47 military, BOSDET personnel. Funds: $647K BOSDET equipment and travel cost. Administrative costs for field personnel. $55K. Increased informational effort.

Other areas

Accomplished 1972—(1) Servicewide implementation of authority to require immediate correction of unsafe conditions. (2) Revision & expansion of motorboat numbering requirements. (3) Implemented uniform casualty reporting system. (4) Expanded lifesaving device requirement to all boats.

LICENSING AND DOCUMENTATION PROGRAMS

Question. Your forecast of workload indicators indicates that you expected a substantial increase in the number of licenses and documents issued in fiscal year 1972, an increase of 11,000 over fiscal year 1971, but that you expect an offsetting decrease in fiscal 1973 of 12,000. Please provide the Committee with the basis for these estimates?

Answer. The initial increase indicated for FY 1972 was primarily due to an anticipated increase in licenses issued to towing vessel operators. This forecast was based on the assumption that H.R. 6479, an act to provide for the licensing of personnel on certain vessels, would have been enacted. This act will be applicable to approximately 6,000 vessels in the towing industry. It is expected that in the first year after passage there will be a great number of previously unlicensed persons suddenly making application for an original license as would be required by the act. As a license is issued for a period of five years, statistics should indicate that in the subsequent years between issuance and renewal a decrease in licenses will be noted. The figures stated for the increases and decreases in licenses and documents appear to us to be correct estimates but the dates should relate to the first and second years after passage of the Act. In support of the above assumption it should be noted that the House of Representatives passed H.R. 6479 and sent it to the Senate for consideration in April 1971. It was referred to the Senate Committee on Commerce 30 April 1971, and the sub-committee hearings are scheduled for 27 April 1972.

Question. Many Congressional offices have received letters of concern from constituents regarding the Coast Guard's plan with respect to documentation offices. I would appreciate it if you would detail for the plans regarding the consolidation of documentation offices.

How many documentation centers does the Coast Guard presently have? How many vessels are homeported at each documentation port? How many personnel are assigned to each documentation office, and what are their military or Civil Service grades?

Answer. Under consideration at present are three proposals for consolidation of documentation offices.

One, proposed by the Eighth Coast Guard District is for the revocation of the designations of Gulfport and Pascaguola, Mississippi, as ports of documentation and the transfer of the records of all vessels home ported at these ports to Biloxi, Mississippi. Offices at the three ports are presently served by one Documentation Officer who divides his time between ports on a schedule determined by vessel activity at the respective offices. The three ports are connected by a good highway, Gulfport being 13 miles to the west of Biloxi, Pascagoula being 22 miles to the east of Biloxi. The consolidation of these three part-time offices into a full-time facility at Biloxi will result in better service at less cost without appreciable inconvenience to any. The proposal was published in the Federal Register of 9 March 1972, inviting comments through 10 April. It is understood no adverse comments have been received. Position structure would remain the same. There would be savings in office maintenance and travel expense.

Another proposal, as yet unpublished, is from the Seventh Coast Guard District. This is for the revocation of Fernandina Beach as a port of documentation and the transfer of the Fernandina Beach function to the full-time documentation office at Jacksonville.

Our Fernandina Beach office is open one hour per day and the incumbent of the position has announced a desire to retire. Work volume at the Fernandina Beach office has been in a rather uniform decline over the last several years. Jacksonville is 25 miles by good highway from Fernandina Beach. It is believed that better service at less cost can be given these vessel owners if the function at Fernandina Beach is consolidated with that of the full-time office at Jacksonville. Little or no opposition is anticipated. One part-time position (1 hour per day) would be eliminated.

The third proposal is for the consolidation of documentation offices in the Fifth Coast Guard District from the present fourteen offices into offices at four locations. In the Baltimore Marine Inspection Zone the office serving the ports of Alexandria and Washington, D.C., and the offices serving Annapolis, Cambridge, and Crisfield, would be closed with all documentation service thereafter being handled at the documentation office at Baltimore. In the Portsmouth Marine Inspection Zone offices at Cape Charles, Newport News, Norfolk, and Reedville, Virginia, and Elizabeth City, North Carolina, would be closed and all documentation work for the zone would thereafter be conducted from a new documentation office to be established at Portsmouth. In the Wilmington Marine Inspection Zone the office at Washington, North Carolina, would be closed and vessels home ported there would have the port of Beaufort-Morehead City as home port. Offices at Morehead City and Wilmington would be continued.

Under this proposal the following Documentation Officer positions would be abolished. Two full-time GS–11; one full-time GS–9; one part-time (two hours per day) GS–9; one part-time (two houre per day) GS–7; three part-time (four hours per day) GS–6; and one part-time (two hours per day) GS–5. Two full-time GS–3 clerk typists would be added at Baltimore. If the plan is carried out savings in salaries would be approximately $37,500.

With respect to the matter of hailing ports, while some owners would be required to make a change, many would not. The name of the port to be marked on the vessel's stern may be either the port at which the vessel is registered or licensed (home port) or a place in the same Marine Inspection Zone where the vessel was built or where one of the owners resides (46 U.S.C. 47). Thus an owner residing in Washington, D. C., could continue to show Washington as hailing port even if Washington, D. C., ceases to be a port of documentation. An owner residing in Silver Spring could not retain Washington as hailing port but would be required to change the marking to Silver Spring or Baltimore. Of course, if the vessel was built in the Baltimore Inspection Zone the name of the place the vessel was built could be shown.

Attached is a list of Ports of Documentation showing the number of vessels home ported at each and giving staffing data.

Ports of documentation, of which there are 112, are listed below by district. The second column indicates the number of vessels having home ports at each of the ports. The third column states the number of personnel assigned to each office and the military or civil service grade is shown in parenthesis. The fourth column contains supplementary information.

Documentation offices	Number of vessels	Personnel and grades	Supplementary information
1st Coast Guard District:			
Bangor, Maine	7	None	Handled by documentation officer, Rockland, Maine.
Bar Harbor, Maine	74	do	Do.
Bath, Maine	167	do	Handled by documentation officer, Portland, Maine.
Belfast, Maine	31	do	Handled by documentation officer, Rockland, Maine.
Boston, Mass	1,513	1 (GS–12); 2 (GS–11).	There is also an assistant chief for admeasurement and documentation at the district level (GS–13).
Calais, Maine	1	None	Handled by documentation officer, Rockland, Maine.
Eastport, Maine	12	do	Do.
Fall River, Mass	27	do	Handled by documentation officer, New Bedford, Mass.
Gloucester, Mass	301	1 (GS–11)	
Jonesport, Maine	26	None	Handled by documentation officer, Rockland, Maine.
New Bedford, Mass	584	1 (GS–11)	
Newport, R.I.	145	None	Handled by documentation officer, Providence, R.I.
Plymouth, Mass	316	do	Handled by documentation officer, New Bedford, Mass.
Portland, Maine	259	1 (GS–11)	
Portsmouth, N.H	181	None	Handled by documentation officer, Portland, Maine.
Providence, R.I	503	1 (GS–11)	
Rockland, Maine	194	1 (GS–11)	
Salem, Mass	312	None	Handled by documentation officer, Gloucester, Mass.
2d Coast Guard District:			
Cincinnati, Ohio	2,093	Vacant (1 GS–11)	Handled by OCMI, Cincinnati, Ohio.
Evansville, Ind	194	None	Handled by U.S. Customs, Evansville, Ind.
Greenville, Miss	484	1 (GS–5)	
Louisville, Ky	1,228	1 (GS–11)	
Memphis, Tenn	392	1 (GS–9)	
Minneapolis, Minn	704	1 (W–4); 1 (GS–3)	
Nashville, Tenn	136	1 (GS–5)	
Pittsburgh, Pa	753	Vacant (1 GS–9)	Handled by OCMI, Pittsburgh, Pa.
St. Louis, Mo	2,154	1 (GS–11); 1 (GS–9); 1 (GS–5).	
3rd Coast Guard District:			
Albany, N.Y	118	1 (GS–7)	
Bridgeport, Conn	507	1 (GS–11)	
Hartford, Conn	162	None	Handled by documentation officer, Bridgeport, Conn.
New Haven, Conn	178	do	Do.
New London, Conn	263	do	Do.
New York, N.Y	6,504	1 (GS–12); 3 (GS–11); 3 (GS–9); 1 (vacant GS–9); 1 (GS–7); 1 (GS–5).	
Perth Amboy, N.J	193	None	Handled by documentation officer, New York, N.Y.
Philadelphia, Pa	3,377	1 (vacant GS–12); 1 (GS–11); 1 (GS–9); 1 (GS–4).	
Wilmington, Del	4,325	2 (GS–11); 1 (GS–5).	
5th Coast Guard District:			
Alexandria, Va	434	None	Handled by documentation officer, Washington, D.C.
Annapolis, Md	928	1 Vacant (GS–6)	Handled by documentation officer, Baltimore, Md.
Baltimore, Md	1,532	1 (GS–12); 1 (GS–11); 1 (GS–5).	
Beaufort-Morehead City, N.C.	415	1 (GS–11)	
Cambridge, Md	438	1 (GS–6)	Part-time employee (20 hours weekly).
Cape Charles, Va	256	1 (GS–9)	Part-time employee (10 hours weekly).
Crisfield, Md	404	Vacant 1 (GS–6)	Handled by documentation officer, Baltimore, Md.
Elizabeth City, N.C	148	1 (GS–7)	Part-time employee (10 hours weekly).
Newport News, Va	916	Vacant (1 GS–11)	Handled by documentation officer, Norfolk, Va.
Norfolk, Va	605	1 (GS–12); 1 (GS–11); 1 (GS–3).	
Reedville, Va	687	1 (GS–9)	
Washington, D.C	925	1 (GS–11)	
Do	210	None	Handled by documentation officer, Beaufort-Morehead City, N.C.
Wilmington, N.C	303	1 (GS–11); 1 (GS–7).	

Documentation offices	Number of vessels	Personnel and grades	Supplementary information
7th Coast Guard District:			
Brunswick, Ga	221	None	Handled by documentation officer, Savannah, Ga.
Charleston S.C	421	1 (GS–9)	
Charlotte Amalie, St. Thomas, V.I.	297	None	Handled by documentation officer, San Juan, P.R.
Fernandina Beach, Fla	181	1 (GS–7)	Part-time employee (5 hrs. weekly).
Jacksonville, Fla	652	1 (GS–9)	
Key West, Fla	522	1 (GS–9)	
Miami, Fla	1,716	1 (GS–12); 1 (vacant GS–11).	
San Juan, P.R	182	1 (GS–11): 1 (GS–9)	
Savannah, Ga	320	1 (GS–9); 1 (GS–7).	
Tampa, Fla	2,210	1 (GS–11); 1 (vacant GS–11); 1 (GS–7).	
West Palm Beach, Fla	545	1 (GS–9)	
8th Coast Guard District:			
Apalachicola, Fla	151	None	Handled by documentation officer, Pensacola, Fla.
Baton Rouge, La	287	1 (GS–9)	
Biloxi, Miss	285	1 (GS–9)	
Brownsville, Tex	567	1 (GS–11)	
Corpus Christi, Tex	780	1 (GS–11)	
Galveston, Tex	828	1 (GS–11); 1 (GS–5).	
Gulfport, Miss	152	None	Handled by documentation officer, Biloxi, Miss.
Houma, La	1,420	1 (GS–9)	
Houston, Tex	1,367	2 (GS–11)	
Lake Charles, La	188	Vacant (1 GS–7)	Handled by 1 W–2.
Mobile, Ala	1,012	1 (GS–11); 1 (GS–7).	
Morgan City, La	1,178	1 (GS–10); 1 (vacant GS–9).	
New Orleans, La	3,207	1 (GS–12); 1 (GS–11); 1 (GS–9).	
Pascagoula, Miss	177	None	Handled by documentation officer, Biloxi, Miss.
Pensacola, Fla	598	1 (GS–9)	
Port Arthur, Tex	282	1 (GS–11)	
9th Coast Guard District:			
Buffalo, N.Y	256	1 (GS–11); 1 (GS–4).	
Cape Vincent, N.Y	33	None	Handled by documentation officer, Oswego, N.Y.
Chicago, Ill	2,090	1 (GS–11); 1 (GS–9); 1 (GS–5).	
Cleveland, Ohio	515	1 (GS–12); 1 (GS–5).	
Detroit, Mich	416	1 (GS–11); 1 (GS–5).	
Duluth, Minn	402	1 (GS–7)	
Erie, Pa	95	None	Handled by documentation officer, Buffalo, N.Y.
Milwaukee, Wis	814	1 (GS–9)	
Muskegon, Mich	313	1 (GS–7)	
Ogdensburg, N.Y	13	None	Handled by documentation officer, Oswego, N.Y.
Oswego, N.Y	136	1 (GS–9)	
Port Huron, Mich	134	None	Handled by documentation officer, Detroit, Mich.
Rochester, N.Y	179	do	Handled by documentation officer, Buffalo, N.Y.
Sandusky, Ohio	136	do	Handled by documentation officer, Toledo, Ohio.
Sault Ste. Marie, Mich	265	1 (GS–7)	
Toledo, Ohio	104	1 (GS–9)	
11th Coast Guard District:			
Los Angeles-Long Beach, Calif.	2,499	1 (GS–11); 1 (GS–9); 1 (GS–5).	
San Diego, Calif	750	1 (GS–11)	
12th Coast Guard District:			
Eureka, Calif	293	1 (GS–4)	Part-time employee (18 hours weekly).
San Francisco, Calif	2,647	1 (GS–12); 1 (GS–11); 1 (GS–7).	
13th Coast Guard District:			
Aberdeen, Wash	487	1 (GS–9)	
Astoria, Oreg	373	1 (GS–9)	
Bellingham, Wash	592	1 (GS–11)	
Coos Bay, Oreg	487	1 (GS–9)	
Port Angeles, Wash	139	1 (GS–9)	
Portland, Oreg	798	1 (GS–11)	
Port Townsend, Wash	44	None	Handled by documentation officer, Port Angeles, Wash.
Seattle, Wash	2,972	1 (GS–12); 1 (GS–11); 2 (GS–9).	
Tacoma, Wash	632	1 (GS–11)	

Documentation offices	Number of vessels	Personnel and grades	Supplementary information
14th Coast Guard District:			
Guam	3	None	Handled by OCMI, Guam.
Honolulu, Hawaii	586	1 (GS–11); 1 (GS–7).	
17th Coast Guard District:			
Juneau, Alaska	1,862	1 (vacant GS–12); 1 (GS–9).	
Ketchikan, Alaska	680	None	Handled by U.S. Customs, Ketchikan, Alaska.
Sitka, Alaska	216	do	Handled by U.S. Customs, Sitka, Alaska.
Wrangell, Alaska	368	do	Handled by U.S. Customs, Wrangell, Alaska.

RECAPITULATION

112 ports of documentation.
Total vessels documented: 78,694.
Personnel and grades: 9 (GS–12); 42 (GS–11); 1 (GS–10); 31 (GS–9); 13 (GS–7); 1 (GS–6); 11 (GS–5); 3 (GS–4); 2 (GS–3); 1 (W–4).
Vacant positions: 2 (GS–12); 4 (GS–11); 3 (GS–9); 1 (GS–7); 2 (GS–6).
Total positions: 126.

Question. What is the Coast Guard's position with respect to the inspection and required manning levels for tugs and barges using the rigid or semi-rigid tug barge linking system?

Does the Coast Guard differentiate between this system of linkage and the conventional linkage systems?

If so, why?

Answer. The Coast Guard position is that a propulsion unit (tug) connected to a cargo-carrying unit (barge) by a rigid or semirigid mechanical system is in fact a single self-propelled motor vessel. The Artubar tug barge linking system is one such system in current use. Another is the Breit-Ingram system. When this combination admeasures over 300 G.T. it is subject to inspection and certification in view of its intended use and operation on the high seas (46 USC 367). This means that the cargo-carrying unit and the propulsion unit regardless of its gross tonnage are subject to inspection, certification, and appropriate manning requirements.

The use of mechanical connections between the propulsion unit and the cargo-carrying unit provides an all-weather capability that is most attractive but which also clearly differentiates such an arrangement from the conventional method of push-towing. We hold that the mechanical connection, regardless of whether it is rigid or semi-rigid, categorizes the combination of tug and barge as a single unit for inspection purposes.

We recognized that this departure from conventional pusher-towing offers a much needed increase in control over the towed vessel and may well be an innovation that would improve the competitive position of our merchant marine. We considered it our responsibility to facilitate development of the new concept so long as requisite safety was maintained.

The Coast Guard decision to inspect tug/barge combination as a single unit when utilizing the rigid mechanical connection has been reinforced by the recent accident to the MARTHA INGRAM. This accident points up the importance of viewing these combinations as a single vessel for construction and operational features and not as a separate tug and barge.

Ocean Station Vessel Program

Question. What is the Ocean Station Vessel Program?

Answer. Simply stated, the Ocean Station Vessel Program (OSV Program) is a term which includes the operation of ships and associated facilities for the purpose of manning specified ocean positions. The Atlantic and Pacific OSV Program, in which the United States is a participant, serve both international and national requirements.

While manning these stations, the ships perform a variety of duties which are categorized as primary and ancillary functions. These functions relate to the safety of aeronautical and maritime commerce, as well as national defense interests. Primary functions are to observe and report weather data for real time forecasting. Second functions include the maintenance of a search and rescue capability, a communications capability and air navigation services.

Other functions include oceanography, AMVER[1] message relay and various cooperative projects of a scientific nature.

Question. What is the historical and legal background for the OSV Program?

Answer. The OSV Program has a long history rooted in the need to describe and predict world weather patterns. Systematic efforts to acquire the necessary meteorological data over the oceanic areas were accelerated by World War II. At the end of the war, the importance of weather prediction to military operations shifted to civil aviation. By 1954, a 17 nation agreement, called the North Atlantic Ocean Station (NAOS) scheme, was formed. Since 1954, this agreement has been administered by ICAO (International Civil Aviation Organization). At the same time, through a bi-lateral executive agreement, the U.S. and Canada created an OSV Program in the Pacific.

The Coast Guard was then tasked as a principal operating agency, along with the National Weather Service, to conduct the operations for the U.S. Government.

Question. What are the tasks assigned to ocean station vessels?

Answer. Primary services consist of performing meteorological duties such as:

collecting surface and upper air weather data on a specified schedule

reporting observational data to appropriate shore stations

providing a communications relay of meteorological observations from other ships and aircraft.

The ancillary functions are threefold:

First, ocean station vessels maintain a *search and rescue capability* to assist transoceanic aircraft and surface ships.

Secondly, these OSV's maintain a *communications capability* for both the handling of distress incidents and routine traffic.

Thirdly, OSV's are equipped to provide *air navigation services* such as position fixing by radar and radio beacon.

In addition to the primary and ancillary categories of OSV Program services, other tasks are performed such as:

Relay of AMVER message traffic.

Sub-surface oceanographic observations.

Conduct of a variety of scientific efforts on a cooperative basis. Examples of this include bottom contour plotting, plankton tows, bird and mammal observations, air and sea water sampling.

Question. How many ocean stations and ocean station vessels are there under U.S. control?

Answer. In the Atlantic, U.S. responsibility extends to manning four ocean stations which are required by the NAOS Agreement. In addition, the Coast Guard also operates the specialized weather station HOTEL 200 miles off the Virginia coast. This is strictly a U.S. effort to provide better forecasting of winter storms and hurricanes for the northeastern seaboard. Weather station HOTEL operations are limited to meteorological functions; no aircraft services are provided, and this station is a separate consideration from the international OSV Prgoram. A former high endurance cutter, the GRESHAM, has been converted to a weather cutter and provides about 80% of the manning time for station HOTEL.

In the Pacific, Canada mans one station in the Gulf of Alaska, and until a few months ago, the U.S. maintained two ocean stations. In January, the western Pacific station VICTOR was disestablished.

To perform these tasks, the Coast Guard uses a mixed fleet of 27 high endurance cutters as the resource for the OSV Program in two oceans. These multimission cutters also engaged in other activities and maintain a military readiness capability. At the present time, the OSV Program itself comprises the majority of the high endurance cutter employment schedule.

---

[1] AMVER—The Automated Mutual-assistance VEssel Rescue system, operated by the United States Coast Guard, is an international program designed to assist the safety of merchant vessels on the high seas. Merchant vessels of all nations on offshore passages throughout the world are encouraged to send sail plans upon departure from port, and periodic position reports en route, to cooperating radio stations who will forward them to the AMVER Center on Governors Island in lower New York Harbor. There, the information is entered into a computer which calculates positions by dead reckoning for the ships throughout their voyages, based upon most recent information. When a recognized Rescue Center of any nation learns of an emergency at sea, it is encouraged to obtain a computer-predicted listing of ships in the vicinity of the emergency to see which, if any, might be well suited to provide help. Valuable Search and Rescue data, such as each ship's radio watch schedule and whether she carries a doctor, is kept on file in the computer and is also printed for each ship listed. The location of an individual vessel, if participating, may also be obtained by rescue authorities if her safety is in question. Predicted vessel locations are disclosed only for reasons related to maritime safety.

Question. How many ocean stations and ocean station vessels are there under foreign control?

Answer. The five European stations in the Atlantic are a shared responsibility of five operating countries (Norway, Sweden, United Kingdom, France, Netherlands). Nine single purpose weather ships are manned by civilian crews solely for the OSV Program. The European method is basically a merchant ship operation.

Canada mans one ocean station in the Gulf of Alaska.

Question. How many significant search and rescue cases in the last year have been successful in a direct sense because of the presence of ocean station vessels either on station or proceeding to or from port incident to an ocean station patrol?

Answer. There really haven't been any of the sensational assistance cases of the plane ditch variety that we used to encounter a decade ago.

More common today are those involving medical evacuation of sick or injured personnel from merchant ships or the communications relay assistance cases in mid-ocean. There were several instances where our high endurance cutters responded to searches for missing planes or reports of sinking vessels. None of these were successful in the sense of locating survivor or saving property.

Mid-oceans search and rescue activities of the OSV Program in a direct sense are far from numerous. Even in the medical exacuation cases, there is usually another vessel of opportunity which could have provided similar assistance.

The existence of the Coast Guard's AMVER program is the backbone of using the vessel of opportunity technique. But instances where the success of a search and rescue effort in mid-ocean depends upon the exclusive presence of a high endurance cutter on ocean station patrol are becoming rare.

Question. What percentage of the Coast Guard fleet of cutters is dedicated to ocean station duty?

Answer. Only the 27 high endurance cutters are used for ocean station vessel purposes. This is 14% of the total Coast Guard Cutter fleet (65 ft length and over). These 27 multi-mission ships provide a pool resource from which continuous manning of ocean stations is conducted. A variety of other mission activities absorbs the remaining available operating time. None of the high endurance cutters are totally dedicated to the OSV Program because they all participate in other mission assignments in addition to the OSV Program.

Question. Could the vessels assigned to this duty be profitably assigned to other tasks? If so, what are those tasks?

Answer. There are several aspects to this problem. New mission activity, particularly law enforcement of fishery areas, is shaping up as a job that will require increasing employment of high endurance cutter resources. However, 15 of our existing 27 HEC's are approaching end life in a few years.

Because of changing mission activities and aging cutters, we are right now making a study to determine our long range cutter requirements. At this point, we are examining the need for the types and number of cutters for long term operations. The study has just recently started, so we do not yet have any concrete results.

Question. Recently, a U.S.-manned ocean station in the Pacific Ocean was discontinued. Why?

Answer. The recent disestablishment of Ocean Station VICTOR in the Pacific was part of the Coast Guard's effort to reduce government spending. After extensive analysis, we concluded that a shutdown of the station was the best way to avoid an increased work load which would have resulted from an across the board reduction of operating units.

Question. Are other ocean stations planned for termination in the future? If so, which ones, and when?

Answer. The recently concluded international conference for the North Atlantic OSV Program agreed to a closing of Ocean Station ECHO, one of the four U.S. Atlantic stations, on 30 June 1973.

In addition, the conferees agreed to a termination of the Atlantic OSV Program under ICAO auspices effective 30 June 1975. After that time, the continuation of any residual OSV Program is to be decided by a May 1974 Conference. The extent of a U.S. role in a ship scheme after 1975 is yet to be determined. The success of NOAA's meteorological satellite program will probably be one important factor.

Question. Does perpetuation of the Ocean Station Program affect enlisted and officer morale and retention adversely or positively?

Answer. This is a hard question to answer. We have a group of officers and enlisted men who do enjoy sea duty; particularly on the open ocean, regardless of tasks.

There are others who do not regard ocean station duty as very attractive, due in varying measure to such factors as monotony, family separation, lack of a direct feeling of accomplishment, poor habitability on our older ships, etc. However, it is a Coast Guard responsibility and is generally accepted.

Question. Are there any satisfactory alternatives to the OSV Program?

Answer. The satellite technology being developed by NOAA seems to hold a lot of promise for meteorological functions. There are groups who contend that the optimum system will have to consist of a mix of buoys, satellites and ships. One reason advanced for the mixed system of resources is to conduct effective operations not only into the atmosphere but into the sub-surface ocean environment as well. Others foresee that a mixed system could also be used as an international tool of law enforcement on the high seas in such things as pollution control and fisheries.

I expect that such a multi-mission plan may eventually replace the existing OSV Program. Where these activities involve the safety of maritime commerce, I foresee that the Coast Guard will have a valid role in any new order of ocean operations.

Status of Projects Authorized for FY 1972

Question. Please provide for the Committee a summary of the current status of each project for which funds were authorized and or appropriated during fiscal year 1972?

Answer. (Chart).

A.C. & I.—1972 PROJECTS—CURRENT STATUS

[In thousands]

Project title	Amount appropriation	Unobligated balance as of Feb. 29, 1972	Estimate completion date
HEC's—increase fuel capacity and improve habitability of 327 foot class	$760	----------	August 1972.
Rehabilitate and improve buoy tenders	1,290	$310	April 1973.
Restore WIND Class Polar Icebreaker	5,250	----------	March 1974.
CGC GLACIER—major repairs	1,250	----------	May 1972.
CGC EVERGREEN—upgrade oceanographic capability	1,450	1,095	February 1973.
Vessel communications and modernize radio rooms	300	107	June 1973.
Vessel communications—replace secure radio teletype	850	352	June 1974.
Abate pollution—holding tanks for CG vessels	3,200	1,168	August 1973.
Procure 3 LRS A/C, modify fuel system and construct hangar, Miami, Fla.	14,190	3,850	March 1974.
Replace center wing on (3) C–130 aircraft	600	----------	June 1972.
Rework outer wing on (3) C–130B aircraft	600	----------	October 1972.
Reactivate (6) aircraft for pollution surveillance	900	496	June 1972.
Procure (6) M/R recovery aircraft	13,550	2,603	June 1973.
Survey and design of facilities	1,800	1,328	Various.
Miscellaneous urgent aids to navigation	640	434	Do.
Selected aids to navigation projects	760	592	Do.
Public family quarters	5,740	5,729	August 1973.
LAMP	1,000	572	June 1972.
Newburyport, Mass.—rebuild Merrimac River Station	1,400	1,195	Unknown.
Gloucester, Mass.—rebuild station	1,530	1,524	September 1973.
Marshfield, Mass.—construct barracks at Boston Radio Station	200	200	Unknown.
Barnegat, N.J.—improve station, phase II	390	389	July 1973.
Port Hueneme, Calif.—relocate station	670	160	August 1972.
Portland Oreg.—relocate station	1,840	1,834	July 1973.
Westport, Wash.—rebuild Grays Harbor Station	1,340	1,338	Do.
Honolulu, Hawaii—construct new radio station	4,610	4,604	Cancellation requested.
San Francisco, Calif.—improve fuel and water systems at air station	230	150	December 1972.
Abate pollution—Coast Guard shore stations	360	360	September 1972.
Procure Air Deliverable Antipollution Transfer System components	1,600	1,600	May 1973.
Procure open water oil slick containment system	1,900	1,900	Do.
Procure pollution monitoring sensors	1,830	1,467	January 1973.
French Frigate Shoals, Hawaii—improve and modernize loran station	1,200	1,065	August 1973.
Pacific loran stations—replace generators/air-condition work spaces	650	650	October 1972.
Palau Island—repave airstrip serving loran station	100	100	Cancellation requested.
Loran-C stations—develop replacement equipment, construct building, EEC, Wildwood.	3,250	2,085	December 1973.
Marcus Island and Iwo Jima and Yap—restore loran towers	350	78	December 1972.
Puget Sound, Wash.—marine traffic control	1,000	701	October 1972.
Wildwood, N.J.—construct barracks at EEC	350	45	February 1973.
Portsmouth, Va.—relocate water main, new CG base	410	9	September 1972.

A.C. & I.—1972 PROJECTS—CURRENT STATUS—Continued

[In thousands]

Project title	Amount appropriation	Unobligated balance as of Feb. 29, 1972	Estimate completion date
Terminal Island, Calif.—replace electronics repair building	200	200	August 1972.
Honolulu, Hawaii—improve barracks at base	380	380	Do.
Boston, Mass.—improve facilities at CG base, phase II	3,620	3,620	July 1973.
Curtis Bay, Md.—modernize facilities, Coast Guard Yard	1,530	666	April 1973.
Omaha, Nebr.—improve facilities at CG moorings	380	380	January 1973.
Guam, Marianas Islands—augment Coast Guard Depot facilities	500	83	December 1972.
Petaluma, Calif.—construct trainee barracks	2,500	2,500	June 1973.
New London, Conn.—construct Academy science teaching facility	4,590	66	October 1973.
Cape May, N.J.—expand heating plant capacity at Recruit Training Center.	210	3	August 1972.
Administrative expense	4,432	1,373	Not applicable.
Total	97,682	49,361	

Charges for Icebreaker Services

In the fiscal 1972 authorization hearings the Coast Guard was queried regarding the possibility of a assessing user charges for Ice Breaker services. At that time the response did indicate that the Coast Guard was investigating such a system and might propose it during fiscal year 1973. What progress has been made in this effort?

At the direction of the Office of Management and Budget, the Coast Guard developed and proposed a system of incremental user charges.

The system did not receive uniform support from the potential users. It was therefore decided to proceed with the 1973 budget under the assumption that no user charges will be levied during that fiscal year.

Analysis of Need for Administrative Aircraft

Question. Please provide a review of the operating hours for administrative aircraft during fiscal year 1971. Estimate for the Committee the extent to which the administrative aircraft are used by the Department of Transportation officials not on Coast Guard business?

Answer.

FY 1971—Utilization of Coast Guard Administrative Aircraft

To provide a review of the operating hours for Coast Guard administrative aircraft it is necessary to categorize user groups as follows:

DOT—Flights for Department of Transportation Officials.

C/CA—Flights for the Commandant or Assistant Commandant of the Coast Guard.

CG—All other Coast Guard flights.

OTHER—Those for congressional interests, other departments, etc. Aircraft use in the following table is described in terms of:

FLIGHT HOURS (FH)—The actual amount of airborne time expended in providing services; and

OPERATING HOURS (OH)—The time, including flight hours, during which the aircraft are necessarily unavailable to other users due to the services provided.

Aircraft	DOT		C/CA		CG		Other	
	FH	OH	FH	OH	FH	OH	FH	OH
VC-4A	123	318	117	382	447	946	112	416
VC-11A	317	729	144	756	80	230	11	15
Total	440	1,047	261	1,138	527	1,176	123	431

The table above summarizes a total of *394* individual flights by administrative aircraft. Of that total, *129* were attributed to DOT officials of which 72 were for the Secretary, *10* were for other DOT officials on Coast Guard business and *47* were for DOT officials on non-Coast Guard related business. *37* were for other departments and the Congress on Coast Guard related business.

IMPACT ON COAST GUARD OF VIETNAM OPERATIONS

Question. Please detail for the Committee the expenditures of the Coast Guard, from all appropriations, for its military preparedness training and participation in Naval training exercises and actual combat missions related to Viet Nam for fiscal years 1970, 1971 and your estimates for fiscal year 1972, 1973?

Answer. Expenditures for Fiscal Years 1970 and 1971 and estimates for Fiscal Years 1972 and 1973 are as shown below. The Military Readiness figures include the Reserve Training appropriation as well as expenditures for Underway Training with the Navy and local training at Coast Guard commands. The Military Operations figures relate solely to participation in the Viet Nam effort. It can be noted that phase down of operations commenced in FY 1970 with the turnover of the Patrol Boat operations to the Vietnamese and continued through the decommissioning of Squadron Three in mid FY 1972. Remaining operations relate almost solely to Support of Tactical Aids to Navigation.

	Fiscal year—			
	1970	1971	1972, estimated	1973, estimated
Military readiness	$46,264,000	$44,261,000	$48,401,000	$55,021,000
Military operations	18,818,000	6,084,000	3,826,000	2,558,000
Total	65,082,000	50,345,000	52,227,000	57,579,000

IMPACT OF VESSEL PLACEMENT PROGRAMS DEFERMENT

Question. In fiscal year 1972 the Coast Guard requested funds for three high endurance cutters to replace over-aged cutters. Those funds were denied by the Department of Transportation. I noticed that this project has again been deferred for 1973. How many of your high endurance cutters are now considered over-aged?

Answer. Six 327's are overage in number of years. However, these vessels underwent a program of rehabilitation and modernization in the late 1960's and are considered useable for a few more years. In addition, nine 255's are on the borderline of approaching obsolescence but a minor modification program for them a few years ago has extended their useful life.

Question. What is the operational consequence of continually deferring the replacement of over-aged cutters? Which specific types of missions must be curtained as a result of the additional time required for upkeep and maintenance on an overaged vessel?

Answer. Our building program for the new 378-ft. HAMILTON Class was based on a one-for-one replacement of the old 311-ft HEC's which were World War II sea plane tenders.

During the recent effort to reduce government spending, we decommissioned the last three of those cutters used as HEC's when Ocean Station VICTOR was disestablished. Now, only two remain. One is the UNIMAK which is used as a reserve training ship and the other is the GRESHAM which has been converted to a special purpose weather ship for station HOTEL. Effectively, all of the 311-ft class has been removed from the high endurance cutter fleet.

As to the 15 HEC's of the older 327–ft and 255-ft Classes, our best estimate is that they are adequate for several years, perhaps five or six, but there is no guarantee of their reliability beyond that.

At present, we are curtailing some of the operational training and some portions of the oceanography work. Some of our underway refresher training and fleet exercises with the Navy are deferred. Pressure is mounting for increased use of high endurance cutters in the offshore law enforcement work. When breakdowns occur on short notice, the resulting change in employment schedules inevitably result in a higher tempo of operations.

QUESTIONS SUBMITTED AT THE REQUEST OF SENATOR HART

Question. Because of the great public interest in Michigan over pollution control in the Great Lakes and because the Coast Guard remains one of the very visible offenders in this regard, I would appreciate your response to this question:

Is there money in the 1973 budget to install holding tanks and facilities to pump out waste in home ports in all Coast Guard craft in the Great Lakes, including the icebreaker Mackinac?

If not, how much additional authorization is needed for this purpose?

Answer. The FY 1973 budget contains sufficient funds to install shore reception facilities at all Coast Guard installations on the Great Lakes, including MACKINAC's moorings. It does not include funds to install holding tanks and pumpout capability in all Coast Guard craft in the Great Lakes.

Funds to install holding tanks and pumpout capability are provided for two Great Lakes vessels at an estimated cost of $120,000.

An additional $670,000 would be required to install holding tanks and pumpout capability in the remaining 10 cutters and 99 boats on the Great Lakes. The MACKINAC is included in these 10 vessels. However, funding is not the only constraint on proceeding with the installation of holding tanks pumpout capability. The impact on operational commitments must be considered. Our plans take this into account and installations have been scheduled accordingly.

The schedule will meet the mandate of the Federal Water Pollution Control Act, as amended. Thus, even if the additional $670,000 were provided in fiscal year 1973, installations in *all* Great Lakes vessels could not be effected without severe disruption of service to the public.

QUESTIONS SUBMITTED AT THE REQUEST OF SENATOR GRIFFIN

Question. What new or additional icebreaking capabilities will be needed in the Great Lakes if extension of the shipping season becomes a permanent reality?

Answer. As a minimum we will need to replace EDISTO which is temporarily deployed to the Great Lakes with a more suitable vessel. EDISTO is scheduled for decommissioning in FY 1975. She is overaged and her machinery is so tired it cannot be effectively rejuvenated. Additional icebreaking capability may be required depending upon the length of season extension desired.

Question. Could you provide the Committee with the specific amount requested for FY 1973 by the Coast Guard for expansion of its facilities at Cheboygan, Michigan? Also, please provide an explanation of the need for the funds requested.

Answer. The Coast Guard requested $1.16 million for mooring facilities in Cheboygan in FY 1973. More recent information on the cost of dredging, backfill and related environmental precautions have increased the estimated cost of this project to $1.55 million.

The MACKINAW has been using makeshift facilities at Cheboygan. At present these consist of two pile clusters to hold the vessel in position and a narrow pier to provide access for personnel. The depth of water is not adequate for safe maneuvering of the vessel. The funds requested are needed to remove the existing facilities, dredge the area to a depth of 21 feet, place a riprap blanket along the shore, construct a new pier and turning cluster, providing adequate lighting for the area and shoreside utility connections for the vessel, including a sewage connection. A recreation building for the crew is also included in the project.

Senator LONG. Senator Hatfield and Senator Packwood had planned to be with the subcommittee this afternoon to support the Coast Guard authorization bill. Senator Hatfield is absent due to the serious illness of his father and Senator Packwood is detained on the floor. Without objection their statements will be printed in the record at this point, as if they had been given here this afternoon.

STATEMENT OF HON. MARK O. HATFIELD, U.S. SENATOR FROM OREGON

Mr. Chairman, thank you for allowing me to address comments to S. 3241, a bill to authorize appropriations for Coast Guard activities. The importance of the Coast Guard and the services it provides to my State of Oregon is something I cannot stress enough. Adequate funding for Coast Guard activities is crucial.

I am appearing today to urge the committee to retain the authorization for construction of a helicopter station at North Bend, Oreg. You will recall, Mr. Chairman, that the committee added this as an amendment to the authorization bill last year.

At that time I stressed how important this station could be for both search and rescue operations as well as for surveillance of foreign fishing off the coast. Increased Coast Guard attention to search and rescue as well as off-shore fishing by foreign vessels can have direct effects on the Northwest, specifically, in bringing about meaningful negotiations for off-shore fishing limits, and helping to alleviate incursions of foreign vessels.

Assigning a dollar value to the lives and property saved by the 13th Coast Guard District, for Oregon and Washington, is a difficult task. The beauty of the Oregon coast makes it a popular recreation area, drawing thousands of visitors, fishermen, and pleasure seekers each year, many from outside Oregon. In addition, seven coastal counties are the home of a fishing industry which harvests 85 million pounds of fish annually, amounting to a $18 million business. These both create a need for Coast Guard patrol and rescue operations.

The search and rescue operations of the Coast Guard have been dramatically illustrated many times along the Oregon coastal area. In 1971, Oregon-Washington Coast Guard operations rescued 14,000 persons, responded to 6,200 calls for assistance, and saved property worth $135 million.

In the Coos Bay area alone, there were 443 cases in 1971, representing an increase of 53 percent over 1970. At the Yaquina station, there were 411 search and rescue operations amounting to a 35-percent increase over 1970. At Astoria there were 256 cases in 1971—a 10-percent increase over 1970. These figures by themselves are a significant indicator of the need for adequate funding in my State.

Mr. Chairman, as a resident of Newport, on the Oregon coast, I take a special interest in the Coast Guard appropriations. I am familiar with the neeed of the coastal areas, and I intend to speak out for programs of the Coast Guard, and continue to work to see that they receive the funding they deserve.

Thank you.

STATEMENT OF HON. BOB PACKWOOD, U.S. SENATOR FROM OREGON

Mr. Chairman, and members of the subcommittee, I want to thank you for this opportunity to appear before you today, and for holding hearings on Coast Guard authorizations.

I am testifying today in behalf of the authorization of a Coast Guard air station in North Bend, Oreg. In addition to providing increased

surveillance of the Oregon Coast, this air station would supply the increased search and rescue opeartions desperately needed in this area.

Throughout the commercial fishing season, I regularly receive letters and telegrams from irate Oregon fishermen who complain about the intolerable invasion of our fishing zone by foreign fishing fleets. The presence of foreign ships presents a tremendous threat to Oregon's commercial fishing industry. Oregonians are understandably bitter about lengthy Coast Guard delays in answering their complaints of Soviet, Korean, and Japanese violations of our 12-mile limit.

In response to this problem, I have attempted since joining the Senate to insure that the interests of our commercial fishing industry receive the high priority they deserve.

In 1970, for example, I cosponsored a bill, which eventually became law, to increase the maximum fine for illegal fishing from $10,000 to $50,000. That same year, I cosponsored an amendment to the Military Sales Act which prohibited assistance to the Republic of Korea until the President of the United States determined that no citizens of the Republic of Korea were fishing for salmon east of the line 175 degrees west longitude. More recently, I have cosponsored legislation to require that all fish aboard any foreign vessel found fishing in American waters must be forfeited.

Mr. Chairman, each of these proposals represents a major step toward achieving a solution to our foreign fishing problem. We must realize, however, that strong laws are not worth the paper they're printed on unless they are strictly enforced. Unfortunately, strict enforcement has been the exception rather than the rule in protecting America's commercial fishing industry from foreign encroachments. Until we provide adequate manpower and equipment to catch the violators, and impose the fines we legislate, foreign fishermen will continue to ignore our territorial integity. The construction of an air station at North Bend would allow more aggressive enforcement of existing law.

Oregon fishermen have assured me that their bitterness stems not so much from the action of foreign fleets as from the inaction of Federal departments and agencies. In the past, the justified concerns of Oregon commercial fishermen have been met with mere expressions of sympathy or apology. I can assure you, Mr. Chairman, that Orgeon fishermen deserve and expect better treatment. I am here today to insure that they receive it.

Senator LONG. Secretary Olsson and Admiral Bender. We appreciate your assistance here this afternoon and are looking forward to receiving any additional information which may be helpful to the subcommittee in considering this measure. We will cooperate with you and we expect it to be mutual.

Secretary Olsson and Admiral Bender. We would welcome the additional information we requested of you. We will cooperate with you and we expect it to be mutual.

Mr. OLSSON. Thank you.

Admiral BENDER. Thank you.

(Whereupon at 3:55 p.m., the subcommittee was adjourned.)

MARINE PROGRAMS FISCAL YEAR 1973

MONDAY, MAY 1, 1972

U.S. SENATE,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON MERCHANT MARINE,
Washington, D.C.

The subcommittee met at 10 a.m. in room 5110, New Senate Office Building, Hon. William B. Spong, Jr., presiding.

Present: Senators Spong, Cotton, and Beall.

OPENING STATEMENT BY SENATOR SPONG

Senator SPONG. The hearing will come to order.

This morning we begin hearings on S. 3404, legislation to amend the Cargo Preference Act of 1954 to require that at least 50 percent of oil imports brought in under quota be carried on U.S.-flag vessels.

I introduced S. 3404 on behalf of myself and Senator Beall, because I am deeply concerned about the implications for our security and commerce that result from our domestic energy shortage.

We are increasingly becoming a have-not nation, both with respect to our petroleum requirements and the means of transporting these requirements to our shores.

Our imports of oil are escalating rapidly, both in real terms and as a percentage of our overall consumption. They are projected to increase even more dramatically in the next decade.

At the same time, almost none of our imports are carried in U.S.-flag tankers and the U.S. tanker fleet deteriorates. At present, over 11 percent of it is laid up.

If the present situation continues, we will be faced with a situation where we will be dependent on foreign sources for our supply of petroleum and dependent on foreign sources for the transportation of our supply.

Such a dual dependency doubles the risk that in the future we will not receive the energy supply we require. While we probably cannot help but become more dependent on foreign oil, we can and should prevent total dependency on foreign sources for the carriage of this energy.

The benefits of this legislation are obvious for our security, our balance of payments, and domestic employment. These matters were discussed when the bill was introduced and, in the interest of time that material will be inserted in the record at this point.

(The information follows:)

By Mr. SPONG (for himself and Mr. BEALL):

S. 3404. A bill to amend the Cargo Preference Act of 1954 for certain purposes. Referred to the Committee on Commerce.

Mr. SPONG. Mr. President, the United States is becoming increasingly dependent on the import of foreign oil as a major source of fuel. In 1960, this country imported 1.8 million barrels of oil per day, or 18 percent of our petroleum demand. In 1970, imports of oil rose to 3.3 million barrels per day, or 23 percent of our demand. By 1985, it is estimated that the United States will have to import more than 14 million barrels of oil each day in order to satisfy our domestic demand. In other words, we may, by 1985, be relying on foreign sources for nearly 60 percent of our petroleum.

The problem presented by our increasing reliance on imports is complicated by the deterioration of the American-flag tanker fleet. As of January 1, 1972, the world tanker fleet totaled more than 190 million deadweight tons. Yet the U.S. fleet was only 7.6 million deadweight tons, or 4 percent of the total, and these few ships were engaged only in domestic tanker operations. In addition, 11 percent of our total fleet, or better than 850,000 deadweight tons, was laid up. Within a few months, prospects are that a minimum of 1.5 million dead-weight tons will be laid up, including many of our newest and most modern vessels.

The situation thus presented is that on the one hand the United States has an increasing need for the tanker carriage of foreign oil to our country and on the other hand our tanker fleet is dwindling in size and wasting away in idleness. The reason is that no oil is being carried from foreign sources to our country aboard American-flag tankers.

If this situation continues, we will be faced with a situation in which we will be dependent on foreign sources for our supply and dependent on foreign sources for the transportation of our supply. Such a dual dependency doubles the risk that in the future, we will not receive the energy supply we require. While we probably cannot help but become more dependent on foreign oil, we can and should prevent total dependency on foreign sources for the carriage of this energy.

It is for this reason that I am introducing legislation on behalf of myself and Senator BEALL to amend the Cargo Preference Act of 1954 to require that a minimum of 50 percent of our oil imports be carried on U.S.-flag vessels.

This provision would automatically provide for a buildup in the U.S.-flag tanker fleet. New jobs would be provided for thousands of Americans in shipbuilding and allied industries and in seafaring, thus helping to alleviate our country's unemployment problem. The companies involved in shipping the oil would be American corporations paying taxes to our Government on their profits.

Militarily, modern mechanized armed forces depend heavily on petroleum products to function. Supplying this need, or logistical support, is becoming more and more the responsibility of the privately owned merchant fleet. As Rear Adm. G. H. Miller stated in the February 1972, issue of Sea Power:

"Shipbuilding budgets have been insufficient in recent years to maintain an adequate Navy. Thus, with the compelling need to modernize its aging combat fleet, the Navy must turn to the U.S. Merchant Marine for an increasing proportion of the logistic support required by the combat fleet. An adequate U.S. Merchant Marine would provide a large reservoir of ships, which would be converted quickly to logistic support functions."

This legislation would help to insure that the United States has a merchant marine which could function as the Nation's fourth arm of defense.

The use of U.S.-flag vessels to carry oil will also assure the American public that this potentially dangerous and polluting cargo will be carried in the safest, most ecologically conscious manner possible. Legislation can be passed to prohibit harmful operating procedures, but such laws are difficult to apply to a foreign-flag vessel. In addition, enactment of this legislation would have a beneficial effect on our balance of payments. For every dollar spent on petroleum transport without this legislation, about $0.52 would go and stay abroad. With the 50–50 amendment, this would be cut to about 26 cents on the dollar, assuming the comparability between United States and foreign costs.

Enactment of this legislation would not make the United States unique in this area. France, Spain, Chile, and Peru have laws which establish quotas for their flag vessels. Japan and other maritime nations strongly promote their merchant fleets through Government policies which achieve the same result as if they had such laws. There has been no retaliation against these countries by the oil producing nations or by other maritime countries. The United States should require that its crude imports be carried in domestic tankers on the same economic and military grounds that caused other nations to adopt that policy.

Testimony before the House Merchant Marine and Fisheries Committee demonstrates that the importation of 50 percent of our oil aboard American-flag tankers will not result in an increase in cost to the consumer.

It is for these reasons that the United States should require that at least 50 percent of our oil imports be carried aboard American-flag tankers. Our national security, our economy, and our environment demand it.

Mr. BEALL. Mr. President, I am pleased to join with the distinguished Senator from Virginia in sponsoring legislation to amend the Cargo Preference Act of 1954. I wholeheartedly concur with the reasons presented by Senator Spong in proposing that a minimum of 50 percent of our oil imports be carried on U.S.-flag vessels.

There are two important aspects of this bill which must be fully considered. One is the impact of this legislation on the American shipbuilding industry. The second is its relationship to our national security.

It has been estimated that by 1985 we will have to import between 12 and 15 million barrels of oil per day from overseas services. To supply the United States, a tanker fleet nearly equal to that of all of the tanker capacity in the world today will be required.

If the American flag were guaranteed a carriage of at least 50 percent of this vital cargo, between 50 and 75 million deadweight tons of tankers would be needed. The impact on American shipyards, and on the economy as a whole, would be enormous.

The average private shipyard employment for the first 11 months of 1971 was 128,800. This was the lowest figure since 1965. But, the construction of a 50,000 deadweight tons tanker, costing $14 million, would create jobs for 378 men for a full year. For a 250,000 deadweight ton supertanker costing $62 million, jobs would be created for 1,674 men for a full year.

So, when discussing the construction of a fleet of hundreds of modern tankers, we are talking in terms of ship construction jobs for thousands of skilled and semiskilled Americans. We are talking about giving Americans who are receiving unemployment compensation and welfare the opportunity to work and to make a worthwhile contribution to our society.

These benefits would also be felt by other segments of our economy. Allied industries—those which provide the materials necessary for ship construction—would be stimulated as production increased. The increase in the purchases of consumer goods and services would bolster the economies of the areas surrounding the shipyards and allied industries.

At the present time, it is difficult to regulate any part of the import oil transportation industry simply because American-flag vessels are engaged in the oil import trade. Our Nation must have an active tanker fleet engaged in transporting at least 50 percent of our oil imports. If this is not accomplished, the U.S. Government must be prepared to relinquish all control and regulatory powers over this entire industry to foreign nations.

There appears to be little choice in becoming more dependent on foreign sources for our supply of this vital and strategic raw material. The one remaining choice is whose transportation facilities will we utilize. Becoming dependent on third party foreign governments for transportation would create a dual dependency problem and would at least double the risk of being shut off from our supply of imported oil.

For example, using a third party nation as a transportation medium could create these problems:

A dispute between the producing exporting nation and the foreign-flag nation could effectively cut off all supply to our Nation.

Management and labor problems in the third party foreign-flag nation. Many of the corporations and labor unions of other nations are very politically oriented. For instance, some foreign-flag vessels crews and the companies themselves, refused to carry U.S. cargoes to Vietnam.

A dispute between our Nation and a third party nation transporting our energy resources could result in a withdrawal of all ships of that nation engaged in carrying oil to our country.

A dispute between our Nation and an international corporation that controls importing into the United States under a weak "flag of convenience." For example, if the United States pressures an international company to improve their safety and pollution standards, the company could instead withdraw its ships from our trade. Thus, we would either be without the supply we need, or else be forced to lower our standards and endanger our environment.

It therefore becomes apparent that in time of crisis, only U.S.-flag vessels can be directly controlled by our Government. In a future oil crisis, all the European-flag vessels currently engaged in transporting oil to the United States would either shift to their own oil trade or be nationalized by their governments. We could not afford to lose these ships, which currently carry about one-third of our imported oil. Yet, our European allies could not afford to let us keep these ships in our service.

Many arguments have been presented to attack the fact that our national security requirements command enactment of this amendment. There has been much testimony before the House Merchant Marine and Fisheries Committee to the effect that the United States can rely on the "effective control" fleet in time of national crises. But the truth of the matter is that the doctrine of effective control has never been put to the test. In other words, we have never been in the position to determine once and for all whether these Liberian-, Panamanian-, and Honduran-flag vessels would be available to the United States. We must have oil to survive as a nation, and we must import our oil. Our national security demands that we know we will be able to have the ships we require. There is only one way to so guarantee, and that is through the use of U.S.-flag vessels.

Another argument presented was that in time of an oil boycott against the United States, the exporting nations would load foreign-flag but not U.S.-flag ships. History has shown that this is not the case. The Department of Interior's Middle East Petroleum Emergency of 1967 contains an excerpt from Esso magazine. That article stated that:

". . . But, following allegations of Anglo-American participation in the war, all loadings at Arab ports for British and U.S. destination were refused, while some Arab states placed an embargo on British and U.S.-flag vessels, irrespective of their destination . . ."

The point is that in time of boycott, the exporting nations would not allow any flag to deliver oil to the United States. All participating nations joined in the boycott of the country of destination, whereas not all boycotted U.S.-flag vessels. Their argument in opposition to this legislation is therefore meaningless.

President Nixon, in late July 1970, asserted that "we are primarily—a sea power." Virtually surrounded by water, and hardly self-sufficient, the United States must rely on ships to import oil—vital and strategic material.

We cannot allow the carriage of this energy source to fall completely into foreign hands. We cannot allow our Merchant Marine—our Nation's fourth arm of defense—to deteriorate to such a point that in time of crisis it will be unable to meet our needs. The world is constantly changing. Our enemies of yesterday are our friends of today. And our friends may tomorrow's enemies. We must maintain ourself. We cannot place our fate in the hands of nations who may not desire to or be able to help us in time of trouble.

This legislation must be acted upon favorably. Americans need the jobs and the United States needs the guarantee of security.

Senator SPONG. I should note that the bill was introduced as a working paper. Like most legislation, it can probably be improved.

For example, part of the reason I introduced this bill is my belief that it could in no way increase cost to the consumer. This results from the operation of the import quota system itself.

When crude oil is purchased abroad, it is at a much lower price than U.S. oil. But when it is sold here, it sells for the same U.S. price. That is the purpose of the quota system, to keep domestic prices up to a level where they fully compensate U.S. production costs, uninfluenced by lower cost foreign supplies.

Since the bill would not affect domestic production costs, it would not affect consumer prices.

While this analysis seems persuasive with respect to crude oil and most refined products, it may not be true with respect to residual fuel oils which, although technically under license, are permitted free entry. Thus it may be necessary to modify the bill in this regard.

In any event, the purpose of these hearings is to explore all these issues.

(The bill and agency comments follow:)

92D CONGRESS
2D SESSION

S. 3404

IN THE SENATE OF THE UNITED STATES

MARCH 22, 1972

Mr. SPONG (for himself and Mr. BEALL) introduced the following bill; which was read twice and referred to the Committee on Commerce

A BILL

To amend the Cargo Preference Act of 1954 for certain purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 901 (b) (1) of the Merchant Marine Act, 1936, as amended (46 U.S.C. 1241 (b) (1)), is amended by inserting in the first sentence after the words "or commodities," and before the words "the appropriate agency", the words "or shall issue, on a quota basis, allocations or licenses for the importation of oil,".

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., April 20, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce, U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: This responds to your request for this Department's views on S. 3404, a bill "To amend the Cargo Preference Act of 1954 for certain purposes."

We recommend against enactment of this bill for the reasons stated herein.

The Cargo Preference Act of 1954 requires that 50 percent of any cargo procured by the United States from a Foreign nation or furnished by the United States to a foreign nation without reimbursement, shall be transported in United States-flag commercial vessels. For the purposes of the Act, United States-flag vessels must be documented under United States laws and must have a United States crew. If the ship was built or rebuilt outside of the United States, or if it had been documented under a foreign flag, to qualify as a United States-flag vessel it must be documented under United States laws for three years. S. 3404 would amend the Act to require that 50 percent of all oil imported under quotas or licenses issued by the United States be transported in United States-flag vessels.

We oppose S. 3404 for several reasons. First, while the United States and many other nations now have cabotage laws restricting trade between domestic ports to vessels of their own flag, very few countries impose these flag restrictions on their imports. The United States has traditionally favored international free trade for private shipping. Enactment of S. 3404 is therefore contrary to that tradition and might prompt similar restrictions by other countries on their imports or restrictions by oil producing nations on their exports.

Second, S. 3404 would substantially increase the cost of imported oil to consumers. American crews are two to three times more costly than foreign crews. The increased cost of imported oil would be borne mostly by east coast consumers. Assuming that this country's dependence on foreign oil increases at the current rate, S. 3404 could raise the cost of imported oil by as much as a billion dollars annually by 1985.

While we recognize the importance to the nation's security and economy of a strong domestic shipping industry, we note that there are presently a number of Federal programs designed to revitalize the domestic shipping industry on both the building and operating levels. Moreover, in time of emergency the United States can call upon ships from the "effective control fleet." This fleet is comprised of ships sailing under Panamanian, Honduras and Liberian flags and owned by United States citizens who agree to transfer control of the ships to the United States in the event of a national emergency. Moreover, many United States owned vessels sailing under foreign flags of convenience never sail into ports controlled by countries of the flag they are flying. The ties these vessels maintain with such countries are often minimal and for appearance only. Any danger of these vessels coming under exclusive control of the foreign country where they are registered is, therefore, remote.

Therefore, we do not feel that the national security benefits this bill would achieve justify the conflict with free trade policies, and the unavoidable increase in costs to consumers of imported oil.

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely yours,

HOLLIS M. DOLE,
Assistant Secretary of the Interior.

DEPARTMENT OF STATE,
Washington, D.C., April 28, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The Secretary has asked me to reply to your letter of April 14, 1972 requesting comment on S. 3404, a bill "To amend the Cargo Preference Act of 1954 for certain purposes." The bill would extend the provisions of

Section 901(b)(1) of the Merchant Marine Act, 1936, as amended, to oil imported subject to quota, allocations or licenses issued by the United States.

Under other existing provisions of Section 901(b)(1) it would be required that the 50 percent of oil imports coming within the scope of that Section "shall be transported on privately owned United States flag commercial vessels. . . ." Such vessels are later defined in the Section as *not* including "any vessel . . . (a) built outside the United States, (b) rebuilt outside the United States or (c) documented under any foreign registry until such vessel shall have been documented under the laws of the United States for a period of three years." In consequence of these provisions the oil cargoes to be reserved to United States flag tankers under this proposed legislation would have to be carried in US built and documented tankers, either existing or to be built. US owned tankers now under foreign flag would not be eligible unless originally built in the US and redocumented under US flag for three years.

To carry one-half of the rapidly increasing quantities of foreign oil which will have to be imported into this country by the end of this decade, or approximately three times the present level of imports by sea, a very substantial new tanker construction program in US shipyards would appear necessary, over and above the existing large needs for projected movements from Alaska, for the transport of LNG and for normal replacement of obsolete tonnage. Given significantly higher construction and operating costs for US-flag tankers, there would also be an impact on the cost of oil products to American consumers and of feedstock to our petrochemical exporters, unless substantial subsidy programs were adopted at direct cost to taxpayers.

The impact of the proposed bill, as understood by the Department of State would be extensive and enduring. There are potentially serious implications for US foreign economic interests which, in the view of this Department, raise the basic question whether the proposed reservation of oil imports to US-flag vessels is necessary or desirable in terms of our national security interests. We are fully aware of the broad security problem, not only for the United States but even more for other major free world nations, arising out of the fact that world consumption of oil may well double by 1980, that the US may come to depend upon imports for about half of its supplies, and that a large part of free world imports must come from distant and relatively insecure sources. We consider it vital to assure a steady supply of oil on reasonable terms. It is not clear, however, that our security interest requires an expansion of sea transport capacity under the US flag or US ownership control. Studies which we have seen on the broad security aspects of our oil import program appear to confirm that control over the means of transport would not be a determining factor in preventing an interruption of supplies. This is not to say, of course, that a reduction in the US-flag or US-controlled tanker fleet or in our shipbuilding capacity would be justified, but only that the need for an expansion on security grounds has not been demonstrated.

As to the impact of the proposed bill on our foreign economic interests, apart from security considerations, we must point to the major role of our international oil companies in the world-wide production, transport, refining and marketing of petroleum. The existence of a large world pool of efficient tanker tonnage available for charter on competitive terms, and under diverse flags, has provided the necessary transport capacity with a flexibility which is an important factor in their operations. It would not be desirable in our view to reduce or remove this flexibility by encouraging other nations, whether major consumers or producers of oil, to adopt policies—such as exemplified in this bill—requiring that their oil exports or imports be carried to a certain proportion in national flag tankers. There are already indications that a number of oil producing states wish to take steps to assure that a given percentage of their oil exports be mandatorily carried in ships of their own national registries. The implications in terms of transport costs and the negotiating leverage of producing countries are difficult to foresee.

The impact of the proposed measure could also extend beyond the petroleum world to the carriage of other bulk cargoes. We have frequently called attention to the harmful effects of the growth of cargo preference legislation in many nations. This Department has often argued, to foreign critics, that the spread of these protectionist measures cannot fairly be attributed to the example set by by the United States, which limits its cargo reservations by law to government-owned or financed cargoes and assists its merchant marine mainly through subsidy programs aimed at making its ships competitive. Nonetheless, if we extend

cargo preferences to new areas—to normal commercial cargoes and especially to bulk cargoes, where they scarcely exist—the example will be plain to see and readily followed by others.

We must add that, in the absence of a justification on security grounds, the reservation to US-flag tankers of a portion of commercial oil cargoes would be inconsistent with United States obligations under its treaties of Friendship, Commerce and Navigation with a large number of countries, including several major maritime nations. These treaties call for "national" and "most favored nation" treatment with respect to the right to carry all products that may be carried by vessel. (A list of FCN treaties to which the United States is a party, together with an extract from a typical treaty of this kind, is enclosed.)

We are aware that some American-flag tankers are currently laid up. It is our understanding that there are a combination of circumstances which have caused this situation. Among these factors are the lessened demand for US flag tankers to support the diminishing US involvement in the war in Vietnam, the increased through-put of the Colonial pipeline, the lessening of US Government supported shipments of grain, and the delay in the proposed operational date for the Alaska pipeline. To meet this problem, we do not believe it necessary or desirable that the Congress should enact permanent legislation of a sweeping character with the serious implications already mentioned. Finally, the Administration's maritime program, as set forth in the Merchant Marine Act of 1970, is intended to strengthen the US-flag merchant marine and encourage building of US ships, including tankers. We believe that it is within the context of this program that we should seek to solve our maritime problems rather than resorting to a measure such as S. 3404.

In light of the foregoing considerations, the Department of State is opposed to the enactment of S. 3404.

The Office of Management and Budget advises that from the standpoint of the Administration's program there is no objection to the submission of this report.

Sincerely yours,

DAVID M. ABSHIRE,
Assistant Secretary for Congressional Relations.

TREATIES

A typical clause relating to shipping in current Friendship, Commerce and Navigation treaties reads as follows: "Vessels of either party shall be accorded national treatment and most favored nation treatment with respect to the right to carry all products that may be carried by vessel to or from the territories of such other party . . ." (Article XIX(4), FCN treaty between US and Japan)

Friendship, Commerce and Navigation treaties are currently in force between the United States and Belgium, China, Denmark, Ethiopia, Germany, Greece, Iran, Iraq, Ireland, Israel, Italy, Japan, Korea, Liberia, Luxembourg, Muscat, Netherlands, Nicaragua, Turkey, Vietnam.

In addition, the United States accords "most favored nation" treatment with regard to shipping to the following listed countries: Argentina, Bolivia, Colombia, Costa Rica, Nepal, Paraquay, Thailand, Yemen, Yugoslavia.

Treaty provisions, while not unambiguous, may be construed to be intended to give to the following states "national treatment" or "most favored nation treatment" with regard to the carriage of cargoes: Austria, Honduras, Finland, Norway.

DEPARTMENT OF THE NAVY,
OFFICE OF THE SECRETARY,
Washington, D.C., April 28, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your letter of April 20, 1972, to Secretary Laird concerning hearings on May 1, 2 and 3 on S. 3404, a bill to amend the Cargo Preference Act of 1954 for certain purposes. The Secretary of Defense has designated the Department of the Navy to represent the Department of Defense on this bill, and I have been asked to reply to your letter directly.

This bill would affect other executive agencies to a greater extent than the Department of Defense, and it is understood that representatives from these agencies will be appearing before the Subcommittee. Accordingly, I do not feel that it will be necessary for a witness representing the Department of Defense to appear as our written comment on the bill will fully express our views.

Our report on the bill is currently in the Office of Management and Budget and will be forwarded to you as soon as possible.

Sincerely yours,

CHARLES L. ILL,
Assistant Secretary of the Navy (Installations and Logistics).

DEPARTMENT OF THE NAVY,
OFFICE OF LEGISLATIVE AFFAIRS,
Washington, D.C., May 1, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Your request for comment on S. 3404, a bill "To amend the Cargo Preference Act of 1954 for certain purposes," has been assigned to this Department by the Secretary of Defense for the preparation of a report expressing the views of the Department of Defense.

The Cargo Preference Act of 1954 requires that at least 50 percent of all Government-generated cargo be carried in privately-owned U.S.-flag vessels. This bill would amend the Act to make it applicable to oil imported into the United States under the oil import quota system.

Since governmental programs relating to the U.S. Merchant Marine are administered by the Maritime Administration of the Department of Commerce, the Department of the Navy, on behalf of the Department of Defense, defers to the Department of Commerce as to the enactment of S. 3404.

Information is not available to this Department on which to base an estimate of the budgetary impact of the enactment of S. 3404.

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

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there is no objection to the presentation of this report on S. 3404 for the consideration of the Committee.

For the Secretary of the Navy.

Sincerely yours,

LANDO W. ZECH, Jr.,
Captain, U.S. Navy, Deputy Chief.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF EMERGENCY PREPAREDNESS,
Washington, D. C., May 1, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I must respectfully decline your invitation to offer testimony before your Merchant Marine Subcommittee's hearings on S. 3404, amending the Cargo Preference Act of 1954.

First, I have previous commitments before other Committees on the dates of your hearings. Second, both the Congress and the President have assigned the responsibility for surveillance and administration of the American-flag fleet for the national defense to other agencies. I therefore defer to those agencies having direct interest.

Sincerely,

G. A. LINCOLN, *Director.*

78-255 O - 72 - 13

GENERAL COUNSEL OF THE DEPARTMENT OF COMMERCE,
Washington D.C., May 2, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your request for the views of this Department with respect to S. 3404, a bill

"To amend the Cargo Preference Act of 1954 for certain purposes."

The Cargo Preference Act of 1954 provides that whenever the United States obtains for itself or furnishes to foreign nations goods, or where in connection with the furnishing of goods the United States provides funds, credits or guarantees concerning the convertibility of foreign currencies, appropriate agencies shall assure that at least 50% of the goods be transported on privately-owned United States-flag vessels, to the extent they are available at rates reasonable for U.S. vessels. S. 3404 would amend this Act by including within the categories of goods subject to the 50% requirement, oil imported under quota, allocation or license.

The demand for petroleum in the United States has been growing rapidly in recent years. From the approximately 15 million barrels a day consumed in 1970, at least one projection indicates that United States consumption will increase to about 27 million barrels a day in 1985. The Domestic Council is currently conducting studies of our future energy needs, including oil, and it is very difficult at this point to predict the future requirements for particular energy sources and the extent to which we can rely on domestic sources. However, we expect that these studies will show a need over the years for substantially more oil from abroad. This would mean that adequate U.S. import shipping capacity will become increasingly important in the future.

The existing United States tanker fleet operates almost exclusively in the coastal trade. It includes many older and smaller tankers and has been declining in numbers over the last few years although, with the addition of modern replacement vessels, the tonnage of the fleet has remained relatively static. This static condition of the fleet has existed at a time when world tanker capacity has been growing dramatically. At the present time, over 12% of our relatively small fleet is in lay-up due to insufficient cargo. The basic cause of the present adverse situation facing U.S. tanker operators is a declining trend in the domestic movement of oil by sea. Over the last decade movement of oil from the Gulf to the East Coast of the United States by vessel has substantially declined. One contributing factor has been an increase in oil imports into East Coast states, supplanting U.S. Gulf crude formerly carried by our tankers. The market for domestic tanker service will further deteriorate with the completion of planned increases in pipeline capacity between the Gulf and the eastern United States. From the foregoing, it is apparent that, at a time when our oil imports are increasing, the U.S. tanker fleet is in a state of decline. While there are presently sufficient foreign-flag tankers available to meet our oil import needs, the situation is cause for concern.

Assuming the need for imports of foreign sources of energy reach the proportions being predicted, we must have ships under sufficient American controls to assure delivery as demand requires. The ships that transport these fuels represent an overseas pipeline which must be maintained under reasonable control and free of interdiction and abridgement. Such ships must be the most technologically efficient in order to minimize transportation costs.

The Merchant Marine Act of 1970 provides a number of amendments to the 1936 Act which were specifically included to provide this Nation with a modern fleet of bulk carriers. The program that the President presented to the Congress in 1969 recognized the overwhelming dependence on foreign-flag tonnage in the bulk trades and further recognized that it is in the national interest to insure that a reasonable portion of this fleet fly the American flag. The authorization contained in the 1970 Merchant Marine Act specifically provides construction differential subsidies to build all types of ships for use in the foreign commerce of the United States. Operating subsidies were also specifically extended to bulk carriers which heretofore had been unavailable and the tax deferral provisions which previously had been restricted to a few companies were extended to all qualified operators. As a direct result of these provisions, in the last year we have let the first contracts to build tankers and combination bulk carriers in this country for use in our foreign commerce. At the present time we are also processing application for a number of additional bulk carriers to transport both crude oil and liquefied natural gas.

This is not to say that the progress to date has been satisfactory, for it has not. As Assistant Secretary Gibson testified before the House Merchant Marine and Fisheries Committee on November 18, 1971, there are several reasons for the slow development of the shipbuilding program. The first is the precipitous decline of the tanker market in the last year. Another was the concern of many of the oil companies with the past labor relations history of the maritime industry. The third possible obstacle is the restrictions contained in section 804 of the Merchant Marine Act.

Since November, the market has shown little evidence that it will improve in the immediate future. In the area of labor relations, the recent declaration by the leadership of the maritime unions to make every effort to renew their expiring contracts without a work stoppage is most encouraging. We believe that they will be as successful in this respect as they were 2 years ago, when the contracts were successfully renegotiated without strike for the first time in many years. This is the best evidence that American seagoing labor can be counted on to provide continuous and reliable service.

The restriction on receipt of operating-differential subsidy by operators who have foreign flag vessels contained in section 804 of the Act continues to be a problem and an early reconsideration of this restriction may be warranted. Of the 26 tankers presently in lay-up, 21 are prohibited by this statute from qualifying for the operating subsidy that could enable them to operate in foreign commerce.

While this Department supports the general goal of S. 3404, it believes that the President's Maritime Program is the more appropriate vehicle for developing a U.S.-flag tanker fleet to serve our foreign trade.

The 1970 Merchant Marine Act was structured to insure that qualifying U.S.-flag vessels would be operated in a competitive manner in our foreign trade, and we believe that the imposition of the requirements contained in S. 3404 would tend to remove this incentive. In designing the new Maritime Program, we recognized that there was a vital national need to maintain a strong U.S. merchant marine and therefore the necessary subsidies to provide this fleet have been and will continue to be requested.

It is the view of this Department that the proper means to revitalize the U.S. maritime industry are those provided for by the Merchant Marine Program of 1970. This Program provides the tools with which industry can rebuild the merchant marine at reasonable expense and operate its vessels in open competition with minimum government assistance. We believe this philosophy of assisting American industry in taking advantage of American technology in order to compete freely in world trade offers much more promise for the industry and the American public than a retrogressive policy of creating a protected market.

We recognize that the American tanker industry faces immediate problems because of the severe decline in its natural market. However, we believe that assistance should be rendered within the general context of the Administration's program. The 1970 Act contains the basic elements required to enable American operators to successfully compete in foreign trade.

It is the goal of this Administration to insure that the United States has a U.S.-flag merchant marine adequate for its defense and commercial needs. We believe that this goal can be achieved through the Merchant Marine Act of 1970 and it should be given a longer period of time to establish its efficacy. Should it develop that modifications of that program appear necessary, the Administration would certainly consider such modifications.

The Office of Management and Budget advised that there is no objection to the submission of this report to the Congress from the standpoint of the Administration's program.

Sincerely,

WILLIAM N. LETSON,
General Counsel.

FEDERAL MARITIME COMMISSION,
Washington, D.C., May 2, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request for the views of the Federal Maritime Commission with respect to S. 3404, a bill

To amend the Cargo Preference Act of 1954 for certain purposes.

Inasmuch as the bill does not affect the responsibilities or jurisdiction of the Commission, we express no views as to its enactment.

The Office of Management and Budget has advised that there would be no objection to the submission of this letter from the standpoint of the Administration's program.

Sincerely,

HELEN DELICH BENTLEY,
Chairman.

FEDERAL POWER COMMISSION,
Washington, D.C., May 5, 1972.

Hon. WARREN G. MAGNUSON,
Chairman, Committee on Commerce,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is to acknowledge your request of April 14, 1972, for comments on S. 3404 (Spong and Beall), a bill:

To amend the Cargo Preference Act of 1954 for certain purposes.

A report is being prepared and it will be submitted to you as soon as possible

Very truly yours,

KENNETH F. PLUMB,
Secretary.

Senator SPONG. In the interest of time, and because not all witnesses have submitted written statements, we will be supplementing our discussion here with additional written questions to the witnesses to be answered for the record.

We invited several departments from the executive branch to testify at these hearings. The Department of State accepted the invitation and, therefore, is representing the administration.

Our first witness is the Honorable Bertram Rein, Deputy Assistant Secretary of State for Transportation and Telecommunications.

Before hearing from Mr. Rein, I understand the ranking member of this committee, Senator Cotton from New Hampshire, has some brief remarks he would like to make.

OPENING STATEMENT BY SENATOR COTTON

Senator COTTON. Thank you, Mr. Chairman.

I felt compelled at the very outset of these hearings to raise one point that I may have to pursue later when the time comes for consideration of this bill by the full committee.

I find myself with very mixed feelings about this bill sponsored by the distinguished Senators from Virginia and Maryland.

I commend them for the purpose that they have in mind. For years I have cooperated with other Members of Congress in seeking to see to it that our merchant marine had its fair share of shipping to enable it to keep our flag on the high seas.

However, I must be a little sectional on this the subject matter of this bill. For years now every Senator and Congressman from the New England States, I think, has been engaged in a constant struggle to either abolish the quota system on oil imports to our regional, or at least to increase the quotas.

We have succeeded from time to time in getting some enlargement.

The situation, as I believe everyone knows, is that New England has been in dire need of more and consequently less expensive fuel oil.

It wasn't too bad when most manufacturing establishments, large apartment houses, and schools in our region were burning certain less expensive fuel oils.

Now, in the interest of the environment, these facilities are having to convert from No. 6 oil to larger quantities of No. 2 oil, upon which the householders in New England have to depend for heat.

The State of Massachusetts, for example, is requiring by law that schools, apartment houses, and I believe to a certain extent, industrial establishments convert to No. 2 oil to reduce sulphur emissions.

Now, that means that the price of oil for heat to the homeowner and those who rent in New England where the winters are pretty cold, has become even more serious than heretofore.

In the last few months, New England Senators have been struggling with the proper representatives of the administration to remove or at least be far more liberal in the quotas on oil imports to New England. Transportation costs also are a factor. The net result is that we are paying from 2 to 3 cents a gallon more for heating oil in New England than elsewhere.

Even in Canada, across the line from northern New Hampshire, I find the Canadians are buying their home heating oil cheaper.

Now, in this bill it includes the words "or shall issue on a quota basis, allocations or licenses for the importation of oil."

I am not saying at this point that we from New England are going to be compelled to oppose the bill introduced by the Senators from Virginia and Maryland. We recognize its merit. However, when Senator Pastore, who has been recuperating from surgery returns I shall confer with him and other Senators. I know that the other New England Senators will be up against the situation of having to reach a judgment on this measure.

But, I thought it was only fair that, while fully appreciative of the motives behind this measure at the outset of the hearings I place my good friend from Virginia, who is always very considerate, very fair, and my good friend from Maryland, on notice that we in New England, somewhere along the line, may have to take a position which might not be wholly favorable to this measure in its present form. I fear that in its present form this bill simply creates another group or another constituency deeply interested in quotas on the importation of oil.

Oil import quotas are what we have been confronting for years, and have fought in most cases a losing battle against, even in the most favorable times.

I thank the distinguished chairman for permitting me to interpose these comments. I make them because I feel they should be made at the beginning of the hearing. They do not represent a studied determined position yet. But, I felt that there should be a notation in the hearing record at this point that both I and other New England Senators somewhere along the line may find ourselves in a position where we might have to seek some compromise, ask for some amendment, or take issue with this legislation.

I thank the distinguished Senator.

Senator SPONG. I thank the Senator from New Hampshire. I very much appreciate being placed on notice here at the outset of these hearings.

It is our purpose to develop a record upon which I hope the Senator from New Hampshire and his New England colleagues may make a

judgment on the value of this legislation and on the possible need for changes in it.

But, we will try in the next 2 days and on a third day, if necessary, to develop a record that will be helpful to all of us in gaining a better understanding of the problem.

Senator COTTON. I thank the Senator.

Senator SPONG. Senator Beall, do you have any comments you wish to make.

OPENING STATEMENT BY SENATOR BEALL

Senator BEALL. Yes; thank you Mr. Chairman.

I am pleased to be a sponsor of S. 3404.

I believe there are two important aspects of this bill which must be fully considered. One is the impact of this legislation on the American shipbuilding industry. The second is its relationship to our national security.

It has been estimated that by 1985 we will have to import between 12 and 15 million barrels of oil per day from overseas sources. To supply the United States, a tanker fleet nearly equal to that of all the tanker capacity in the world today will be required.

If the American flag were guaranteed a carriage of at least 50 percent of this vital cargo, between 50 and 75 million deadweight tons of tankers would be needed. The impact on American shipyards, and on the economy as a whole, would be enormous.

The average private shipyard employment for the first 11 months of 1971 was 128,800. This was the lowest figure since 1965. But, the construction of a 50,000 deadweight tons tanker, costing $14 million, would create jobs for 378 men for a full year. For a 250,000-deadweight-ton supertanker costing $62 million, jobs would be created for 1,674 men for a full year.

So, when discussing the construction of a fleet of hundreds of modern tankers, we are talking in terms of ship construction jobs for thousands of skilled and semiskilled Americans.

We are talking about giving Americans who are receiving unemployment compensation and welfare the opportunity to work and to make a worthwhile contribution to our society.

These benefits would also be felt by other segments of our economy. Allied industries—those which provide the materials necessary for ship construction—would be stimulated as production increased.

The increase in the purchases of consumer goods and services would bolster the economies of the areas surrounding the shipyards and allied industries.

At the present time, it is difficult to regulate any part of the import oil transportation industry simply because no American-flag vessels are engaged in the oil import trade.

Our Nation must have an active tanker fleet engaged in transporting at least 50 percent of our oil imports. If this is not accomplished, the U.S. Government must be prepared to relinquish all control and regulatory powers over this entire industry to foreign nations.

There appears to be little choice in becoming more dependent on foreign sources for our supply of this vital and strategic raw material.

The one remaining choice is whose transportation facilities will we utilize. Becoming dependent on third party foreign governments for

transportation would create a dual dependency problem and would at least double the risk of being shut off from our supply of imported oil.

For example, using a third party nation as a transportation medium could create these problems:

A dispute between the producing exporting nation and the foreign-flag nation could effectively cut off all supply to our Nation.

Management and labor problems in the third party foreign-flag nation could vitally affect supply. Many of the corporations and labor unions of other nations are very politically oriented. For instance, some foreign-flag vessels crews and the companies themselves, refused to carry U.S. cargoes to Vietnam.

A dispute between our Nation and a third party nation transporting our energy resources could result in withdrawal of all ships of that nation engaged in carrying oil to our country.

A dispute could arise between our Nation and an international corporation that controls importing into the United States under a weak "flag of convenience." For example, if the United States pressures an international company to improve their safety and pollution standards, the company could instead "withdraw its ships from our trade. Thus, we would either be without the supply we need, or else be forced to lower our standards and endanger our environment.

It herefore becomes apparent that in time of crisis, only U.S.-flag vessels can be directly controlled by our Government. In a future oil crisis, all the European-flag vessels currently engaged in transporting oil to the United States would either shift to their own oil trade or be nationalized by their governments. We could not afford to lose these ships, which currently carry about one-third of our imported oil. Yet, our European allies could not afford to let us keep these ships in our service.

Many arguments have been presented to attack the fact that our national security requirements command enactment of this amendment. There has been much testimony before the House Merchant Marine and Fisheries Committee to the effect that the United States can rely on the "effective control" fleet in time of national crisis.

But the truth of the matter is that the doctrine of effective control has never been put to the test. In other words, we have never been in the position to determine once and for all whether these Liberian-, Panamanian-, and Honduran-flag vessels would be available to the United States.

We must have oil to survive as a nation, and we must import our oil. Our national security demands that we know we will be able to have the ships we require. There is only one way to so guarantee, and that is through the use of U.S.-flag vessels.

President Nixon, in late July 1970, asserted that "we are primarily—a sea power." Virtually surrounded by water, and hardly self-sufficient, the United States must rely on ships to import oil—vital and strategic material.

We cannot allow the carriage of this energy source to fall completely into foreign hands. We cannot allow our merchant marine—our nation's fourth arm of defense—to deteriorate to such a point that in time of crisis it will be unable to meet our needs.

The world is constantly changing. Our enemies of yesterday are our friends of today. And our friends may be tomorrow's enemies.

We cannot place our fate in the hands of nations who may not desire to or be able to help us in time of trouble.

Thank you.

Senator SPONG. Mr. Rein.

We are very pleased to have you with us this morning, Mr. Rein.

STATEMENT OF HON. BERTRAM REIN, DEPUTY ASSISTANT SECRETARY FOR TRANSPORTATION AND TELECOMMUNICATIONS, DEPARTMENT OF STATE; ACCOMPANIED BY CARROLL PERRY, DEPUTY DIRECTOR OF THE OFFICE OF MARITIME AFFAIRS; AND JAMES AKINS, DIRECTOR OF THE OFFICE OF FUELS AND ENERGY

Mr. REIN. Thank you, Mr. Chairman.

Mr. Chairman, my name is Bert Rein, Deputy Assistant Secretary for Transportation and Telecommunications in the Department of State.

I am accompanied this morning by Mr. Carroll Perry, who is Deputy Director of our Office of Maritime Affairs, and Mr. James Akins, who is the Director of the Office of Fuels and Energy in the Department of State and concerned therefore with oil policies.

I appreciate this opportunity to appear before your committee, Mr. Chairman, so that I might explain, as a supplement to our letter to the committee, why the Department of State is opposed to the enactment of S. 3404.

While this proposed legislation is intended, in considerable measure, to relieve the problems faced by owners of currently laid up U.S. flag tankers, the long range implications of the legislation are most serious, both from the standpoint of our foreign policy and from the effect on our domestic economy.

We are aware that a number of factors, some of which are beyond the control of U.S.-flag tanker owners, have caused the layup of a considerable tonnage of American-flag tankers, including, among others, the lessening of demand for tankers in the support of military operations, the increased capacity of the Colonial pipeline and, importantly, the delay in the proposed operational date for the Alaska pipeline.

We cannot, at this time, estimate what factors might reverse this situation, or when. But we do not feel that Congress should enact legislation of a sweeping and permanent character to meet a current economic situation facing a portion of our tanker fleet.

One factor that must be considered is the effect that the passage of this legislation might have on other nations, particularly major producers of oil, in encouraging them to adopt similar measures to reserve the transportation of crude and products to ships of their national flag.

Within the last year we have seen significant changes in the international oil industry. The oil producing countries concerting together in OPEC (the Organization of Petroleum Exporting Countries) have obtained major increases in the terms determining their oil revenues.

At times there have been threats on the part of some of the producing countries to embargo oil shipments in order to obtain their economic, and even political, objectives.

The risks of supply interruptions can be expected to increase in the future, as the consuming countries' demand for oil increases. Most

estimates indicate that this demand will double by 1980 and triple by 1990.

Under such circumstances, the need for maximum flexibility and economy in transportation will be imperative. We should remember that in the supply crisis precipitated by the closing of the Suez Canal in 1967, and in 1970 when petroleum supplies were theatened by the closing of the Trans Arabian Pipeline and production cutbacks in Libya, that a transportation system which permitted worldwide adjustments in the use of tankers of all flags was of paramount importance in meeting the world's oil demands.

We must be aware that passage of this legislation would undoubtedly cause the producing countries to adopt similar measures to reserve the transportation of crude oil and products produced in their countries in vessels of their national flag.

There are already indications that a number of oil producing states wish to take steps to assure that a stated percentage of their oil exports be carried in their own national flag vessels.

Indeed, just last week both Iraq and the Arab Federation of Egypt, Libya, and Syria announced plans to establish oil tanker fleets.

Should the United States, the largest importer of oil in the world, adopt legislation requiring the use of U.S. vessels, there is no reason to believe, viewing the current changes in the international oil industry, that other countries would not follow suit.

To the extent that oil is arbitrarily directed by Government to ships of a specific foreign flag, U.S. control over the means of transportation is diminished and the flexibility which has enabled U.S. oil importers to use the most efficient tonnage available, regardless of flag, is also diminished.

Neither of these developments would be in our national interest, and we urge the committee to consider the effects of this legislation, not only in its first stage, but in terms of the kinds of world situation it would ultimately create.

Nor do we think that the international repercussions of the passage of this legislation would necessarily be confined to the area of oil transport.

The United States has heretofore been consistent in applying its cargo preference measures solely to the area of Government-owned or financed cargoes. There can be little doubt that the application of new U.S. cargo preference legislation, which for the first time would extend preferences to the area of commercial cargoes, would stimulate additional cargo reservation measures on the part of other governments. Such reservations might well appear in the field of bulk cargoes, further impinging on the ability of U.S. traders to select the most efficient and least expensive means of transport.

We should also point out that the reservation to U.S.-flag tankers of a portion of commercial oil cargoes would be inconsistent with U.S. obligations under its treaties of friendship, commerce, and navigation with a large number of countries, including several major maritime nations.

Government and private estimates indicate that there will be a substantial increase in the amount of oil imported into this country by sea by the end of this decade. These imports may well be three times the present level. If, as called for by the bill, up to 50 percent of these

imports are to be reserved to U.S. built tankers operated under U.S. flag, it follows that there must be a very substantial increase over current levels in the construction of tankers for U.S. flag operation.

Taking into account the differential in construction and operating costs of U.S. ships, there is no question but that there would be a significant increase in the cost of imported oil.

Previous testimony before the Congress has indicated that this increase might amount to as much as $1 billion annually by 1985. Such an increase could not fail to be a burden on American consumers, and to have a detrimental effect on our export industries, particularly the petrochemical industry which is to a considerable extent dependent on imported oil as feedstock.

I recognize that it has been contended by certain proponents of this legislation that the additional costs of transport of oil imported under quota in U.S.-flag tankers would not be passed on to consumers since the U.S. price level is determined by the cost of domestic oil, and that even with the added cost of U.S.-flag transportation, the landed cost of foreign oil would still be below the cost of domestic oil.

Given the highly competitive nature of the U.S. oil industry, we must assume that presently at least some of the lower costs of imported oil are in fact passed on to the consumer.

Conversely, we must equally expect that additional costs would be passed on if this bill became law. In this connection, we should also be aware of the remendous capital requirements facing the world's oil industry if future demand is to be met.

The Chase Manhattan Bank has estimated that over $500 billion in capital will be necessary to produce the amount of petroleum and products to satisfy requirements over the next decade. There is already some doubt that sufficient capital can be found, given present conditions in the industry, to generate the necessary production. Under such circumstances, it would appear imprudent ot expect that any increased costs resulting from the required use of U.S. tankers would not be passed on to consumers.

It has elsewhere been estimated that the enactment of this legislation would increase transportation costs by 23 cents per barrel by 1975 and possibly by 30 cents per barrel by 1980. Given the certain tremendous increase in the volume of imported oil by those dates, it is estimated that, as I mentioned before, we would be facing an artificially induced transportation cost of $1 billion annually by 1985 and significantly greater sums thereafter.

It would seem to fly in the face of all economic experience to assume that cost of this magnitude would not be passed on to the consumer. Prices for imports of fuel oil, which are not subject to quota control and which represent about one-half of all oil presently imported, could be expected to bear immediately and fully any additional transportation cost imposed by this bill and, we may assume, this additional cost would be immediately passed on to the consumer.

The Department is well aware of the question of national security stemming from the fact that the United States may, by roughly the end of the 1970's, be dependent on oil imports for almost half of its consumption.

We also recognize that these imports will come primarily from areas which are, politically speaking, relatively unstable. It is this question

of the source of supply, rather than the means of transportation, which poses the primary problem from a national security standpoint.

We do not believe it has been demonstrated that our security interest requires any large expansion of tanker capacity under U.S.-flag or U.S.-ownership control.

I might add, as we said before, that looking at the totality of results, which one might expect from this legislation and the reactions of other countries, indeed raises a question whether our security would be enhanced or hampered by a situation in which the transportation of oil came under political control, under our legislation, and perhaps corresponding legislation of producing countries. Rather than enact this bill, which as I have suggested, raises both domestic and foreign economic and political questions, including the question of inconsistency with our treaty obligations, we think that the problems of the U.S.-flag tanker industry would best be dealt with in the context of the Merchant Marine Act of 1970. This act is intended to strengthen the U.S. merchant marine through the granting of subsidies to enable our ships, including tankers, to operate competitively on a worldwide basis.

We think it should be possible, under the authority of this act, to stimulate the construction and operation of U.S.-flag tankers capable of carrying a share of our increasing oil imports.

If your committee has any questions, Mr. Chairman, I will try to answer them.

Senator SPONG. Well, thank you very much, Mr. Rein.

In the earlier part of your statement you mentioned a letter which the Department has forwarded to us. We have not received that as yet but we would be pleased to have it for the record of these hearings.

Mr. REIN. Mr. Chairman, the letter was dated Friday, April 28, and we thought we had delivered it on that date. We have a copy here. It is very much along the lines of the testimony we presented but it has some additional material.

Senator SPONG. Thank you. We will receive it and admit it along with your statement here this morning.[1]

You have stated that the legislation is inconsistent with our treaty obligations. Does this mean it would violate our Friendship, Commerce and Navigation Treaties?

Mr. REIN. Yes, sir. Of course, we do not have treaties with all of the nations of the world but such treaties are currently in force between the United States and Belgium, China, Denmark, Ethiopia, Germany, Greece, Iran, Iraq, Ireland, Israel, Italy, Japan, Korea, Liberia, Luxembourg, Muscat, Netherlands, Turkey, and Vietnam. That is the list.

I think the important thing is they are in effect with Greece which is a major carrier. They are also in effect with the Netherlands, Germany, and Liberia. And there are also similar provisions which are somewhat more difficult to interpret, with Austria, Honduras, Finland, and Norway. Norway is a major carrier of oil. The treaty questions are substantial questions, not only technically, but because they arise under treaties with countries that significantly participate in the carriage of our oil cargoes.

[1] See p. 184.

Senator SPONG. If the legislation were required by our security interests, would it violate our treaties?

Mr. REIN. I think, of course, in their terms the treaties do not directly have an exception for national security. I think it is a general principle of international law, one might say, that all obligations undertaken by nations are subject to paramount conditions of national security.

There is also the issue of international precedent; whether you are simply alleging national security interests or actually involved in a question which traditionally would be considered one of national security.

Certainly during time of war I wouldn't consider these treaty obligations to be binding. But whether more tangential relationships to national security would justify violation of the treaties is a close question.

Senator SPONG. Who makes that determination?

Mr. REIN. Well, when you say who makes that determination, of course, all treaties are subject to interpretation by both sides. Quite clearly, the legal adviser to the Department of State would be the chief official in the U.S. Government who would be charged with the responsibility on our side of interpreting these treaties. We would be glad to ask his opinion on that subject if it would be helpful to the committee.

Senator SPONG. Suppose there were a congressional finding of a security need, would the treaties present any problem?

Mr. REIN. I think that rather than get off into the questions of international law which I might not be an expert on, I would refer that question and furnish an answer to the committee.

Senator SPONG. All right. Aren't our existing cargo preference laws equally inconsistent with respect to provisions in Friendship, Commerce, and Navigation Treaties calling for national treatment of vessels?

Mr. REIN. Well, I think that we have always taken the position that cargoes with a special relationship to the government are not commercial cargoes. We have drawn a distinction for treaty purposes between commercial cargoes and cargoes which are closely tied to government requirements. I think this is generally recognized as a valid distinction. And therefore, we detect some differences between those cargoes which are government sponsored cargoes and cargoes like these which are commercial cargoes.

Senator SPONG. Do these treaties distinguish between government financed cargoes and other cargoes, between government financed and government import listed cargoes?

Mr. REIN. Not in their terms.

Senator SPONG. Do other nations such as France, Spain, Chile, and Peru have similar requirements that their vessels be used for oil imports?

Mr. REIN. Yes, they do.

Senator SPONG. Does it violate their treaties with us?

Mr. REIN. Well, if we had Treaties of Friendship, Commerce, and Navigation with those countries, I think that we would consider it a violation. I don't believe on the list that we have given you, which we tried to be comprehensive about, that we have such treaties with

those countries. So that as a bilateral matter, you have to be in a treaty relationship to claim a violation.

Senator SPONG. In other words, we do not have bilateral treaties with France, Spain Chile, and Peru?

Mr. REIN. No, sir.

Senator SPONG. We do not.

Mr. REIN. Well, of this kind, I mean. We may have some other treaties with them.

Senator SPONG. Friendship, Commerce, and Navigation Treaties?

Mr. REIN. Yes, sir, we do not.

Senator SPONG. Does Japan effectively accomplish the same result administratively?

Mr. REIN. Well, I can't really answer that question. I think I know what the results are in terms of the carriage of oil imports. The Japanese have a very significant fleet which has not only done well in their own trade, but worldwide trade. Their economy is organized in a somewhat different manner from ours and the relationship between business and government in Japan are somewhat different. There is no existing legislation or regulation of government which would accomplish this objective in Japan.

Senator SPONG. We do have a treaty of Friendship, Commerce, and Navigation with Japan?

Mr. REIN. We do, sir.

Senator SPONG. And whatever they may be accomplishing, you are telling me it is being done without benefit of legislation in Japan?

Mr. REIN. Well, I am saying that I am not sufficiently expert on the economy of Japan to tell you exactly why the results which occur do occur. But we are aware that there is no discriminatory legislation or government regulation in Japan.

Senator SPONG. Well, I have so many questions here that I would like for you to take another look at this question and if you have anything to add to your answer, I would appreciate hearing from you. As you know, there has been a good deal of activity recently with respect to a bilateral shipping agreement with the Soviet Union. Has the Department of State participated in this? Isn't this equally inconsistent with the most favored nation and national shipping provisions of our FCN treaties?

Mr. REIN. There have been discussions between United States and the Soviet authorities on questions of maritime policy and shipping. The Department of State has participated. I don't think I am at liberty at this time, because there is no final agreement and the matter is still under discussion, to disclose the results of those consultations. But I can say in conducting them we have been aware of our obligations under these treaties and it has not been our intent to violate those obligations.

Senator SPONG. If these negotiations result in a bilateral agreement, would that violate the existing FCN treaties?

Mr. REIN. It would depend on the nature of the agreement, Mr. Chairman. It is quite possible to reach an agreement on some matters between governments which do not invade the areas of commercial cargo or result in a violation of our treaties. So it would depend entirely on what kind of bilateral agreement. That word has a number of meanings. I can't really answer the question without laying out the

elements of an agreement which is now still under discussion and in no way final.

Senator SPONG. Senator Cotton?

Senator COTTON. I note in your statement you say, "Prices for imports of fuel oil, which are not subject to quota control and which represent about one-half of all oil presently imported can be expected to bear immediately and fully any additional transportation cost imposed by this bill, and we may assume, this additional cost would be immediately passed on to the consumers." What oil are you talking about when you say that this fuel oil is not subject to quota control?

Mr. REIN. Well, there is a distinction between quota products and licensed products. We are talking basically about residual oils which are not, as finished products, subject to quota, as crude oil would be, but subject to license control. And these being imported as finished products, one can readily identify the relationship between the landed cost and the charge to the consumer.

Senator COTTON. Well, it was my impression that residual fuel oil, certainly as far as our section of the country is concerned, has been and is now subject to quotas. Not once, but many times, beginning way back under the Eisenhower administration, we from New England have been going down seeking a relaxation of such controls.

Are you now stating that at the present time there is no quota on our fuel oil?

Mr. REIN. Excuse me, Senator. I am sorry. I think it is a matter of terminology. As the bill says, it applies to quota base allocations or licenses. There is a control on the volume, that is, actually in technical terms not a quota, but license control. So I am not stating the unlimited amounts can come in, but that is a useful way of distinguishing the types of products and the types of cost impact in relation to the consumer.

Senator COTTON. There is no question that the quantity of imports are controlled?

Mr. REIN. Yes, sir, that is correct.

Senator COTTON. Whether you call it quotas or licenses or whatever terms you apply?

Mr. REIN. Correct.

Senator COTTON. Thank you. I just wanted to straighten out that point.

Senator SPONG. As you noted, some oil—are you ready?

Mr. REIN. We were just trying to straighten out our technical terms.

Senator SPONG. As you noted, some oil producing countries are moving to require that 50 percent of their oil imports are carried on their own ships. Others will probably follow. If they adopt such appeals, how as a practical matter is the United States going to stop them?

Mr. REIN. Well, you are talking now about the export of oil from producing countries.

Senator SPONG. Yes.

Mr. REIN. I think it is not a question of the United States alone stopping them. I think that there are, of course, considerations that any nation would take into account in its overall policy before it embarked on a measure to restrict the carriage of the exports. There have been recurring examples of developing countries in many fields trying to reserve cargo to their own fleet. I think this kind of restriction

would be resisted by the using countries, the buying countries, as a whole, and I think that there would certainly be great efforts made by all of the countries that use oil to resist this kind of measure if indeed it were only being used by the exporting countries. If the buying countries themselves are split, with some of them having the same restrictions, it becomes harder to form the kind of joint effort which might be useful in resisting this effort on behalf of the producing countries.

Senator BEALL. Can I pursue that?

Senator SPONG. Yes, Senator Beall.

Senator BEALL. Isn't it true that the buyer has more control over how the goods are going to be shipped than the seller does? If I go to the furniture store and buy a couch, if I want to haul it away myself, it is my right to do so and the store doesn't tell me I have to ship it on their truck. If I am buying oil from a country, isn't it logical to assume that I control the way that I am going to take the oil home?

Mr. REIN. Senator, I think we know that, from domestic experience and I think somewhat internationally, whether you control the terms of sale as a buyer is heavily dependent on your relative economic position.

Senator BEALL. Ours is not bad, is it?

Mr. REIN. It is a question of the terms of trade in oil, whether the producer or buyer has the advantage. There are many firms in this country that will only sell you on a delivered price basis and won't let you take it FOB. I think the same is true in oil, that the seller can dictate the terms of the sale if he is in a position where what he has is so valuable to the buyer that his economic leverage is very great. We can't at all be confident, as we look to the future, that the buyers will be in a, especially if taken one by one, in a situation of significant leverage with respect to the seller. I think you have seen more and more the producing countries extracting concessions of one kind or another from the buyers, the oil companies that not only work with them but are their customers. I think this indicates they have some leverage that they might be able to enforce these measures if they are not resisted.

Senator BEALL. That leverage generally relates to the production of oil rather than the selling of it.

Mr. REIN. I think once you control production and dictate to whom it will be sold and won't be sold, your overall leverage is very great and on issues in which the buyers are in some disarray or disagreement among themselves, for example, the reservation of carriage, if that were to come to pass by legislations of this kind, I think that the unified sellers front would be politically very powerful. It might indeed be able to dictate whether the sale could be closed out on FOB or CIF terms.

Senator BEALL. I find that difficult to believe. I just find it hard to imagine a situation arising where the United States would buy so much oil that it wouldn't be in a position to at least control 50 percent of the flow of that oil if it so desired and this would be, I think, readily accepted by the people who are selling the oil.

Mr. REIN. Well, if you are talking about 50 percent——

Senator BEALL. Neither one of us can win this argument until it happens, but I don't think the premise is very good.

Mr. REIN. If you are talking about 50 percent—I thought we were talking about whether the producing country could control 50 percent. I think it would be easier to say yes, the buyer might be able to enforce 50 percent on his ships, the producer couldn't enforce 100 percent. But the question is really whether the producer can enforce 50 percent. Maybe both of us can agree that too would be possible, the producing countries may be in a situation of advantage which would enable them to make 50 percent go on their own ships, even though we correspondingly might be able to make 50 percent go on ours. Those are not inconsistent propositions.

Senator BEALL. I don't have much difficulty with that. If my purpose is to try to accomplish a 50 percent shipment on our ships, if they want to send the other 50 percent on their ships, that is all right with me.

Mr. REIN. I guess what we are saying is that is not all right with us.

Senator BEALL. I don't think that will happen. I think from our standpoint it is highly unlikely.

Senator SPONG. Well, the first part of my question was based on a notation that some oil-producing countries are moving in this direction.

I would like to ask you a hypothetical question now, after hearing you and Senator Beall in this exchange. If they are successful in achieving a result whereby 50 percent of their exports are being carried in their own bottoms at their direction, would you still oppose this legislation?

Mr. REIN. I think in part our concerns have been to preserve as much as possible of the freedom of choice for the shippers to get the lowest possible rate.

Now if 50 percent of the oil is removed from the area of competitive shipping, that is locked up by the producing countries, I think we would again look at the risks of locking up the other 50 percent. That is to say, what would the impact of that on world shipping be? Would it create an overall situation in which much of the tonnage available pulled out of the trade, so that one might have to fall back on one's own resources? I can't answer that question today. I think if nothing else changed, that is to say if there was still quite freely available either effectively controlled U.S. tonnage or allied tonnage, I think we would still be concerned about the added cost of the reservation to U.S.-flag vessels of the other 50 percent. So I think some of our concerns would remain, but it is hard to predict what the world shipping picture would look like if indeed the producing countries were able to get control of 50 percent of the oil and put it on their own vessels.

Senator SPONG. Well, you can't answer my question today then either.

Mr. REIN. I can't give you a definitive answer, because I think that would really create quite substantial changes in the whole nature of the shipping industry.

Senator SPONG. Well, you haven't said no, so I would assume from your answer that there would be some reevaluation of the world shipping situation.

Now, if this took place, wouldn't that put our transportation capability in the hands of the same nations that you have characterized as unstable?

Mr. REIN. I would assume, and I have said that it would be troublesome to us to see not only the production capability, but 50 percent of

the transportation capability fall into the hands of those nations. That would be troublesome. And that is the result we want to avoid and that is part of the reason we oppose this bill.

Senator SPONG. I have so many questions here, Mr. Rein, that we would be here well beyond noon. I have selected two. I am going to submit the rest to you for the record and we will be back in further touch with you.

I note there is nothing in your statement relating to the effect of the bill on our balance of payments. Is the Department of State concerned about our balance-of-payments problem and have you done any study of the effects of this bill in that regard?

Mr. REIN. Well, we have given a good bit of thought to that subject. We are concerned about our overall balance of payments position. And we recognize that of course payments for services are exported to someone else and imports to us in balance-of-payments terms.

The question that is difficult to answer, as we said, looking at the whole set of conditions which might be established by this bill, is whether the total payment for shipping services would be increased or decreased over any period of time by the enactment of this bill.

The reason is if 50 percent goes on U.S. flag, quite clearly 50 percent of the payments would not be made to foreign flag. But what happens to the other 50 percent. That other 50 percent may be carried by more expensive foreign-flag tonnage. The possible cost differentials are substantial, I think there is testimony in the House and you will hear it here, that these can go up to 4 to 1. If you assume the other 50 percent is put on higher cost foreign-flag tonnage by other people's reservation, you may get into a situation where you are quadrupling the foreign exchange costs of carrying that 50 percent and where, the net effect on balance of payments is negative. In order to assess the balance of payments, you can't look in isolation of what you might stop paying for half of the oil, you have to look at what you will pay to bring the rest in. If that more than doubles, your total balance-of-payments outflow is greater.

Senator SPONG. Other than your comments, has the State Department done any study on the effects of the bill on the balance-of-payments situation?

Mr. REIN. Well, I think what I said is based on some work we tried to do. But I don't think we have done a formal study.

Senator SPONG. You would not characterize the information that you have as a result of any study of the problem?

Mr. REIN. Well, I hate to say that we didn't study this, because we did look very closely at it, and took a number of different assumptions. But if you are talking about a formal written study, suitable for presentation as such, no, sir; it is not the result of a study of that kind. But we did study the subject.

Senator SPONG. All right.

With respect to the increases in transportation costs you cited testimony indicating increased cost of a billion dollars annually by 1985. You said by 1975. Which year is correct do you mean?

Mr. REIN. This is based on testimony that was given in the House and this subject was commented on by the American Petroleum Institute, with some figures, the American Maritime Association also

78-255 O - 72 - 14

gave some estimates of the per barrel increases. It is a typographical error. It should be 1985.

Senator SPONG. In both instances?

Mr. REIN. Yes, sir; that is the testimony in the record. We have not attempted an independent assessment of the actual added costs, so we are looking at figures that have been placed in the public record.

Senator SPONG. Well, the testimony in the House that you are quoting is that of foreign-flag tanker owners; is that correct?

Mr. REIN. As I say, there were a number of sources which discussed added costs. The Department of Interior gave some figures which I think are fully consistent. There was also testimony on behalf of the American Petroleum Institute, the producers of oil. The foreign-flag tanker owners are also of course largely U.S. oil companies, so they are not wholly foreign sources. Indeed the American Maritime Association, which represents independent tanker owners under U.S. flag gave figures that confirmed there would be a substantial increase in the cost of oil carried.

Senator SPONG. I gather from what you said the Department of State has not independently analyzed and evaluated these costs?

Mr. REIN. No, sir, but we feel our testimony is valid over the whole range given on all sides. We don't think there is much dispute that the added costs would be substantial.

Senator SPONG. Are you aware the Department of Commerce estimates are only a small fraction of that amount?

Mr. REIN. We are not aware that the Department of Commerce testified in the House proceedings.

Senator SPONG. They did not testify, but we have access to the figures. We will submit that you for further comment, along with any additional questions which we would like you to answer.

Senator Beall, do you have any questions?

Senator BEALL. No more questions.

Senator SPONG. Mr. Rouvelas of the staff has a question.

Mr. ROUVELAS. Mr. Rein, as you noted one of the key issues is whether these costs will be passed on to the consumer. The proponents of the legislation have prepared a rather detailed study, have profounded a theory, and provided some empirical backup for that theory as to why it would not result in increased consumer costs.

I don't have your exact language in front of me, but you said something to the effect that we must assume that the lower costs of foreign oil is passed on to the consumer. I wondered, wasn't the Department of State part of the Cabinet Task Force on Oil and didn't it conclude exactly to the contrary in that regard?

I am looking at some testimony by Chairman Shultz of that Cabinet task force which said:

> Once it is acknowledged that under the present quota system, the domestic price of No. 2 oil is independent of the delivered price of product imports, it follows that imposition of even a prohibitively high tariff would have no effect on the long run domestic cost.

He went on to say that it is domestic refining cost plus transport that set the price and therefore even a prohibitively high tariff and increase in transportation cost wouldn't have any impact on the long run consumer cost.

Did the Department of State concur in that or not?

Mr. REIN. I believe that statement is accurate, but not in conflict with what I have said today.

First of all, the real question we faced today is not what the impact of lower cost landed foreign oil is on today's market, it is what an increment in those costs would mean.

So whether or not, first of all, whether or not the lower costs are passed on to the consumer today, you would still ask the question would increased costs be passed on tomorrow? That is, what is happening to the return?

Mr. ROUVELAS. Increased costs in the form of a tariff, for example?

Mr. REIN. Well, I think that, yes; increased costs would come from a tariff as well. But increased costs in the form of a tariff, that refers to the landed price of oil.

The question here is the product as it is passed on to the consumer. One might assume that the companies are looking for certain rate of return overall, that their mix of costs would be related to their revenues to determine profit. They have got to generate a certain amount of capital.

So what I am saying is while increased costs might not directly affect the landed cost of oil, so long as the foreign oil cost netted out was still cheaper, and that is an assumption that may disappear, the fact is the cost to the consumer is not solely dictated by the cost of the imported oil.

So what I might charge you for an oil transfer may be different from the way I set my prices on the ultimate range of the consumer product.

Mr. ROUVELAS. I think what Mr. Shultz was saying is the ultimate price to the consumer is not affected at all by the landed cost of the foreign oil, and that is why even a prohibitively high tariff woudn't affect the price to the consumer.

I do not understand how you can go to an average cost analysis, as opposed to a marginal cost analysis, unless you posit that there is absolutely no competition.

Mr. REIN. Any additional information would be useful and we would be glad to comment on that situation.

Senator SPONG. Thank you very much, Mr. Rein.

Mr. Jesse Calhoon.

Mr. Calhoon, your testimony will be received in the record in its entirety and we would be pleased to have you testify from it in summary, or in part.

STATEMENT OF JESSE CALHOON, PRESIDENT, MARINE ENGINEERS BENEFICIAL ASSOCIATION; ACCOMPANIED BY BEN MAN, DEPUTY EXECUTIVE DIRECTOR OF THE AFL-CIO MARITIME COMMITTEE

Mr. CALHOUN. Thank you, Mr. Chairman.

My name is Jesse Calhoon. I am president of the National Marine Engineers' Beneficial Association, AFL-CIO, and a member of the Executive Board of the AFL-CIO Maritime Committee. I am accompanied by Ben Man, deputy executive director of the AFL-CIO Maritime Committee.

Mr. Chairman, and members of the committee, I would like to express the appreciation of the AFL-CIO Maritime Committee com-

posed of the International Longshoremen's Association (ILA), the National Maritime Union of America (NMU), the American Radio Association (ARA), the National Marine Engineers' Beneficial Association (MEBA), and the United Steelworkers of America (USA), for this opportunity to appear before you in support of S. 3404—the extension of the Cargo Preference Act of 1954 to oil imports subject to quota.

Before I continue, I would like to say that we constantly run into these young erudite people from the State Department and we always seem to be in conflict with them. Basically, I think it is because they don't have a U.S. desk at the State Department.

Among our energy resources—coal, oil, natural gas, hydroelectric, nuclear, et cetera—oil will undoubtedly be the most important, at least for the remainder of the century.

However, our domestic capacity to supply petroleum falls far short of meeting our needs now and will fall further behind over the next decade and a half. This means that dependence on imported foreign oil will expand greatly. In turn, this poses crucial economic, national security and environmental problems for this Nation.

The proposed leigslation being considered by this committee to extend the Cargo Preference Act of 1954 to waterborne oil imports covered by quota represents a positive response to these critical issues.

THE ECONOMIC ISSUE

A careful examination of the economic implications of a rapidly expanding oil import program suggests that by 1985 if the United States continues to ship imported oil in foreign tankers, over $2.5 billion could be added annually to an already serious balance-of-payments deficit.

In 1971, on a "net liquidity" basis this Nation suffered a record deficit in its balance of payments of $22.2 billion. This compares with a $3.8 billion deficit in 1970.

The extension of the Cargo Preference Act of 1954 to require that 50 percent of waterborne oil imports be carried in American ships will significantly restrain this outflow of U.S. dollars.

Projections by the Office of Oil and Gas, U.S. Department of the Interior, indicate that imports of oil via tankers will leap from 2.7 million barrels per day in 1970, to 9.7 or 12.7 million barrels per day in 1985 depending on the availability of Alaskan North Slope oil.

If current practices are allowed to continue, this fourfold increase in seaborne oil imports will produce a corresponding increase in the outflow of American dollars and thereby aggravate this country's already serious balance-of-payments deficit.

American dollars will be paid out to foreign ship owners to cover shipping costs.

If, on the other hand, the ships used are U.S. owned, the American dollars would be paid to U.S. companies, and U.S. workers, and thereby reduce the outflow of dollars. Instead, American dollars will be held by U.S. companies and American workers will have needed jobs.

Not only will there be a tremendous growth in the amount of oil imported from overseas, but the origin of the oil will shift so that the average distance and therefore the average transportation cost per barrel will be higher.

Currently, our principal sources of imported oil are Canada and Venezuela. In the future, we will rely to a much greater extent on Eastern Hemisphere countries, particularly those countries in the Persian Gulf.

This shift in the source of U.S. imported oil will have a direct and substantial impact on the transportation cost of imported oil because the average distance traveled will rise significantly.

An indication of the effect distance has on foreign tanker rates can be seen from a review of current rates. For example, the spot rates for transporting a barrel of oil to the east coast in September 1971 were $0.61 from the Persian Gulf, $0.30 and $0.37 from the North African countries of Libya and Nigeria, and $0.17 from Venezuela.

Using very conservative estimating procedures which recognize both the increase in the level of oil imports and the greater average distance traveled, the projected outflow of American dollars connected with the transportation of imported oil would range from $1.2 billion to $2.6 billion.

Thus, if the Cargo Preference Act of 1954 were amended to require that 50 percent of waterborne oil imports must be carried in U.S. tankers, by 1985 it would produce a savings to the U.S. balance of payments of from $600 million to $1.3 billion per year.

This does not represent the full economic benefit to be derived from extending the Cargo Preference Act of 1954 to waterborne oil imports.

The U.S. tanker fleet is in very bad shape—perhaps the worst condition of all the countries which possess tanker fleets.

The U.S. fleet is the oldest fleet among the major flags with an average age of 16 years, 5 months—more than twice the world average of 7 years, 3 months.

The number of U.S. tankers is declining sharply while the world tanker fleet is growing rapidly. In terms of T–2 equivalents, the U.S. capacity has declined from 14.7 percent of the world total in 1959 to 5.5 percent in 1970. This downward trend will continue unchecked according to available data.

The extension of the Cargo Preference Act of 1954 to waterborne oil imports would dramatically improve the U.S. tanker fleet. This, in turn, would yield substantial economic benefits as well as strengthen our national security.

Some 350 new U.S. oil tankers would need to be constructed and manned in order to carry 50 percent of the imported oil. Although the actual number of jobs created in the U.S. shipbuilding industry as a result of the demand for American tankers is difficult to estimate, you can be sure that it will be substantial. In addition, it will open up about 15,000 jobs for crewmen on board the new tankers.

The expanded U.S. construction of tankers would have a multiplier effect on the U.S. economy. American companies would supply materials and products putting other Americans to work to produce them. American crews will also purchase more goods in this country than foreign crews.

The U.S. balance of payments would also benefit from the construction of tankers in this country. If as many as 350 tankers were built at an average cost of $50 million each, at least 17 billion fewer American dollars would leave this country over the next 15 years.

Effect on U.S. oil prices. Because of the pricing structure in the oil industry, the higher profit margin per barrel of imported oil, the enormous gross profits oil companies reap from imports, the benefits of the Merchant Marine Act of 1970, and the economic stimulus generated by the use of U.S. tankers, there should be no increase in oil prices attributable to the extension of the Cargo Preference Act of 1954 to oil imports.

The subsidies under the Merchant Marine Act of 1970 will permit U.S. flag tanker operators to operate at lower costs and as a result charge lower freight rates which should more nearly approach those of foreign-flag owners.

In addition, greater capacity utilization of U.S. shipyards, combined with vastly improved methods of shipbuilding could yield lower construction costs and reduce subsidies. The added tax burden required for U.S. tanker subsidies would be offset by broadening the U.S. tax base. More employed workers, increased U.S. shipbuilding and shipping profits, and the expanded profits of companies serving our shipbuilding industry and tanker fleet all would provide greater tax revenues.

Even if U.S. tanker rates remain a little higher than foreign rates, it should have no upward influence on the price of oil.

Although the cost of imported oil is cheaper than the cost of domestic oil, it appears to have no impact on the price of oil sold to refineries. For example, in spite of several increases in the quota of imported oil in the past 2 years, the average price of a barrel of oil has risen. Thus American oil companies enjoy a much wider profit margin with their imported oil than with the oil they produce domestically.

Admittedly, if U.S. per barrel freight rates were higher, it would narrow the differential between imported and domestic costs and reduce the profit margin per barrel of imported oil assuming no price increases. However, since the volume of imports is going to grow four times or more over current levels, American oil companies aggregate profit will climb steeply even if the profit margin per barrel of imported oil is reduced somewhat.

According to one report the actual realized annual profits of American oil companies operating in five Middle East countries has more than doubled from $657 million in 1963 to $1.43 billion in 1968.

I would like to say that the profits that they realized in 1968 exceeds the book value of their investments in the Persian Gulf countries in 1971.

Over the next decade and a half, the volume of oil imports from these countries will grow 12 to 15 times over the 1968 level and the profits of American oil companies can be expected to grow similarly.

In summary then, the extension of the Cargo Preference Act of 1954 to oil imports would assist the U.S. balance-of-payments problem by reducing the outflow of dollars to foreign tanker companies; it would provide much needed employment to American workers in shipyards and as crews on tankers; it would stimulate other sectors of the U.S. economy; and it would improve the badly deteriorated U.S. tanker fleet.

All of this could be accomplished with the assistance provided in the Merchant Marine Act of 1970 without affecting the price of oil or jeopardizing the profits of American oil companies.

NATIONAL SECURITY

In the past when crises in the Middle East interrupted the flow of imported oil we were able to make adjustments with our own oil reserves and domestic tanker capacity. We simply increased the movement of crude oil from the gulf to the east coast. Even today we could make adjustments—relaxing pollution standards, utilizing marginal and uneconomic production capability, et cetera—to meet our oil requirements.

But we must look to the future. By 1985 our domestic production will meet only one-half of our needs, not three-fourths, as is currently the case.

Conversely, at the present time less than a tenth of our oil supply is imported on tankers; by 1985 this ratio will increase to between one-third and one-half.

Obviously, where a small U.S. tanker fleet may be able to respond to an emergency now, it will not nearly be equal to the task in the future.

There seems to be little choice whether we become dependent on foreign sources of oil in the future. But should we also become dependent on third party foreign governments for the transportation of a critical energy source?

Plainly the risks involved in depending on foreign oil will increase geometrically if we shortsightedly also permit this country to depend on foreign tankers as well. Our oil import requirements would be dependent upon the good will of one set of foreign producing nations and another completely different set of foreign transportation "service" nations.

We need a strong dependable U.S.-flag fleet which will be constantly available to satisfy our Nation's oil import requirements and to quickly respond to an interruption in the steady flow of waterborne oil should a crisis arise. However, as I pointed out earlier, the U.S. tanker fleet is deteriorating rapidly.

Our national security depends on sufficient energy which, in turn, depends on a sufficient supply of imported oil. Only with a strong U.S. tanker fleet can this country be reasonably assured that the flow of imported oil will not be interrupted by a transportation breakdown. The extension of the Cargo Preference Act of 1954 to oil imports will permit strengthening the U.S. tanker fleet to the level required to protect our national interest.

ENVIRONMENTAL PROBLEMS

All of us have seen pictures of oil washed up on sandy beaches and seagulls struggling mightily to free themselves from the sticky substance. It is a sight which incenses the average American citizen.

While recalling that scene, consider again that only about 8 percent of the U.S. oil supply is imported on tankers now, but that this percentage will rise to 36 percent or more by 1985.

Readily one can see that the odds for oil spillage as the result of tanker movement will increase more than fourfold. Yet, if waterborne imported oil is carried almost exclusively in foreign tankers, as is presently the case, the United States will be practically powerless to exercise controls which will minimize the prospects for oil pollution.

If U.S.-flag vessels are used, the U.S. Coast Guard would have primary responsibility and be able to enforce control over construction, loading and off loading, ship manning levels and crew proficiency standards. Furthermore, the Coast Guard can take direct action against any U.S. merchant ship officer who creates an oil pollution incident.

This control cannot be exercised over foreign-flag vessels, including those of the so-called "flags of necessity" fleet, which maintain ship construction, maintenance and inspection standards well below the requirements applied to U.S.-flag vessels.

The extension of the Cargo Preference Act of 1954 to oil imports by requiring the use of U.S.-flag tankers for 50 percent of our seaborne imported oil would assure the American public that the safest antipollution standards would be maintained and that the threat of oil spillage would be minimized.

If we, as a nation, are sincerely interested in maintaining high standards against oil pollution we must guarantee that half of the vessels carrying oil to this country are U.S. tankers. Only in this way can we secure enough leverage to force foreign-flag tankers to meet our criteria for a safe, healthy marine environment.

If Congress permits foreign ships to carry all the oil imported into this country, the Congress may be subsequently forced to deal with a pollution problem after it is too late.

CONCLUSION

In conclusion, by applying the Cargo Preference Act of 1954 to oil imports covered by quota, we will strengthen our country economically by improving our balance-of-payments position, expanding employment opportunities, and stimulating our shipbuilding and other industries; we will help maintain our national security by assuring an adequate tanker supply during a period when we will experience a growing dependence on foreign oil; and we will be able to minimize the potential environmental danger to marine life and beauty associated with expanding tanker movement of oil.

I exhort the members of this committee to see the wisdom and merit of the legislation before you. The future well-being of this Nation may well depend on it.

Senator SPONG. Thank you very much, Mr. Calhoun, for your testimony.

You have made a number of interesting points relating to the balance of payments, domestic employment, national security and the environment.

If this legislation were enacted, do you think that it would be physically possible for the U.S. tanker fleet to expand rapidly enough to carry 50 percent of our imports?

Mr. CALHOUN. I have no doubt that the American tanker fleet could and would expand rapidly enough to carry all of our imports. We have a considerable number of tankers laid up, I think in excess of a million tons. There is a dearth of new orders in the American shipyards. There are several shipyards on the verge of closing down, because they don't have new orders. I see no problem in producing the necessary tankers.

Senator SPONG. Is the fleet capable of doing that today?

Mr. CALHOUN. The existing fleet is capable of doing it today.

Senator SPONG. I know that you have done considerable work in the area of liquid natural gas in ships. How do you foresee liquid natural gas fitting into our future energy requirements?

Mr. CALHOUN. Oil will continue to be the primary fuel supply for the remainder of this generation. However, within the gas industry, there has been a tremendous shortage developing throughout most of the United States. Exploration that is going on in this country today is at a very slow pace. The foreign sources of gas are very limited. The technology that was developed in this country for the transportation of this gas has been utilized by the European nations, primarily the French and Norwegians, and unless we move very fast, very rapidly into the importation of natural gas, we will be completely dealt out of that market. The natural gas market will not be a free economy market as we know oil. The capital investments in natural gas are so tremendous, with the capture system in the producing areas, the liquification plants, which are tremendously expensive, and the specialized vessels that are only good for natural gas, runs into a modest operation, runs into a billion or a billion and a half dollars.

It is an integrated system. The plants to produce the natural gas or liquefy the natural gas and ships and the deliquefication plant are all an integrated system, and it is so expensive that there won't be surplus tonnage ability for a free market, for the tramp market.

Right now some of the more developed nations are having financial difficulty in financing the installation of the deliquefication plants, construction of the tankers, and the liquefication plants.

But unless this Nation does jump into it on really an emergency basis, we will have been dealt out of the natural gas market.

The real devastating part of being dealt out of the natural gas market is that it is by far the cleanest fuel. There is practically no pollution by burning natural gas. Most of the natural gas that is not being used today is flashed at the wellhead, so whatever little pollution there is from it is already going into the atmosphere, and if American industry, certain particular industries that need natural gas, if they cannot get it, they will have to be put in expensive anti-pollution devices which will make them much more less competitive in the world, particularly if the northern Europeans and the Japanese capture the gas industry and use the gas where they don't have to put in the pollution devices.

Another big problem is under the Clean Air Act of 1970, where most of the major cities have to triple and quadruple their use of natural gas to come close to meeting the standards of the Clean Air Act, that gas supply is not available in this country, so for environmental purposes, was must get into it.

Senator SPONG. I note that you agree that enactment of the legislation will not increase consumer prices, but only decrease the windfall profit involved in the oil import quota system. If that is true, and this legislation is enacted, do you believe we should use construction subsidies and operating subsidies to reduce the cost of it?

Mr. CALHOUN. I believe the committee should take a look at whether the Federal Government should subsidize the construction and operation of vessels to carry petroleum products if there is a windfall profit,

which obviously there is, for the oil companies, that are adequate to pay for the operation and construction of these vessels.

Senator SPONG. What you are saying is it would be preferable to take the transportation cost from the windfall profit rather than have a subsidy by the public?

Mr. CALHOUN. Yes, sir.

Senator SPONG. If this legislation is not enacted, do you see any hope that the Merchant Marine Act of 1970 will produce a U.S. tanker fleet capable of carrying a substantial portion of our oil imports?

Mr. CALHOUN. No, sir; it will not. It is ironic that the Merchant Marine Act of 1970 was a shipbuilding act, it was enacted to build ships. It was not enacted to produce cargoes. To the best of my knowledge, only five new vessels have been contracted for under the Merchant Marine Act of 1970. I say five new vessels, I mean five vessels that could not have been contracted for under the old Merchant Marine Act of 1936. These consist of three small tankers, chartered to Shell Oil Co., operated by Keystone Shipping Co., and 28,000-ton OBO's chartered to Ultramar. Ironically, both charters are to foreign oil companies. Not one U.S. based company has offered a charter to an American tanker since the passage of the Merchant Marine Act of 1970 and unless this bill is passed, I do not believe any American oil company will offer an American company a charter.

Senator SPONG. Senator Beall.

Senator BEALL. Thank you, Mr. Chairman.

Mr. Calhoun, did I understand you to say the existing fleet could transport 50 percent of the oil currently imported into the United States?

Mr. CALHOUN. Yes, sir.

Senator BEALL. Including those that are laid up?

Mr. CALHOUN. Yes, sir.

Senator BEALL. How about the manpower? Do you have the trained engineers and captains and so on?

Mr. CALHOUN. Yes, sir; we have a surplus of manpower.

Senator BEALL. Enough to man all of those ships today?

Mr. CALHOUN. Yes, sir.

Senator BEALL. Thank you. That is all I have.

Senator SPONG. Thank you very much, Mr. Calhoun.

Mr. CALHOUN. Thank you, Mr. Chairman. It was a pleasure to be here.

(The statement follows:)

TESTIMONY OF JESSE M. CALHOON, PRESIDENT, NATIONAL MARINE ENGINEERS' BENEFICIAL ASSOCIATION, AFL-CIO, ON BEHALF OF AFL-CIO MARITIME COMMITTEE

Use of American Tankers for Oil Imports

My name is Jesse Calhoon. I am President of the National Marine Engineers' Beneficial Association, AFL-CIO, and a member of the Executive Board of the AFL-CIO Maritime Committee. I am accompanied by Ben Man, Deputy Executive Director of the AFL-CIO Maritime Committee.

Mr. Chairman and members of the Committee, I would like to express the appreciation of the AFL-CIO Maritime Committee composed of the International Longshoremen's Association (ILA), the National Maritime Union of America (NMU), the American Radio Association (ARA), the National Marine Engineers' Beneficial Association (MEBA), and the United Steelworkers of America (USA), for this opportunity to appear before you in support of S. 3404 -- the extension of the Cargo Preference Act of 1954 to oil imports subject to quota.

It is well known that this nation faces a critical energy crisis. Our uninterrupted rapidly growing demand for energy is perilously close to outstripping our ability to supply it.

Yet it is vital to the welfare of this country and its citizens that sufficient energy supplies be assured. As the Joint Economic Committee of the Congress of the United States has stated "the economy of the United States and the technologically advanced nations is based on energy. Energy is the ultimate raw material which permits the continued recycle of resources into most of man's requirements for food, clothing and shelter. The productivity (and consumption) of society is directly related to the per capita energy available.1/

1/ Joint Economic Committee of the Congress of the United States, The Economy, Energy and Environment, September 1970, p. 5.

In fact over the past three or four years, the use of energy in the United States has increased faster than the Gross National Product. In brief, our goals of an ever-improving standard of living and a strengthened industrial economy are dependent on a reliable supply of sufficient energy.

Among our energy resources -- coal, oil, natural gas, hydroelectric, nuclear, etc. -- oil will undoubtedly be the most important, at least for the remainder of the century. Oil is frequently known as the "swing" fuel. In other words, the demand for oil is directly affected by the availability of other fuel supplies.

In recent years the demand for oil has exceeded expectations because of environmental considerations which have made high-sulphur content coal unacceptable for many purposes, because nuclear energy has not expanded as rapidly as anticipated, and because of the rather acute shortage of natural gas.

However, our domestic capacity to supply petroleum falls far short of meeting our needs now and will fall further behind over the next decade and a half. This means that dependence on foreign oil will expand greatly. In turn, this poses crucial economic, national security and environmental problems for this nation.

The proposed legislation being considered by this Committee to extend the Cargo Preference Act of 1954 to waterborne oil imports covered by quota represents a positive response to these critical issues.

The Economic Issue

A careful examination of the economic implications of a rapidly expanding oil import program suggests that by 1985, if the U.S. continues to ship imported oil in foreign tankers, over $2½ billion could be added annually to an already serious balance of payments deficit.

According to the Office of Oil and Gas, U.S. Department of the Interior, the total daily supply of oil in the United States was 14.7 million barrels in 1970. Seventy-six percent was U.S. produced and 24% was imported. Of the 3.4 million barrels imported daily about 1.4 million was crude oil. The remaining 2 million barrels per day was residual oil imported principally from Venezuela to the East Coast.

Projections to 1985 by the Office of Oil and Gas indicate that the U.S. total daily demand could reach 26.5 million barrels. Of this total only 56% will be domestically produced if the potential of Alaskan oil is realized by that time and 44% if Alaskan oil remains unavailable. Thus, between 12 to 15 million barrels of oil would need to be imported daily — about four times more than in 1970. This estimated range, incidentally, is consistent with the National Petroleum Institute's projected 14.8 million barrels of oil imports per day for 1985.

This tremendous jump in the flow of imported oil into the United States will produce a corresponding outflow of American dollars and thereby aggravate this country's already serious balance of payments deficit.

American dollars will be paid out to foreign ship owners to cover shipping costs. If, on the other hand, the ships used are U.S. owned the American dollars would be paid to U.S. companies and U.S. workers and thereby reduce the outflow of dollars. Instead, American dollars will be held by U.S. companies and American workers will have jobs.

In 1971, on a "net liquidity" basis, this Nation suffered a record deficit in its balance of payments of $22.2 billion. This compares with a

$3.8 billion deficit in 1970. Also in 1971 we suffered a deficit in our balance of trade of $2 billion. This was the first U.S. trade deficit in this century and only the second in our history. The extension of the Cargo Preference Act of 1954 to require that 50 percent of waterborne oil imports be carried in American ships will significantly restrain this outflow of U.S. dollars.

According to projections of the Office of Oil and Gas, by 1985 some 2.2 million barrels per day will be imported from Canada — principally by pipeline. The balance of imported oil will be both waterborne and governed by quota. Thus in 1985, excluding imports from Canada and assuming availability of Alaskan North Slope oil, some 9.7 million barrels per day will need to be imported under the quota by means of tankers; without North Slope oil, it will jump to 12.7 million. (see Table 1 in Appendix)

In order to look at the potential outflow of American dollars associated solely with the transportation of the 9.7 - 12.7 million barrels of oil imported per day, we need to examine per-barrel transportation costs. In its report, The Oil Import Question, dated February 1970, the Cabinet Task Force on Oil Import Control estimated that the average cost of transporting a barrel of oil in a tanker to the United States in the early 1970's would range from $0.40 - $0.50 from the Persian Gulf, $0.15 - 0.25 from Libya, and $.20 from Venezuela. However these costs have already proven to be too low for the early 1970's. For example, the spot rates for transporting a barrel of oil to the East Coast in September 1971 were $0.61 from the Persian Gulf, $0.30 from Libya, $0.37 from Nigeria and $0.17 from Venezuela. Available data suggests the rates have risen still further since September.

In looking to the late 1970's and early 1980's, it is certain the rate per barrel will be even higher. The larger volume carried by the super tankers may restrain the increase in rates, but with higher ship-building and maintenance costs and higher wages paid to foreign seamen, foreign tanker freight charges can realistically be expected to rise. A very conservative estimate for 1985 would be $0.70 per barrel from the Persian Gulf, $0.40 from northwest Africa (Libya and Nigeria), and $0.25 from Venezuela.

In making projections of the potential outflow of American dollars connected exclusively with the use of foreign tankers for transporting imported oil to the U.S. each of the above sets of freight rates will undoubtedly produce underestimates. Moreover, equally as important as the freight rates is the projected shift in the origin of American oil imports. Currently most of the oil imported into this country is produced in Venezuela which has a low per barrel transportation cost. In the future, the majority of U.S. imported oil will be produced in the Persian Gulf countries. The resulting increase in the average length of movement will have a significant impact on cost.

In its recent report "United States Energy, A Summary Review" the Department of the Interior states "The bulk of the Free World [oil] reserves are in the Persian Gulf countries with four of these, Iran, Iraq, Saudi Arabia, and Kuwait accounting for 58 percent of the total." The report goes on to say that "although most of U.S. oil imports are now drawn from Western Hemisphere sources, principally Canada and Venezuela, production in these

countries is not expected to keep pace with the rising U.S. requirement. Most of the increased import needs will have to come from the Eastern Hemisphere."

In fact a comparison of the origin of U.S. crude oil imports (exclusive of residual oil) for the eleven months January through November of 1970 and 1971 shows how quickly this shift is occuring. Between these two periods Canada's share of U.S. crude oil imports declined from 50.9% to 43.5% while Venezuela's dropped from 20.4% to 18.7%. More important from the standpoint of tanker shipment, among waterborne shipments Venezuela's share declined from 41.5% to 33.2%. These are dramatic changes over a one year period.2/

At the same time there is a shift in the source of Eastern Hemisphere crude oil imports to the Persian Gulf and Indonesia. Of the total waterborne U.S. oil imports for the two eleven month periods, the share originating in the four Persian Gulf countries of Iran, Iraq, Saudi Arabia, and Kuwait grew from 15.8% in 1970 to 26.5% in 1971. The corresponding figures for Indonesia were 10.5% in 1970 and 11.3% in 1971. Libya experienced a decline in its share from 7.5% in 1970 to 5.4% in 1971 while the proportion imported from Nigeria grew from 7.4% to 9.6%.3/

The continuation, and actual acceleration, of this shift in the source of U.S. imported oil will have a direct and substantial impact on the transportation cost of imported oil because the average distance traveled will rise significantly. According to the Office of Oil and Gas, South American

---

2/ Source: "Mineral Industry Surveys," November, 1971 (prepared Feb. 9, 1972), U.S. Department of the Interior, Bureau of Mines, Table 15, p. 16.

3/ Ibid.

oil imports (principally residual oil from Venezula) will grow from 2.2 million barrels per day in 1970 to 3.5 million in 1985. Over the same period Eastern Hemisphere imports are anticipated to leap from 530 thousand barrels per day to 6.2 million barrels per day if Alaskan North Slope oil is available or to 9.2 million barrels per day without Alaskan oil.

This dramatic shift is seen more clearly when expressed in percentage terms. In 1970 South American oil imports comprised 81% of the total U.S. waterborne oil imports. In 1985 the percentage is expected to fall to 36% with Alaskan oil or 28% without it. Conversely Eastern Hemisphere oil imports represented only 19% of total U.S. seaborne oil imports in 1970, but this percentage is expected to jump to 64% with Alaskan oil or to 72% without it.

In addition, existing trends and the concentration of large oil reserves in the vicinity of the Persian Gulf suggest that by 1985 the great majority of U.S. waterborne oil imports will originate in this area. For extimating purposes it would seem reasonable to assume that 15% (about the current percentage) or 1 million barrels per day would orginate in North Africa in 1985 if a total of 6.2 million barrels per day are imported from the Easter Hemisphere. Even at the higher level of 9.2 million barrels per day from the Eastern Hemisphere, only about 1 million barrels per day could be realistically expected to originate in North Africa. Thus some 5.2 to 7.2 million barrels per day of imported oil would be projected to originate in the Persian Gulf and beyond.

In an effort to simplify the process of projecting the outflow of American dollars connected with transporting imported oil in foreign tankers,

78-255 O - 72 - 15

we have confined ourselves to allocating the projected volume among three points of origin: (1) Venezuela, (2) North Africa and (3) the Persian Gulf. We recognize that this process overlooks oil imported from other countries. However, this method not only covers the great bulk of oil imports but also provides a very conservative estimate of freight costs since the largest oil exporting country omitted — Indonesia — would have a relatively high freight rate because of the further distance the oil would need to be transported.

Applying the three sets of estimated per barrel freight costs to the assumed distribution of oil imports for 1985 gives a reasonable projection of the range of American dollars which would be paid to the owners of foreign tankers to carry oil imports to the U.S. If 12% of the U.S. oil supply in 1985 is received from the Alaskan North Slope, annual U.S. transport payments to foreign tanker companies or foreign subsidiaries of U.S. oil companies would range from $1.2 billion at the lowest rates (Cabinet Tast Force), to $1.5 billion at September, 1971 rates and to $1.8 billion at rates adjusted for anticipated increases. If Alaskan oil is not available, the U.S. annual payment to foreign tanker companies in 1985 would increase to $1.7 billion, $2.2 billion and $2.6 billion respectively at each of the rate levels. (See Table 2 in Appendix)

Thus, using very conservative estimating procedures, the projected outflow of American dollars connected with the transportation of imported oil would range from $1.2 billion to $2.6 billion. In all probability, even the highest figure is an underestimate. Conservative as these estimates are, they nevertheless indicate that if the Cargo Preference Act of 1954

were amended to require that 50 percent of waterborne oil imports must be carried in U.S. tankers, by 1985 it would produce a savings to the U.S. balance of payments of from $600 million to $1.3 billion per year.

This would be a very substantial savings and a significant contribution to strengthening our balance of payments situation which will be placed under great stress because of our increasing dependence on imported oil. This entire savings would be produced exclusively by reducing U.S. freight payments to foreign tanker companies. It does not represent the full economic benefit to be derived from extending the Cargo Preference Act of 1954 to waterborne oil imports.

Some 350 new U.S. oil tankers would need to be constructed and manned in order to carry 50% of the imported oil. Although the actual number of jobs created in the U.S. shipbuilding industry as a result of the demand for American tankers is difficult to estimate you can be sure that it will be a substantial number — enough to have a measurable positive impact on this Nation's high unemployment rate. In addition, it will open up about 15,000 jobs for crew men on board the new tankers.

Currently, practically all waterborne shipments of oil to the U.S. are carried in foreign tankers. U.S. tankers are limited to intra-coastal shipments of oil, principally from the Gulf to the East Coast. This movement of oil is being drastically reduced as the result of expanding use of pipelines within the continnetal U.S. and the growth in foreign imports directly to the East Coast. According to federal government data, tanker movement of crude oil and products from U.S. Gulf ports to Atlantic ports has dropped from 667.7 million barrels in 1959 to 603.8 million barrels in 1969.5/

5/ Bureau of Mines, Mineral Industry Surveys, "Petroleum Statements" Annual and December Issues.

The result has been a precipitous drop in the number of U.S. tankers at the same time the world tanker fleet has grown tremendously. Between 1959 and 1970 the number of U.S. tankers dropped from 485 to 350 while the number of world tankers has increased from 3,276 to 3,994. In terms of T-2 equivalents the U.S. capacity has declined from 14.7 percent of the world total in 1959 to 5.5 percent in 1970.6/

Construction activity suggests that the U.S. share of the world tanker fleet will decline still further. Of the 649 tankers under construction or on order on December 31, 1970, only 21 were being built to carry the U.S. flag. The 649 represented 45 percent of the deadweight tonnage of the world's existing fleet, but the 21 U.S. tankers on order represented only 21 percent of the deadweight tonnage of the existing U.S. fleet.

The U.S. fleet is the oldest fleet among the major flags. The average age of the U.S. fleet at the end of 1970 was 16 years 5 months compared to the world average of seven years and three months. Not only is the U.S. fleet more than twice as old as the world average, but the U.S. average age approximates the seventeen years normally used for depreciation purposes.

The number of U.S. owned tankers is much larger than the number of tankers which fly the U.S. flag of registry. As of December 31, 1970 there were 944 U.S. owned tankers of which only 350 flew the U.S. flag of registry. Further refined, of the 350, 95 were owned by the U.S. government. Thus of the 849 U.S. privately-owned tankers only 255 or 30% were registered in the U.S. In fact, more U.S. owned tankers were registered under the flag of Liberia than under the U.S. flag.

6/ Sun Oil Company, "Analysis of World Tanker Fleet, August, 1971, p. 4.

It is obvious that the U.S. tanker fleet is in very bad shape -- perhaps the worst condition of all the countries which possess tanker fleets. The extension of the Cargo Preference Act of 1954 to waterborne oil imports would dramatically improve the U.S. tanker fleet. This, in turn, would yield substantial economic benefits as well as strengthen our national security.

At this time in our nation's history when about 6% of the Nation's labor force -- more than 5 million workers -- are unemployed, the construction of U.S. tankers and the staffing of crews to sail them would create many needed job opportunities. The expanded U.S. construction of tankers would have a multiplier effect on the U.S. economy. Japanese shipbuilding companies do not purchase much American steel, but U.S. shipbuilding companies would. American workers building U.S. tankers will purchase American products putting other Americans to work to produce them. American crews will purchase more goods in this country than foreign crews. The potential economic benefits of constructing and operating an expanded U.S. tanker fleet are enormous.

The U.S. balance of payments would also benefit from such an effort. Dollars which now flow out of this country to purchase ships built in Japan, Norway, etc., would now remain in this country. A super tanker costs about $50 million. If as many as 350 tankers were built in this country over the next fifteen years instead of in foreign countries as result of the extension of the Cargo Preference Act of 1954, at least 17 billion fewer American dollars would leave this country over the next 15 years and thus improve our balance of payments.

Effect on U.S. Oil Prices

But what will it cost? The rates for shipping oil on U.S. tankers are about double the rates using foreign tankers. Won't this mean higher prices for the U.S. oil consumer?

Because of the pricing structure in the oil industry, the higher profit margin per barrel of imported oil, the enormous gross profits oil companies reap from imports, the benefits of the Merchant Marine Act of 1970, and the economic stimulus generated by the use of U.S. tankers, there should be no increase in oil prices to consumers directly attributable to the extension of the Cargo Preference Act of 1954 to oil imports.

It must be understood that the oil tanker industry is a capital intensive and not a labor intensive industry. Therefore, since American shipbuilding costs are higher than those in foreign countries, U.S. tanker owners must set higher freight rates in order to assure a reasonable return on their investment. Now, however, as the result of the Merchant Marine Act of 1970, the costs of U.S. flag tanker operators should more nearly approach those of foreign-flag owners. The shipbuilding subsidy under this act will be passed along in lower costs to the tanker operator who, in turn, will be able to secure a reasonable return on his investment while charging lower freight rates.

In addition, with the vastly improved methods of shipbuilding which are prevalent today the costs of building tankers could be cut if the capacity of shipyards is more fully utilized. In other words, the increased productivity which is customarily associated with volume production could yield lower costs — perhaps even enable a reduction in construction subsidies.

The Merchant Marine Act of 1970 also provides a subsidy to defray the payroll costs of U.S. ship operators. This, too, will help U.S. tankers become more cost-competitive with foreign tankers. However, it should be kept in mind that crew costs will become less a factor in computing total

operating expenses as more use is made of large automated super tankers. These large tankers use about the same number or fewer crew men than tankers 1/5th to 1/10th their size.

The added tax burden required to subsidize the construction and operation of U.S. tankers will be offset by broadening the U.S. tax base. Workers now unemployed will obtain jobs constructing or operating U.S. tankers and become tax payers instead of being a drain on the Nation's tax resources. U.S. corporations engaged in building tankers and shipping oil would pay taxes on profits. Other U.S. companies benefitting from expanded U.S. shipbuilding and a growing tanker fleet would also pay more taxes.

Although the subsidies are expected to make U.S. tanker freight rates competitive with foreign rates, it is possible that U.S. tanker rates may remain a little higher than foreign rates. Even so, since imported oil is so lucrative to American oil companies, a slightly higher U.S. tanker per-barrel freight rate should have no upward influence on the price of oil. In fact, the price per barrel of crude oil to the refinery is apparently determined by the cost of domestic oil. Imported oil appears to have a very limited impact, if any, on the price of oil sold to refineries. For example, in spite of several increases in the quota of imported oil in the past two years — and imported oil is much less costly than domestic oil — the average price of a barrel of oil has risen.

Since the cost of imported oil is cheaper than the cost of domestic oil, American oil companies enjoy a much wider profit margin with their imported oil than with the oil they produce domestically. For example, the U.S. landed spot prices per barrel of high quality, low-sulphur crudes

delivered to the East Coast were $3.21 from Libya, $3.15 from Algeria, and $3.18 from Nigeria compared to $4.02 from Louisiana in September, 1971. The similar U.S. landed spot prices for middle weight, medium sulphur crudes were $2.50 from Iran, $2.45 from the Arabian Persian Gulf, and $3.06 from Venezuela compared to $3.83 from West Texas.7/ But yet even though imported oil quotas were increased, Bureau of Mines data show the average price per barrel of oil has risen by 16% from 1968 to the present time.

Admittedly if U.S. per barrel freight rates were higher, it would narrow the differential between imported and domestic oil costs and reduce the profit margin per barrel of imported oil assuming no price increases. However, the potential reduction in the profit margin per barrel of imported oil needs to be viewed in the context of the vastly increased volume of imports and the higher ratio of imported to domestic oil which is expected to prevail in the 1980's.

In 1970 waterborne imported oil totaled 2.7 million barrels per day; by 1985 oil imported in the U.S. via tankers is expected to reach 9.7 to 12.7 million barrels per day. This volume, 4 to 5 times greater than current imports, will yield a much larger profit in the aggregate even if the profit margin per barrel of imported oil is reduced somewhat.

The profits reaped by U.S. oil companies from their foreign operations is already very large. According to a thesis being written by Odeh F. Aburdene, a Ph.D. candidate at the Fletcher School of Law and Diplomacy at Tufts University, the actual realized profits of American oil companies operating in Iran, Iraq, Kuwait, Saudi Arabia and Lybia totaled $5.8 billion

---

7/ "Worldwide Crude Oil Prices," Quarterly Report, Fall 1971, Office of Oil and Gas, U.S. Department of Interior, Tables I and II.

between 1963 and 1968. Even more startling is the rate at which their annual profits from their oil operations in these Middle-East countries is growing. They more than doubled over the six year period, jumping from $657 million in 1963 to $1.43 billion in 1968. Over the next decade and a half the volume of oil imports from these countries will grow to 12 to 15 times the 1968 level and the profits of American oil companies can be expected to grow correspondingly.

Perhaps more important, the ratio of waterborne imports to the total supply of U.S. oil will expand from 8% in 1970 to 36% or 48% in 1985 depending again on the availability of oil from Alaska. Therefore, the profit margin connected with oil imports will have a much greater impact on the total profit margin of oil companies (i.e., the combination of the imported and domestic oil profit margins). Since a reduced profit margin on imported oil would still exceed the profit margin on domestic oil, it is very likely that the combined imported and domestic profit margin per barrel of oil will widen as imported oil assumes a greater share of the total.

The key point to keep in mind is the profits which flow from the economies of scale. The volume of imported oil is going to grow so much that even if the profit margin per imported barrel is reduced, the profits accruing to American oil companies from imported oil will expand greatly.

In any case, it is very clear that American oil companies can readily absorb the modest increases in per barrel tanker transportation costs which may result from the use of U.S. registered vessels without passing on the cost in the form of higher prices.

In summary then, the extension of the Cargo Preference Act of 1954 to oil imports would assist the U.S. balance of payments problem by reducing the outflow of dollars to foreign tanker companies; it would provide much needed employment to American workers in shipyards and as crews on tankers; it would stimulate other sectors of the U.S. economy; and it would improve the badly deteriorated U.S. tanker fleet. All of this could be accomplished with the assistance provided in the Merchant Marine Act of 1970 without affecting the price of oil or jeopardizing the profits of American oil companies.

National Security

An increase in the United States' reliance on imported oil from one-fourth of total supply in 1970 to one-half of total supply by 1985 poses serious national security problems. The potential threat is compounded if all of the waterborne imported oil supply is to be transported in foreign tankers.

It is not the availability of world oil, but the severe transportation dislocations, principally in the Middle East, that have caused oil crises in the past. Moreover these crises represented a greater threat to Europe than to the United States since Europe currently depends on North African and Persian Gulf oil to a much greater extent than this country. As a result

we may tend to minimize the potential threat to ourselves as we begin to rely more and more on this source of oil in the future.

The Suez Canal closings and the bursting of an oil pipeline to the Mediterranean Sea created severe tanker ship shortages. More tankers were needed to supply the same amount of oil to European countries from the Persian Gulf because they had to travel around Africa instead of through the Suez Canal or receiving oil in the Mediterranean Sea via pipeline. During these crises many European foreign flag vessels, usually engaged in importing oil into the U.S., switched over to supplying their respective European countries with oil. They were happy to take U.S. dollars during normal times but during the crises they served the needs of their homeland, not the United States.

However, we were able to overcome these problems with our own oil reserves and domestic tanker capacity. We simply increased the movement of crude oil from the Gulf to the East Coast. Even today, if an oil import crises were to occur, we could supply our oil energy requirements with domestic resources — but just barely. It would mean relaxing air pollution standards so that high sulphur coal could be consumed on the East Coast by the electric power generation industry. Power companies currently consume low sulphur residual oil to conform to present air pollution standards and 96% of this residual oil is imported. Increased use of idle oil production capacity, depletion of on-hand oil stocks, and production from presently uneconomic wells would probably be sufficient for a short period of time.

But let's look to the future. Currently about 3/4's of our supply of oil is U.S. produced; by 1985 only slightly more or slightly less than one-half of our oil supply (depending on the status of Alaskan oil) will be domestically produced. Obviously our capacity to tide ourselves over a crisis are much better today than they will be tomorrow. Conversely, at the present time less than a tenth of our oil supply is imported on tankers; by 1985 this ratio will increase to between one-third and one-half. This not only dramatizes our growing dependence on foreign oil producing countries but on an adequate and reliable tanker fleet.

There seems to be little choice whether we become dependent on foreign sources of oil in the future. But should we also become dependent on third party foreign governments for the transportation of a critical energy source? We could become captives in disputes between oil producing nations and countries whose flags fly on tankers supplying oil to the U.S. For example, if Algeria cuts off French oil, it cuts off oil to all French ships whether the oil is bound to France or the United States.

Similarly, if North African oil supply were shut off for any reason the length of travel per tanker to both Europe and the U.S would increase. This means more tankers would be needed to move the same amount of oil. Given the historical precedence, European flag ships would tend to carry oil to their motherlands and leave the United States without a sufficient supply — and without either the domestic oil capacity or tanker fleet to compensate for the loss as has been the case in the past.

Or if perchance our Middle East oil supply should be cut off, as well as foreign tankers, the need for U.S. tankers would be all the more critical to transport oil from the Gulf Coast to the East Coast and from South America to our shores.

With the international tensions that exist today the potential for conflict is present in all parts of the world. Should a war break out we may be denied access to oil in the Persian Gulf, North Africa or Indonesia depending on the location of the confrontation. Normally this would simply mean shifting our sources of supply to accommodate the loss. However, because of various alliances among countries the foreign flag tankers we use may not be welcome in the oil producing countries willing and able to export to the United States. If, however, we have an adequate fleet of U.S. tankers this problem could be avoided.

Another important factor which must be considered is the growing shortage of U.S. oil refining capacity. According to the Bureau of Mines our oil refineries have been operating at about 90% of capacity for the past five years. Moreover the Bureau projects the total U.S. crude runs will exceed U.S. refining capacity by 1975.

U.S. refineries are already moving to locations outside this country. Hess Oil Company is building a refinery in St. Croix which will process 700,000 barrels of oil per day. It is currently in operation at one-half that level. Northeast Petroleum and Chevron are building a refinery in Freeport in the Bahamas with a 400,000 barrels daily capacity. It is now refining 250,00 barrels per day.

Burma Oil is constructing a 500,000 barrel per day refinery in the Bahamas. Two other oil companies are constructing refineries in Canada. Ultra-Mar is building a refinery with a 250,000 barrel per day capacity that is partially operating and Gulf Oil is constructing a refinery with a daily capacity of 600,000 barrels that is now operating at a 200,000 level.

The shifting of refineries to foreign countries presents still another problem for the United States. Our reliance on tankers is doubled. First they must bring the crude oil to refineries and then they must transport the refined oil products to our shores. We are, in effect placed in double jeopardy. We cannot afford to depend solely on foreign tankers for both our crude and refined oil. To do so would be pure folly. Only by maintaining a strong U.S. tank fleet can we be confident that the prospects of a transportation breakdown will be minimized.

Nor should we be led to believe that we can safely rely on American owned tankers which fly a "flag of convenience" or a "flag of necessity." There are a variety of other factors which tend to nullify the influence of ownership. These ships are manned by foreign crews; they are governed by the laws of the country whose flag they fly; and they may have contractual obligations to honor. There is simply too much "chance" involved to rely on such ships to effectively respond to a tanker crisis.

Plainly, the risks involved in depending on foreign oil will increase geometrically if we shortsightedly also permit this country to depend on foreign tankers as well. Our oil import requirements would be dependent upon the good-

will of one set of foreign producing nations and another completely different set of foreign transportation "service" nations.

If we had an adequate U.S. flag fleet, it would be constantly and dependably available to satisfy our Nation's oil import requirements and to quickly respond to an interruption in the steady flow of waterborne oil should a crisis arise. It would provide needed flexibility to this country at a time when our rapidly growing dependence on oil imports demands a flexible response. Our future energy supply, production growth and standard of living may all depend on such an American tanker fleet.

However, as I pointed out earlier, the U.S. tanker fleet is deteriorating rapidly in relation to the world tanker fleet. Our tonnage capacity was only 5.5% of the world capacity in 1970, having fallen from 14.7% in 1959. This downward trend will continue unchecked according to available data. As of December 31, 1970, the U.S. share of tank ships under construction or on order was 21 out of 649 or 3.2%. In terms of deadweight tonnage the U.S. share was 2.5%. We also have the world's oldest tanker fleet -- with the average U.S. tanker being more than twice as old as the average for the world tanker fleet.

Our national security depends on sufficient energy which, in turn, depends on a sufficient supply of imported oil. Only with a strong U.S. tanker fleet can this country be reasonably assured that the flow of imported oil will not be interrupted by a transportation breakdown. The extension of the Cargo Preference Act of 1954 to oil imports will permit strengthening the U.S. tanker fleet to the level required to protect our national interests.

Environmental Problems

All of us have seen pictures of oil washed up on sandy beaches and seagulls struggling mightily to free themselves from the sticky substance. It is a sight which incenses the average American citizen.

While recalling that scene, consider again that only about 8% of the U.S. oil supply is imported on tankers now but that this percentage will rise to 36% or more by 1985. Readily one can see that the odds for oil spillage as the result of tanker movement will increase more than fourfold. Yet, if waterborne imported oil is carried almost exclusively in foreign tankers, as is presently the case, the United States will be practically powerless to exercise controls which will minimize the prospects for oil pollution.

Foreign tankers, including vessels owned by independent subsidiaries of American companies flying flags of convenience, maintain ship construction, maintenance and inspection standards well below the requirements applied to U.S. flag vessels. In the past, international oil tankers have run aground creating large damaging oil spills. Oftentimes they were caused by "sloppy" offloading practices in port followed by foreign crews or by cleaning oil tanks on an off loaded vessel too near the coast line.

This country can easily pass legislation to suppress these dangerous and harmful operating techniques, but they would be nearly impossible to apply to foreign-flag vessels. Once a ship has left our 12-mile limits, it is no longer subject to U.S. jurisdiction and control. In almost every case of marine oil pollution in U.S. waters, there has been sufficient delay time between the act and the discovery of the pollution to allow the offending vessel to "escape." U.S. flag vessels are held responsible when they return.

Foreign-flag vessels may never return after a polluting incident.

Even more important than penalizing oil polluters after the fact is the potential for reducing the number of incidents of oil pollution. If U.S. flag vessels are used, the U.S. Coast Guard would have primary responsibility and be able to enforce control over construction, loading and off loading, ship manning levels and crew proficiency standards. Furthermore, the Coast Guard can take direct action against any U.S. merchant ship officer who creates an oil pollution incident.

This control cannot be exercised over foreign flag vessels, including those of the so-called "flags of necessity" fleet. Even if a country like Liberia instituted standards, they would be impossible to enforce since Liberia neither has an effective Coast Guard or a Navy and these vessels never call at Liberian ports. All countries offering "flags of necessity" to ship operators are characterized by having maximum tax advantages and minimum standards and controls. When they cease to offer these advantages, the ship operators change flags. An example of this occurred when Greece instituted a number of regulations in the 1960's. The Greek merchant fleet suffered an immediate decline and the fleets of Liberia, Honduras, and Panama realized a corresponding gain.

The "flag of necessity" fleet also employs the "cheapest" crews available in the world. Certainly the miniscule sums devoted to crew costs do not buy either skilled nor loyal help. The recent mutinies in Baltimore harbor and other ports on board foreign flag tankers and the high number of ship jumpings (illegal immigration) to the U.S. are attributed to that fact. It

78-255 O - 72 - 16

is difficult to believe that this type of crew would have any regard for U.S. pollution standards or the health, welfare, and safety of U.S. citizens.

Presently U.S. crews are acknowledged as the best trained and skilled men in the maritime profession. The U.S. Coast Guard has recognized the importance of maintaining pollution standards and has developed such an awareness among U.S. seamen. In order to receive a license as an officer (deck or engineering) a man must pass a set of safety questions, including many concerning pollution problems.

The extension of the Cargo Preference Act of 1954 to oil imports by requiring the use of U.S. flag tankers for 50% of our seaborne imported oil would assure the American public that the safest anti-pollution standards would be maintained and that the threat of oil spillage would be minimized. If we, as a Nation, are sincerely interested in maintaining high standards against oil pollution we must guarantee that half of the vessels carrying oil to this country are U.S. tankers. Only in this way can we secure enough leverage to force foreign flag tankers to meet our criteria for a safe, healthy marine environment.

The people of this Nation, perhaps somewhat belatedly but nevertheless very sincerely, are concerned with all aspects of our environment. Among their environmental concerns none is more acute than the damage caused by oil spillage. If the Congress permits foreign ships to carry all the oil imported into this country, the Congress may be subsequently forced to deal with a pollution problem after it is too late.

Summary

In conclusion, by applying the Cargo Preference Act of 1954 to oil imports covered by quota, we will strengthen our country economically by improving our balance of payments position, expanding employment opportunities, and stimulating our shipbuilding and other industries; we will help maintain our national security by assuring an adequate tanker supply during a period when we will experience a growing dependence on foreign oil; and we will be able to minimize the potential environmental danger to marine life and beauty associated with expanding tanker movement of oil.

I exhort the members of this Committee to see the wisdom and merit of the legislation before you. The future well-being of this Nation may well depend on it.

Appendix

Table 1

U. S. Dependency on Oil Imports
(thousands of barrels per day)

	1970	1985 1/	1985 2/
U.S. Production	11,280	11,600	11,600
Alaska North Slope	—	3,000	—
North American Imports	700	2,200	2,200
South American Imports	2,200	3,500	3,500
Eastern Hemisphere Imports	530	6,150	9,150
Total Supply	14,710	26,450	26,450

1/ With Alaskan North Slope

2/ Without Alaskan North Slope

Source: Office of Oil and Gas, U.S. Department of the Interior, March, 1971.

Appendix

Table 2

Projections of Tanker Costs of Importing Oil, 1985

a. Using the estimated costs of the Cabinet Task Force

Venezuela 3.5 million B/D at $.20	= $700,000 per day
North Africa 1.0 million B/D at $.20	= $200,000 per day
Persian Gulf (w/Alaskan oil) 5.2 million B/D at $.45	= $2,340,000 per day
Persian Gulf (w/o Alaskan oil) 8.2 million B/D at $.45	= $3,690,000 per day
Total with Alaskan oil = $3.2 million per day or $1.2 billion per year	
Total without Alaskan oil = $4.6 million per day or $1.7 billion per year	

b. Using spot rates in effect during September 1971

Venezuela 3.5 million B/D at $.17	= $595,000 per day
North Africa 1.0 million B/D at $.34*	= $340,000 per day
Persian Gulf (w/Alaskan oil) 5.2 million B/D at $.61	= $3,172,000 per day
Persian Gulf (w/o/Alaskan oil) 8.2 million B/D at $.61	= $5,002,000 per day
Total with Alaskan oil = $4.1 million per day or $1.5 billion per year	
Total without Alaskan oil = $5.9 million per day or $2.2 billion per year	

*Libya = .30 and Nigeria = .37

c. Using estimates of increased costs applicable to late 1970's and early 1980's

Venezuela 3.5 million B/D at $.25	= $875,000 per day
North Africa 1.0 million B/D at $.40	= $500,000 per day
Persian Gulf (w/Alaskan oil) 5.2 million B/D at $.70	= $3,640,000 per day
Persian Gulf (w/o/Alaskan oil) 8.2 million B/D at $.70	= $5,740,000 per day
Total with Alaskan oil = $5.0 million per day or $1.8 billion per year	
Total without Alaskan oil = $7.1 million per day or $2.6 billion per year	

Senator SPONG. Mr. Peter Gammelgard.

Mr. Gammelgard, the committee has no wish to place any limitations upon you, but we are, however, guided by certain limitations of activities on the Senate floor which are imposed upon Senator Beall and myself.

I want to say initially your statement in its entirety will be received for the record, and if you could bring yourself to summarize from it, we would be most receptive to that. However, I want to make it clear to you that we want to hear everything you feel that you want to say to us this morning. We don't mean to cut you off.

STATEMENT OF P. N. GAMMELGARD, AMERICAN PETROLEUM INSTITUTE; ACCOMPANIED BY R. E. HOWE, CHAIRMAN OF THE AMERICAN PETROLEUM INSTITUTE MARINE COMMITTEE

Mr. GAMMELGARD. Thank you, Mr. Chairman. We kind of anticipated that this was an unduly long statement, and we should really cut it down, so we will do that, and I appreciate the fact that it will be put in the record in its entirety.

Mr. Chairman, I am accompanied by Mr. R. E. Howe, chairman of the American Petroleum Institute Marine Committee.

We appreciate the opportunity to appear before the committee to express our opposition to S. 3404 and then suggest a viable alternative for achieving the objections of the proposed legislation.

Our opposition to the pending bill will be discussed in some detail, but initially we would like to identify our major objections:

1. To link U.S. merchant shipping needs with the energy situation would be detrimental to both the Nation's shipping and energy interests.

2. Enactment of the proposed bill would provoke foreign retaliation and adversely affect free foreign trade.

3. Proponents of the proposed bill in advocating a broad expansion of the U.S. tanker fleet, strictly on the basis of national security, fail or refuse to recognize the availability of an "effective U.S. controlled" fleet.

4. The cost of expanding the U.S.-flag tanker fleet is better borne by the tax base rather than by a particular segment of the economy. The cost will be considerably greater under S. 3404 than if the same program were implemented under a modified Merchant Marine Act of 1970.

5. The objectives of the proposed bill are best accomplished under the Merchant Marine Act of 1970 with appropriate modifications.

ENERGY AND MARINE TRANSPORTATION

Members of the Senate are well aware of the enormous job facing energy companies now and in the future. Various government hearings, studies and activities now in progress aimed at formulating policies to make our energy situation more compatible with our national objectives underscore this problem. It is quite clear that imports of oil into the United States will rise over the next several years with the rate of rise being largely determined by the extent to which we can develop reserves and processes for increasing our usable supplies of domestic energy in this country.

The bill now before the committee seeks to pair the problem of energy supplies with a desire to rebuild an American merchant marine. These are separate issues and trying to deal with them as a package restricts the opportunities for dealing effectively with each issue.

Under the bill, the nation's merchant marine program would be linked in an undefined administrative way with the oil import program. To the extent that the administration of the oil import allocation system is burdened by maritime considerations, the essential objectives of the import program will be undermined.

Conversely, the merchant marine program will be compromised to the extent that oil import considerations prevail. These two national objectives should remain separate so as to command the individual attention they each deserve.

INTERNATIONAL IMPACT

The enactment of this bill could have international consequences adverse to our national interests.

Most of the major trading nations of the world have no flag restrictions on international ocean movements. Instead they rely on economic means not unlike those in the Merchant Marine Act of 1970, to encourage the use of national flag vessels in international trade. Legal flag restrictions that do exist with respect to international oil movements are confined to France, Spain, Chile, and Peru.

As a matter of fact, in 1970, only 8 percent of the free world's international petroleum movements were subject to such restrictions. Several other countries have cargo preference laws on government-sponsored cargoes or flag restrictions on coastwise movements similar to those in force in the United States today.

A move by this country to adopt discriminatory legislation requiring the use of U.S. vessels in importing oil will invite other maritime nations to take prompt defensive action.

Mr. B. W. Rein, Deputy Assistant Secretary of State for Transportation and Telecommunications, in his testimony before the House Committee on Merchant Marine and Fisheries on October 21, 1971, suggested that extension of the cargo preference principle to classes of cargo not now covered would give impetus to similar actions by other countries. In our opinion, retaliatory action might even extend to areas other than maritime affairs.

Widespread flag discrimination involves serious risks. As more and more of the world's tanker tonnage becomes locked into specific trades in conformance with discriminatory requirements vessel scheduling flexibility, and the oil industry's ability to cope with supply disruptions will be severely restricted.

The enactment of this proposed legislation will encourage oil exporting countries to impose vessel flag requirements on their oil exports. Moves in this direction have been considered in the past and are currently under consideration in a number of countries at the present time. A move by the U.S. toward flag restrictions could not help but weaken otherwise sound arguments against such actions.

If U.S. companies are forced to employ vessels of crude exporting countries by the laws of those countries, there is the increased risk of

interrupting critical supplies of energy required by the U.S. in that tankers as well as oil would be affected.

The oil industry's ability to adjust to supply disruptions stemming from political crises has been demonstrated many times. In the past, political factors such as those involving the Suez Canal closure, the periodic shutdowns of the Trans Arabian Pipeline, and the curtailment of Libyan crude production have drastically altered raw material availability and tanker transportation requirements.

The oil industry has been able to cope with these problems in the past by calling upon alternate supply sources and redeploying the international tanker fleet. If more and more of the international tanker fleet ends up being controlled by various oil exporting countries, the oil industry will no longer have the tanker capacity available which it can freely deploy to cope with such disruptions. It should be clearly understood that loss of such flexibility to mobilize vessels as required in emergencies could seriously jeopardize U.S. energy supplies.

It is true that U.S. flag vessels could be redeployed to supply a portion of U.S. requirements. However, the ability of the U.S. flag fleet to meet added requirements certainly would be limited.

Furthermore, much of the benefit of the "effective U.S. controlled" fleet would have been lost since the capacity of this fleet would undoubtedly have declined as the capacity of national flag tanker fleets increased.

The potential for reducing the "effective U.S. controlled" fleet is far greater than the increase which would occur in the U.S. flag fleet. Hence, the total tonnage available, considering both the U.S. flag and the "effective U.S. control" fleets, would decline rather than increase.

Such security risks are inherent in S. 3404, but would not occur if national maritime objectives are accomplished through the mechanism of the Merchant Marine Act of 1970, as appropriately amended.

Beginning with the Reciprocal Trade Agreement Act of 1934, successive sessions of Congress have reaffirmed this Nation's belief in the desirability of freeing international trade from quota restrictions, arbitrary exchange controls, and discriminatory practices, when it does not conflict with national security.

Furthermore, flag discrimination on the part of this country would be in direct contravention of the intent and objectives of various international agreements to which the United States is a signatory and, in most cases, a sponsor. These include: The Trade Expansion Act of 1962; The General Agreement on Tariff and Trade (GATT); The Organization for Economic Cooperation and Development (OECD); and U.S. treaties of friendship, navigation, and commerce with various maritime nations.

It would be unfortunate indeed if our country, heretofore a leader in liberalized trade, were to endorse the regressive practice of flag discrimination embodied in S. 3404.

Demands for greater use of U.S.-flag ships in foreign trade are frequently based upon the argument that this would help improve the U.S. balance of payments. Any apparent improvement could be largely offset if actions to stimulate the use of U.S.-flag ships provoked retaliation by foreign countries.

It has been argued that national security needs demand an expansion of the U.S.-flag tanker fleet. We fully recognize that the maritime industry is important to national security, and we support governmental actions taken to meet defined national security needs.

However, in our view, the need to expand the U.S.-flag tanker fleet strictly for reasons of national security has not been established. We feel that those who advance such arguments fail to recognize the role played by the American-controlled ships under Liberian and Panamanian registry which are pledged to the United States in time of crisis.

We emphasize that we are here referring to "effective U.S. controlled" vessels and not all "flags of convenience" vessels. Instead we are referring to those vessels considered by Government authorities charged with security responsibilities to be under "effective U.S. control."

Representatives of the Departments of Commerce and Defense have repeatedly affirmed that American-controlled ships under Liberian and Panamanian registry which are pledged to the United States in time of crisis are under effective U.S. control, and are available to the United States for use in event of war or national emergency.

For example, in replying to questions raised by a maritime union representative, Secretary of Defense McNamara stated in June 1967:

> In a full-scale emergency, we believe "effective U. S. controlled" ships will be as available to DOD (Department of Defense) as U.S. flag ships.

Moreover, the record consistently supports the availability and use of these vessels during World War II, as well as in the Korean and Vietnam conflicts.

Mr. Leo A. Hoegh stated in 1960, when he was Director of the Office of Civil Defense and Mobilization, that as a result of a study by his organization, he found no justification on grounds of national defense for requiring that some fixed share of oil imports into the United States be moved in U.S.-flag tankers. The following quote is from the OCDM press release on the study:

> The investigation determined that the tankers comprising the U.S. flag fleet, when supplemented by those ships of Panamanian, Liberian and Honduran registry which can reasonably be expected to be made available to the United States in times of emergency, are adequate to meet defense requirements for the present and foreseeable future.

Although this statement was made in 1960, evidence indicates it is still valid. Approximately 24 million deadweight tons, or 13 percent of the free world's tankship tonnage, now flies the U.S. flag or is effectively under the control of the United States.

This total of 24 million tons represents an increase of more than 65 percent since 1960, whereas commercial tonnage requirements for U.S. domestic oil movements and oil imports combined have only increased about 45 percent.

These 24 million tons now represent over 160 percent of the Nation's commercial tonnage requirements. Despite the significant growth which is forecast for oil imports, we estimate that this coverage will not fall below about 140 percent through 1975. This would appear to provide ample coverage of our country's requirements in event of national emergency.

Supplementing what has been said previously concerning retaliation, a proliferation of flag restrictions with the dedication of vessels and cargoes to their particular flags would reduce the employment of the "effective U.S. controlled" fleet. The potential for this reduction is far greater than any gain likely to be made in the U.S.-flag fleet. Hence, the overall maritime position of our country will be weakened rather than strengthened.

As I indicated earlier, the national security aspect of tanker coverage is a complex issue with many ramifications. We would strongly support any effort by appropriate Government agencies which may be necessary to update and identify the Nation's tanker requirements in the broad perspective of all national interests.

Such an effort should include consideration of requirements and availability of shipbuilding capability, tonnage, fleet composition, and seafaring manpower—in light of both U.S.-flag vessels and vessels under effective U.S. control.

Cost-benefit relationships should be examined in the light of other pressing national needs. Only from such an analysis can a program to expand the U.S.-flag tanker fleet be formulated which is fully consistent with the security needs of the Nation.

We believe that the Merchant Marine Act of 1970 can be adapted to implement such a program, while at the same time avoiding the risks to our Nation's security which are inherent in the bill.

ECONOMICS

Along with security, another important issue raised by this bill involves the question of cost—both from the standpoint of whether increased costs are involved, and, if so, who will bear the burden of those increased costs.

Testimony presented before the House Committee on Merchant Marine and Fisheries has clearly established that there will be added costs involved in utilizing U.S.-flag tankers. All parties seem to agree on this, although there is a difference of opinion on the magnitude of that increase. Based upon our analysis, the proponents of the bill have overlooked some very important considerations and ramifications and have thus tended to understate the cost impact.

We see the cost of implementing the bill as being comprised of two distinct components. The first is the basic and normal cost difference inherent in U.S.-flag versus foreign-flag operations. There seems to be little argument that U.S. shipbuilding costs are almost double those of their foreign counterparts and direct operating costs are at least double. When combining these two elements, we calculate unit transportation costs for U.S.-flag vessels are about 50 percent higher than foreign costs, equivalent to about a 10-percent-per-barrel increase for Caribbean imports, but a 60-cent increase for Persian Gulf sources, which will become increasingly important in the future.

The second cost component results from factors which are specific to S. 3404 and can be described as follows:

First, by its very nature, the bill obviously creates a captive market for U.S.-flag tankers. Furthermore, there would be insufficient U.S.-flag vessels available to meet the demand even when utilizing the currently laid-up U.S.-flag tankers.

A short position can be expected to continue for many years, even with new construction, as a result of the growth in imports in the coming years coupled with the large increase in U.S.-flag tonnage required when north slope Alaskan crude begins to move to market.

In this type of situation, the fundamental law of supply and demand would seem to drive up U.S.-flag tanker rates. It should be kept in mind that anything that would raise U.S.-flag tanker rates would simultaneously raise the freight rates for moving oil in the U.S. coastwise trades.

Second, in a captive market situation, vessel and labor costs can be expected to inflate at an accelerated rate. The proposed legislation provides for no dampening effects on inordinate cost increases such as are built into the Merchant Marine Act of 1970, and there would certainly be no competition to act as a moderating influence.

Third, the legislation would act to start the building of a U.S.-flag fleet of smaller size ships which would be obsolete and inefficient if and when U.S. ports are modified to handle the larger, deep draft vessels which are most efficient for long-haul movements.

Since the United States presently has no deepwater terminals, the vessels constructed to meet the requirements imposed by this legislation would have to be smaller vessels sized to fit within current U.S. port limitations. Since the economic life of a vessel is generally felt to be about 20 years, this fleet of small size vessels would be with us for many years to come.

Fourth, most existing U.S.-flag vessels are not efficient for the long-haul movement of crude because of their relatively small size. It is likely, therefore, that in the short term these vessels would be used to transport oil products such as fuel oil. Since oil product imports are heaviest in the Northeastern States, the increased cost of using such small vessels in the near term is apt to fall disproportionately on consumers in that area.

Fifth, as mentioned previously, the adoption of discriminatory flag restrictions by the United States will tend to encourage foreign oil exporting countries to adopt similar legislation on their oil exports in order to develop their own national flag tanker fleets.

Such action could then be expected to raise transportation costs on the remaining 50 percent of oil moved in foreign bottoms as these vessels, lacking competition, would have no incentive to keep their costs down.

Sixth, as vessel flag restrictions proliferate, vessel owners and charterers will be required to dedicate more and more of their vessels to particular captive and rigid trade routes leaving little or no flexibility to schedule and operate vessels in an optimum manner.

In addition to impairing industry's ability to modify operating arrangements to compensate for political or other disruptions in normal supply patterns, this operating rigidity and inefficiency will result in a corresponding increase in the cost of marine transportation.

In addition to overlooking these latter important economic ramifications of the bill, a factor which may not have been considered is the long-haul component from the Eastern Hemisphere which will become increasingly important in the future.

Considering only operating cost differences between U.S.-flag and foreign-flag vessels unit costs will increase by about 50 percent. The

50-percent increase necessarily applies, regardless of whether the vessel is used in short- or long-haul service.

However, the actual cents-per-barrel transportation cost increase due to operating costs alone, amount to above 10 cents per barrel for a short-haul voyage, but about 60 cents per barrel for a long haul, Persian Gulf to U.S. east coast voyage.

Now let us address ourselves to the costs of S. 3404. We estimate the normal cost differences inherent in U.S.-flag versus foreign-flag operations will cumulatively total about $3.3 bilion through 1980. In our judgment, this figure also represents a reasonable assessment of the cost of creating an equivalent size U.S.-flag tanker fleet under the Merchant Marine Act of 1970, assuming the granting of both construction and operating differential subsidies and when expressing the construction subsidy on an annualized basis.

Furthermore, the added cost impact of the factors peculiar to the bill is estimated to be in the range of $1.7 to $4.1 billion. These costs are less likely to flow from the Merchant Marine Act of 1970.

On what we feel to be a reasonable but yet conservative basis, these two components put the total cost of implementing the bill at $5 billion to $7½ billion by 1980. Those figures are arrived at by adding the $3.3 billion in the first paragraph to the $1.7 billion in the second paragraph, and then alternatively to the $4.1 billion coming to the grand total of $7½ billion.

Thus, putting it very simply, we believe the cost of creating a U.S.-flag tanker fleet of the size envisioned by the bill will be in the range of 50 to 125 percent more as a result of accomplishing such an objective through the enactment of the bill versus the Merchant Marine Act of 1970.

Moreover, the annual cost impact will have reached a level of $850 million to $1.2 billion by 1980, and will continue to increase to the extent the level of imports rises. This averages out to an increase in 1980 of about $0.50 to $0.70 per barrel of oil moved in U.S.-flag bottoms or $0.25 to $0.35 per barrel of total oil imported.

The question of whether this cost increase will increase the price of oil products to the consumer has received much attention. It is, of course, impossible for anyone to predict what prices will actually prevail in a free market because these are the end results of the decisions of many individuals, both buyers and sellers, with different resources, different business strategies and different views of the future.

However, the inescapable impact of costs on prices over a period of time is a fundamental economic principle applicable to any business venture. The basic problem stems from lack of understanding of how the oil import program works.

At the outset, it is important to note that the bill puts a 50 percent U.S.-flag requirement on waterborne oil imports subject to quota, allocation, or license. Thus, essentially all waterborne oil imports are included, not just crude. This is important to remember since there are two basic kinds of offshore imports—one that is subject to quota and allocation, and hence has a quota "ticket value" associated with it such as crude oil, and the other that has no quota "ticket value" associated with it, such as residual fuel oil.

Although licenses are required to import residual fuel oil, there is no restriction on the volume of such imports, and hence the license has no economic value.

In 1972, about 65 percent of the offshore imports will fall into the latter category. I might break in here, Mr. Chairman, and say, because of the question that came up earlier from Senator Cotton, at one time residual fuel oil was subject to quota; you had to have a quota much like a crude quota to bring it in. That was relaxed so all you had to do was apply for the license. And I think currently if you have a customer, there is no problem whatever in having a license to bring in the residual. It is controlled to a degree, but a very, very loose control.

The National Petroleum Council Outlook indicates about 45 percent of the offshore imports will still be in this category in 1980. On imports, such as heavy fuel oil or residual fuel oil, where no quota tickets are involved, it would seem obvious that transportation cost is a direct cost of doing business. Sound business principles would certainly suggest that long-term increased freight costs of the type contemplated by the bill must eventually be recovered or the fuel oil importer would go out of business.

Turning now to imports such to quota and allocation, such as offshore crude oil, under the import program limits are set on how much foreign offshore crude can be brought into the country. The laid-down cost of this crude in the United States is currently less than equivalent quality domestic crude—at this time by around 90 cents per barrel on the U.S. east coast.

Since foreign crude is a lower cost raw material, at least for the present, the right to import it must be allocated. Government regulations require that quota must be awarded to all refiners throughout the country, as a function of their crude runs. Because of this allocation system, every refiner has an entitlement to run a mix of foreign and domestic crude, and if he increases his sales, can count on a portion of foreign crude entitlement to meet his crude requirements for his sales increase.

For all practical purposes, the inland refiner cannot economically or physically use his import rights to import the crude. Hence, he is allowed to "exchange" his foreign crude quota with someone who can use it, receiving domestic crude in return. In so doing, he realizes the market value of the import ticket, thus through this mechanism, the average raw material mix of all refiners is made up of a combination of domestic and foreign raw materials for economic purposes.

For the inland refiner, all of the crude may physically be domestic crude; but by receiving "ticket value" for his import allocation, he is effectively getting that portion of his domestic crude at the foreign cost.

On the other hand, the coastal refiner may actually have domestic crude plus the foreign crude he is allowed by his import allocation in his raw material mix. He may also have more foreign raw material as a result of an "exchange" arrangement; but since he pays a "ticket value" to receive it, it is figured in his raw material mix at the effective domestic cost.

If the basic and long-term transportation cost increase which would occur under the bill would directly raise the cost of foreign oil to the coastwise refiner, it would also raise the cost of the raw material mix to the inland refiner since the value he receives for his import quota rights will decline accordingly.

Over the long term, it would appear fundamental that both must recover this added cost in the marketplace if they are to stay in busi-

ness. I would like again to emphasize that according to our analysis the transportation cost increase associated with the crude only portion of offshore imports in 1980 will average about 70 cents to $1 per barrel for those barrels moved in U.S.-flag bottoms or 35 cents to 50 cents per barrel when averaged out over all offshore crude imports. This is a far cry from the 11-cents-per-barrel increase that has been quoted, not here, but on the House side.

These views are supported by the attached appendix A—Economic Analysis of the Effect of Higher Tanker Costs on U.S. Consumers, prepared by Dr. Richard J. Gonzalez, a nationally recognized consulting economist with an extensive background in petroleum economics. Quoting from Dr. Gonzalez:

> Higher tanker costs for U.S.-flag operations would affect consumers both immediately under the conditions that exist now and even more seriously in the future under the conditions that have been developing in foreign countries and are likely to prevail in the future. If the proposed legislation is based on the assumption that consumer costs will not be affected so long as the laid-down cost of oil imported in U.S.-flag tankers does not exceed the cost of domestically produced oil, then it must be emphasized that such assumption is incorrect.

And he elaborates on that statement in appendix A.

RECOMMENDED ALTERNATIVE

Thus far my remarks have dealt with the reasons we oppose the proposed legislation and with the effects it would have on the U.S. maritime industry and the Nation. There is yet another compelling reason why we oppose the proposed legislation.

We believe that the Government now has a sound basis for fostering expansion of the U.S. maritime industry without risking the adverse effects cited previously. This is through modification of the existing Merchant Marine Act of 1970.

The economic problems associated with U.S. flag participation in international trade were recognized when Congress enacted the Merchant Marine Act of 1970. In promulgating the act, Congress corrected many of the deficiencies of prior legislation, opened the door for both dry and liquid bulk carrier participation and also included some features to stimulate further efficiencies in U.S. shipbuilding.

The act is basically well conceived, but at the same time does contain provisions which have seriously retarded its use. Section 804 precludes many U.S.-flag shipowners including oil companies, the affiliates of which by necessity own and charter foreign-flag tonnage, from obtaining an operating subsidy.

Similarly section 805 inhibits companies which own vessels engaged in domestic coastal trade from obtaining an operating subsidy. The construction subsidy and tax deferred capital construction fund provisions are available to domestic affiliates of companies operating vessels internationally. However, a new vessel subsidized and funded in this way would still be unable to compete in international trade without an operating subsidy.

The current law also restricts operating flexibility by requiring trade to the United States part of the time. This requirement prevents the owner from offering a charterer the worldwide trading privileges which are required by those engaged in international oil trade and which are provided by foreign-flag competition.

The inhibiting thrust of this feature is compounded when you consider the development of the larger, deep draft, more efficient vessels, and the inability to forecast a date when U.S. ports will be able to accommodate this size of tanker.

Considering ourselves to be a leading maritime power, we should encourage our flag vessels to trade internationally without restriction. Trading patterns of vessels do not limit the availability of such vessels to the United States in time of emergency or the degree to which these vessels serve the national interest.

The economic penalties imposed on vessel repairs made outside of the United States further impair the competitive position of U.S. tankers trading throughout the world.

Notwithstanding these restrictive provisions, tanker construction programs under the act have been initiated. There are 13 bulk oil and six LNG carrier applications that have been approved or are pending and a like number are in various stages of discussion with the Maritime Administration. Thus, the Merchant Marine Act of 1970, has begun to fulfill its intended objective.

The only durable means for fostering a U.S. merchant marine, as may be justified to meet the security needs of the Nation, is through a program designed to make U.S.-flag tankers fully competitive in the world market. We believe this can be achieved by removing the restrictive provisions from the Merchant Marine Act of 1970.

We recognize that a problem exists with respect to today's surplus U.S.-flag tankers. It seems to us that the current law forms a basis for helping to solve this problem in that it provides for waiving restrictions and granting operating differential subsidies to provide most of these tankers with an improved opportunity to compete in the world market.

The cost to employ the Merchant Marine Act of 1970, will be less than the cost under S. 3404, for developing a U.S.-flag fleet of comparable size. Use of the act will not incur the economic and political risks inherent in S. 3404. Also under the act, costs will be more appropriately borne by the entire tax base as opposed to selectively imposing them on particular sectors of the economy.

We strongly recommend using the Merchant Marine Act of 1970 to develop and maintain a U.S. merchant fleet which is commensurate with national requirements. The act need only be amended to give owners of U.S. tankers the opportunity to compete with foreign tanker owners in the international market on an equal, unrestricted basis. The act incorporates an approach which is generally recognized and accepted among maritime nations as a sound basis for fostering national fleets.

CONCLUSION

It is our conviction that legislation embodying flag discrimination, such as that contemplated under S. 3404, would be contrary to the national interest.

With provision for appropriate waivers or amendments, the Merchant Marine Act of 1970, can be utilized to help solve the current surplus problem in the U.S.-flag tanker fleet, as well as to expand it to meet whatever national aspirations may be justified.

The act avoids the harmful aspects of mandatory flag restrictions and brings into focus the basic economic problems confronting the

U.S. maritime industry, readily identifies the cost for assessment against benefits, and spreads the cost of national security directly over those who benefit: that is, the tax-paying public.

Close cooperation between labor, management, and government would be necessary to correct the deficiencies remaining in the current law.

Senator SPONG. Thank you very much, Mr. Gammelgard.

Do you believe that the mandatory oil import quota program is required by our national security?

Mr. GAMMELGARD. I definitely do, Mr. Chairman.

Senator SPONG. Aren't the economic arguments you are making against a vessel flag quota and in favor of a direct merchant marine subsidy identical as to the arguments of those who favor abolishing the oil import quota and moving to a system of tariff?

Mr. GAMMELGARD. Could you repeat the first part of that?

Senator SPONG. The economic arguments you have made against a vessel flag quota and in favor of a direct merchant marine subsidy, aren't they really identical to the arguments of those who favor abolishing the oil import quota and moving to a system of tariffs?

Mr. GAMMELGARD. I don't think it is quite comparable. A system of tariffs on oil imports to control the imports, I believe, is a different thing altogether than what we are proposing. Maybe I am missing the point here.

Senator SPONG. In the interest of time, I will give you a little time to consider that.

I asked this of Mr. Rein earlier. I think you were here. If the oil-producing countries were to require that 50 percent of their oil exports must move on their own vessels, would you still oppose this bill?

Mr. GAMMELGARD. Yes; I believe I would. Trying to keep those oil-producing countries from taking that step, if we take it, there is certainly no logical argument to keep them from doing the same thing. I think, as we believe, pointed out, if each oil-producing country, and there are a great number of them—we talked about the Persian Gulf, but there are probably at least a half dozen major producing countries there—if each of them builds a tanker fleet and says, "All right, we are going to require that any customer pick up 50 percent of his oil in our fleet, have it delivered by our fleet," I really think we completely destroy the flexibility we now have in time of emergency for changing ship routes and trades around to the best benefit.

Do you want to add to that discussion?

Mr. HOWE. Over the years, my own personal experience, a number of the producing nations have expressed a desire to create a tanker fleet under their flag. We, on the oil side, have argued with them, and thus far effectively, that this would not be in their own interest. I think we mentioned earlier this question about the buyer having the privilege of choosing his form of transportation. It is our view that were this bill to be passed, the arguments that we have been thus far successful in carrying forward to these producing nations, would fall by the wayside.

Senator SPONG. But you are taking my question and turning it around. What I asked you was not based on the passage of this legislation. We are assuming we have no legislation, and it is before us. By

the Department of State's statement, they mention that there is a movement, which you have confirmed, and which you have resisted, on the part of oil-producing countries to move toward requirements that they have a fleet and a certain percentage of what is exported be carried in their bottoms.

So my question to you, Mr. Gammelgard, does not assume that this is passed and then say that it would bring that on. It assumes that the oil-producing countries continue to move in this direction, that your arguments are not as effective as they have been in the past, and that they have achieved this. The question was if the oil-producing countries had enacted regulations, legislation, or whatever is required, for them to move 50 percent of what they export on their own bottoms, would you still oppose this legislation? It is the same question I put to the Department of State.

What you are telling me is if we pass the legislation, that is liable to happen. Well, let's put that aside for a moment.

Mr. GAMMELGARD. Mr. Chairman, are you looking at it as if it is a fait accompli, that these counties have done this?

Senator SPONG. Yes.

Mr. HOWE. My view would be we would oppose it. It seems to me that if the producing nations acted in consort and come up with 50 percent requirements across the board, for all of the major producing nations, that the impact of that would be so serious on the importing countries that the importing countries would have to get together and take a real close look as to how to live with the situation.

I think it would be a tremendously serious position that would be raised.

Senator BEALL. May I pursue that for a moment?

Senator SPONG. Yes.

Senator BEALL. In your appendix, it looks to be a hypothesis, I think. You say in section 10 that oil exporting countries have recently organized and can be expected to use their control. So you are indicating to me by this statement that they are going to do this. So that means, then, that we can expect very soon after they create this fleet—I don't know how long it takes to create a fleet—that they will impose some sort of control and as you bargain each year for price and other things, the shipment becomes more a bargaining factor and therefore they may start out with 20 percent, but the next time the contract is up, they would try to bargain for 30 percent, and this will happen over a period of time.

I think what Senator Spong and I are trying to get at is, aren't we in a better position, if we do something at the outset before we get into the box, than if we wait until we are already in the box?

Mr. GAMMELGARD. I don't really believe we are in a better position if we took the lead. I think then the reaction would be pretty much predictable and we would have it. If we don't take the action, at least we are in a better position, I think, as the State Department people pointed out, of arguing with them to keep them from doing it.

Senator BEALL. That is what I am saying, though, that you indicate in your testimony that apparently we aren't going to be able to keep them from doing it, because you say they can be expected to use their control.

So I gather you are assuming the argument is lost already.

Mr. HOWE. It could be a question of degree.

Senator BEALL. Degree. You mean 10 percent versus 25 percent?

Mr. HOWE. Ten percent versus 25 or 50, or what we have tried to do in discussions with these entrepreneurs or the governments themselves is if they want to get into the tanker business, if they come in not on a basis of law, but just on a straight commercial basis, and if they do offer their tonnage and regular normal commercial terms, their tonnage should find business in the marketplace to the same extent as any other flag vessel.

Senator BEALL. So it becomes a negotiable factor. By that logic, it would seem to me that since politics is the art of compromise, it has been said, that maybe 50 percent is the wrong figure here. Maybe we ought to start with 10 percent in American bottoms, and work up to 50 percent as they work up. Wouldn't that be logical?

Mr. HOWE. I have to say I think 10 percent is better than 50 in regard to all of the problems we see.

Senator BEALL. I mean in other words——

Mr. GAMMELGARD. I would say on that, if I might, that I think once you break on a principle or yield a principle, then the percentage just becomes——

Senator BEALL. But you see our point. If we yield on the principle here, we have yielded everything the way we have, we are completely at the mercy of these other countries.

And if they are not willing to yield, why should we?

Mr. GAMMELGARD. But if we take the lead and move out and set the example, after many years of not having these bilateral agreements as a matter of policy of trade, no restrictions on flag use and so forth, then we are certainly going to be right in the soup with them, I think.

Senator BEALL. You may be right, but I think you are indicating also we are already in the soup——

Mr. GAMMELGARD. Starting that way a little, maybe.

Senator BEALL. And our position is further eroded if we sit back and do nothing.

Mr. GAMMELGARD. Well, that is debatable, whether it is further eroded or not. I think it would just break the floodgates wide open and everybody would move as fast as they could towards demanding 50 percent.

Senator SPONG. One heavyweight boxing champion sold 900 percent of himself once under the theory that he was a thousand percent entity instead of 100. But there are not going to be any more than two 50 percents.

Mr. GAMMELGARD. That is right.

Senator SPONG. Well, we are concerned about our shipping capability being subject to unstable governments. And this is a question which we put to Mr. Rein this morning, and we are looking for answers here.

I gather that if they actually had moved and gone up to 50 percent, although you think that is going to be a gradual process, and Senator Beall agrees with you, but for hypothetical purposes, you don't know whether you would oppose legislation like this or not?

Mr. GAMMELGARD. I think I could say I would oppose it, because I think the proper avenue to take is to make your merchant marine competitive, which I think can be accomplished under the Merchant Marine Act of 1970, and actually at lesser cost. We have some 21

pages of data to back up the difference in our figures. They are not just picked out of the air.

We would be glad to discuss those with the staff.

Senator SPONG. All right, sir. You say concern about our source of oil and transportation should not be linked. But isn't it true that most oil crises in the past have resulted from transportation dislocations, for instance, the closing of the Suez Canal, or other armed conflicts, rather than problems at the source of the oil itself?

Mr. GAMMELGARD. Yes, the closing of the canal, the severing of the Trans-Arabian Pipeline were both transportation-related. The Libyan Government arbitrarily cut back production by about 600,000 barrels per day and that was not transportation-related. That permitted you, if you had flexibility of the fleet, to reroute the tankers that are under your control to other sources of oil and effectively negate the action of Libya which they took single-handed to just cut the allowable production in Libya by 600,000 barrels per day for quite a few weeks or months, I think.

Senator SPONG. Do you know the amount of payments your members make annually to foreign-flag tankers, and can you give us any projections for the future?

Mr. HOWE. Would you repeat that, Mr. Chairman?

Senator SPONG. Do you know the amount of payments that your members make annually to foreign-flag tankers?

Mr. HOWE. No, sir.

Senator SPONG. Is that information available?

Mr. HOWE. It is not available. Is this in respect to imports, Mr. Chairman, or to the worldwide trading?

Senator SPONG. To imports.

Mr. HOWE. It is certainly available in respect to each company's own operation. I don't know any central source such as the Trade Association that would have that data.

Senator SPONG. We look forward to your reply.

Thank you very much for your testimony.

Just a moment, Senator Beall.

Senator BEALL. Just briefly, I gather there is some disagreement between you and the preceding witness as to the availability of ships for carrying today's imports. I think the preceding witness indicated that there are enough ships active or laid up to import all of the oil. You indicate that there aren't, as I understand your testimony.

Mr. HOWE. That is right, sir.

Senator BEALL. I am wondering also—this might not have anything to do with oil imports, but it has something to do with harbors, being a little parochial, I have an interest in harbors—but you indicate on page 16 that one of the reasons you don't like this legislation is because we would be shipping in smaller U.S. ships which might be good for long-haul, but eventually, if we are going to be able to supply our demands, we have to deepen our harbors to take advantage of the new type of ships, the next generation of ship.

So you are indicating that as far as filling the energy needs of this country is concerned, it is very desirable for us to get about the business of deepening the channels. Is that what you are saying?

Mr. GAMMELGARD. Definitely, deepening the channels or offshore terminals, whichever might be the best economics in a particular harbor situation. It can be different in different harbors.

Senator BEALL. So it is a matter of national importance that all of the harbors be deepened?

Mr. GAMMELGARD. Extremely, very much.

Senator BEALL. The preceding witness mentioned something about the effect on the environment. I think we have to be concerned about that, because those of us who are in the business of getting elected are sensitive to the issues raised by our constituents and the environment is one of those that is at the top of the constituents' priority list these days.

I wonder if you would care to comment on the environmental impact, and the fact it might be easier for us to regulate the effect on the environment if we are shipping in U.S. bottoms, rather than in foreign bottoms?

Mr. GAMMELGARD. I will start out on that, and you can add anything you wish, Dick.

I think that the controls on your chartered vessels are adequate to make the charter party do whatever is needed to follow what you want them to follow.

In other words, the load on top, as an example, I think some 80 percent or more of the U.S.-controlled vessels now employ, in which tank washings are accumulated and the next time you loan crude on top of this, you effectively prevented that oil from getting into the sea, which it used to.

I don't think the flag really has anything to do with whether that practice is followed or not. It is the company that controls the vessel that tells the captain what he wants him to do, and it is done.

Is that correct?

Mr. HOWE. I have had pretty close involvement with this, Mr. Beall, and it is very difficult from any of the data that my company has been able to pull together, to differentiate between the experience in respect to actual spills and carelessness by flag of ship.

I do believe that the U.S.-flag fleet operating as it does today on short-haul coastal trades, with very tight management and highly trained people aboard the ship, men that know the problems in the United States, and management knows them, have a good record. Perhaps a little better, but only marginally so than worldwide.

It seems to us, however, that because the sea pollution is such an international problem, such as the shipping business is as well, that the long-range solutions to the sea pollution problem really have to be at the international level.

Now the U.S. Coast Guard is taking great steps forward in IMCO sessions and the like to cause good relations to at least be considered. Whether they eventually achieve the status of international conventions, that takes time.

Senator BEALL. But from an enforcement standpoint, isn't it easier to enforce regulations we have set for ourselves on American ships than on foreign ships? What right does the Coast Guard have to get onto foreign ships, for instance?

Mr. HOWE. That is the reason I suggested the important thing from an international viewpoint, and it affects every nation, is to have the regulatory solutions be promulgated at the international level, so they will be common regulations to all nations in which event the U.S. Coast Guard would have the same authority on foreign ships as U.S. ships.

Senator BEALL. But today the only control is the Coast Guard on American ships?

Mr. HOWE. They have a better control on U.S. ships than foreign today, yes, sir.

Mr. GAMMELGARD. I recall a spill in Tampa a couple of years ago, and legal action was taken there to prevent that ship from sailing before it posted an adequate bond to cover the clean-up cost. This was a foreign-flag vessel.

Senator BEALL. My point really doesn't bear necessarily on this question. But as long as we in this country have higher standards than exist elsewhere, whether it be living standards, pay standards, or environmental standards, it seems to me we have to pay a price to preserve those standards. That price may be requiring the enactment of legislation like this.

Mr. GAMMELGARD. You can go to the harbor of Milford Haven in United Kingdom, it is a very clean harbor, with a tremendous volume of oil going through it. You can also go to Portland, Maine, where a tremendous amount of oil is transhipped to the Montreal refineries by pipeline, brought into that harbor and that is known as one of the cleanest harbors in the world, I think. So a lot depends on the local authorities, how tough they are in cracking down on people that pollute, once the vessel is in the harbor.

But there is also a sea problem, we recognize that.

Senator SPONG. I certainly agree that an international set of standards that are enforceable is desirable. But the time frame that these agreements take is just not very satsifactory. Just because this has been brought up, there is a real open question about this. The tanker pollution bill, which this committee passed, imposed these standards on foreign vessels, but the State Department came in here and testified during these hearings that we couldn't control foreign vessels.

Mr. HOWE. The Coast Guard has a lot of clout with any ship in U.S. territorial waters. Maybe they have a little more on the U.S.-flag, but they can make their muscle felt.

Senator SPONG. I think we would have to concede that our control of our own vessels has got to be greater than it would be of others. The question is whether it is sufficient or not.

I thank you all very much. We have these questions we will submit to you.

Mr. GAMMELGARD. Thank you, Mr. Chairman. We will respond to them.

(The statement follows:)

STATEMENT OF P. N. GAMMALGARD, SENIOR VICE PRESIDENT, PUBLIC AND ENVIRONMENTAL AFFAIRS, AMERICAN PETROLEUM INSTITUTE

INTRODUCTION

I am P. N. Gammelgard, Senior Vice-President, Public and Environmental Affairs of the American Petroleum Institute.

I appreciate the opportunity to appear before this Committee to express our opposition to S. 3404 and then suggest a viable alternative for achieving the objectives of the proposed legislation.

Our opposition to the pending bill will be discussed in some detail but initially we would like to identify our major objections:

1. To link U.S. merchant shipping needs with the energy situation would be detrimental to both the nation's shipping and energy interests.

2. Enactment of the proposed bill would provoke foreign retaliation and adversely affect free foreign trade.

3. Proponents of the proposed bill in advocating a broad expansion of the U.S. tanker fleet, strictly on the basis of national security, fail or refuse to recognize the availability of an "effective U.S.-controlled" fleet.

4. The cost of expanding the U.S.-flag tanker fleet is better borne by the tax base rather than by a particu'ar segment of the economy. The cost will be considerably greater under S. 3404 than if the same program were implemented under a modified Merchant Marine Act of 1970.

5. The objectives of the proposed bill are best accomplished under the Merchant Marine Act of 1970 with appropriate modifications.

ENERGY AND MARINE TRANSPORTATION

Members of the Senate are well aware of the enormous job facing energy companies now and in the future. Various government hearings, studies and activities now in progress aimed at formulating policies to make our energy situation more compatible with our national objectives underscore this problem. It is quite clear that imports of oil into the U.S. will rise over the next several years with the rate of rise being largely determined by the extent to which we can develop reserves and processes for increasing our usable supplies of domestic energy in this country.

The bill now before the Committee seeks to pair the problem of energy supplies with a desire to rebuild an American merchant marine. These are separate issues and trying to deal with them as a package restricts the opportunities for dealing effectively with each issue.

Under the bill the nation's merchant marine program would be linked in an undefined administrative way with the oil import program. To the extent that the administration of the oil import allocation system is burdened by maritime considerations, the essential objectives of the import program will be undermined. Conversely, the merchant marine program will be compromised to the extent that oil import considerations prevail. These two national objectives should remain separate so as to command the individual attention they each deserve.

INTERNATIONAL IMPACT

The enactment of this bill could have international consequences adverse to our national inferests.

Most of the major trading nations of the world have no flag restrictions on international ocean movements. Instead they rely on economic means not unlike those in the Merchant Marine Act of 1970, to encourage the use of national flag vessels in international trade. Legal flag restrictions that do exist with respect to international oil movements are confined to France, Spain, Chile and Peru. As a matter of fact, in 1970, only 8% of the Free World's international petroleum movements were subject to such restrictions. Several other countries have cargo preference laws on government-sponsored cargoes or flag restrictions on coastwise movements similar to those in force in the United States today.

A move by this country to adopt discriminatory legislation requiring the use of U.S. vessels in importing oil will invite other maritime nations to take prompt defensive action. Mr. B. W. Rein, Deputy Assistant Secretary of State for Transportation and Telecommunications, in his testimony before the House Committee on Merchant Marine and Fisheries on October 21, 1971, suggested that extension of the cargo preference principle to classes of cargo not now covered would give impetus to similar actions by other countries. In our opinion retaliatory action might even extend to areas other than maritime affairs.

Widespread flag discrimination involves serious risks. As more and more of the world's tanker tonnage becomes locked into specific trades in conformance with discriminatory requirements vessel scheduling flexibility, and the oil industry's ability to cope with supply disruptions will be severely restricted.

The enactment of this proposed legislation will encourage oil exporting countries to impose vessel flag requirements on their oil exports. Moves in this direction have been considered in the past and are currently under consideration in a number of countries at the present time. A move by the U.S. toward flag restrictions could not help but weaken otherwise sound arguments against such actions. If U.S. companies are forced to employ vessels of crude exporting countries by the laws of those countries, there is the increased risk of interrupting critical supplies of energy required by the United States in that tankers as well as oil would be affected.

The oil industry's ability to adjust to supply disruptions stemming from political crises has been demonstrated many times. In the past, political factors such as those involving the Suez Canal closure, the periodic shutdowns of the Trans Arabian Pipeline, and the curtailment of Libyan crude production have drastically altered raw material availability and tanker transportation requirements. The oil industry has been able to cope with these problems in the past by calling upon alternate supply sources and redeploying the international tanker fleet. If more and more of the international tanker fleet ends up being controlled by various oil exporting countries, the oil industry will no longer have the tanker capacity available which it can freely redeploy to cope with such disruptions. It should be clearly understood that loss of such flexibility to mobilize vessels as required in emergencies could seriously jeopardize U.S. energy supplies.

It is true that U.S. flag vessels could be redeployed to supply a portion of U.S. requirements. However, the ability of the U.S. flag fleet to meet added requirements certainly would be limited. Furthermore, much of the benefit of the "effective U.S. controlled" fleet would have been lost since the capacity of this fleet would undoubtedly have declined as the capacity of national flag tanker fleets increased. The potential for reducing the "effective U.S. controlled" fleet is far greater than the increase which would occur in the U.S. flag fleet. Hence, the total tonnage available, considering both the U.S. flag and the "effective U.S. control" fleets, would decline rather than increase. Such security risks are inherent in S. 3404 but would not occur if national maritime objectives are accomplished through the mechanism of the Merchant Marine Act of 1970 as appropriately amended.

Beginning with the Reciprocal Trade Agreement Act of 1934, successive sessions of Congress have reaffirmed this nation's belief in the desirability of freeing international trade from quota restrictions, arbitrary exchange controls, and discriminatory practices, when it does not conflict with national security. Furthermore, flag discrimination on the part of this country would be in direct contravention to the intent and objectives of various international agreements to which the U.S. is a signatory and, in most cases, a sponsor. These include:

The Trade Expansion Act of 1962;

The General Agreement on Tariff and Trade (GATT);

The Organization for Economic Cooperation and Development (OECD);

U.S. treaties of Friendship, Navigation and Commerce with various Maritime Nations.

It would be unfortunate indeed if our country, heretofore a leader in liberalized trade, were to endorse the regressive practice of flag discrimination, embodied in S. 3404.

Demands for greater use of U.S. flag ships in foreign trade are frequently based upon the argument that this would help improve the U.S. balance of payments. Any apparent improvement could be largely offset if actions to stimulate the use of U.S. flag ships provoked retaliation by foreign countries.

NATIONAL SECURITY

It has been argued that national security needs demand an expansion of the U.S. flag tanker fleet. We fully recognize that the maritime industry is important to national security, and we support governmental actions taken to meet defined national security needs. However, in our view, the need to expand the U.S. flag tanker fleet strictly for reasons of national security, has not been established. We feel that those who advance such arguments fail to recognize the role played by the American-controlled ships under Liberian and Panamanian registry which are pledged to the U.S. in time of crisis. We emphasize that we are here referring to "effective U.S. controlled" vessels and not all "flags of convenience" vessels. Instead we are referring to those vessels considered by government authorities charged with security responsibilities to be under "effective U.S. control."

Representatives of the Departments of Commerce and Defense have repeatedly affirmed that American-controlled ships under Liberian and Panamanian registry which are pledged to the U.S. in time of crisis are under effective U.S. control, and are available to the United States for use in event of war or national emergency. For example, in replying to questions raised by a maritime union representative, Secretary of Defense McNamara, stated in June 1967:

"In a full-scale emergency, we believe 'effective U.S. controlled' ships will be as available to DOD (Department of Defense) as U.S. flag ships."

Moreover, the record consistently supports the availability and use of these vessels during World War II, as well as in the Korean and Viet Nam conflicts.

Mr. Leo A. Hoegh stated in 1960 when he was Director of the Office of Civil Defense and Mobilization, that as a result of a study by his organization he found no justification on grounds of national defense for requiring that some fixed share of oil imports into the U.S. be moved in U.S. flag tankers. The following quote is from the OCDM press release on the study:

"The investigation determined that the tankers comprising the U.S. flag fleet, when supplemented by those ships of Panamanian, Liberian and Honduran registry which can reasonably be expected to be made available to the United States in time of emergency, are adequate to meet defense requirements for the present and foreseeable future."

Although this statement was made in 1960, evidence indicates it is still valid. Approximately 24 million deadweight tons[1] or 13% of the Free World's tankship tonnage now flies the U.S. flag or is effectively under the control of the U.S.

This total of 24 million tons represents an increase of more than 65% since 1960, whereas commercial tonnage requirements for U.S. domestic oil movements and oil imports combined have only increased about 45%.

These 24 million tons now represent over 160% of the nation's commercial tonnage requirements. Despite the significant growth which is forecast for oil imports, we estimate that this coverage will not fall below about 140% through 1975. This would appear to provide ample coverage of our country's requirements in event of national emergency.

Supplementing what has been said previously concerning retaliation, a proliferation of flag restrictions with the dedication of vessels and cargoes to their particular flags would reduce the employment of the "effective U.S. controlled" fleet. The potential for this reduction is far greater than any gain likely to be made in the U.S. flag fleet. Hence, the overall maritime position of our country will be weakened rather than strengthened.

As I indicated earlier, the national security aspect of tanker coverage is a complex issue with many ramifications. We would strongly support any effort by appropriate government agencies which may be necessary to update and identify the nation's tanker requirements in the broad perspective of all national interests. Such an effort should include consideration of requirements and availability of shipbuilding capability, tonnage, fleet composition, and seafaring manpower—in light of both U.S. flag vessels and vessels under effective U.S. control. Cost-benefit relationships should be examined in the light of other pressing national needs. Only from such an analysis can a program to expand the U.S. flag tanker fleet be formulated which is fully consistent with the security needs of the nation. We believe that the Merchant Marine Act of 1970 can be adapted to implement such a program while, at the same time, avoiding the risks to our nation's security which are inherent in the bill.

ECONOMICS

Along with security, another important issue raised by this bill involves the question of cost—both from the standpoint of whether increased costs are involved, and, if so, who will bear the burden of those increased costs.

Testimony presented before the House Committee on Merchant Marine and Fisheries has clearly established that there will be added costs involved in utilizing U.S. flag tankers. All parties seem to agree on this although there is a difference of opinion on the magnitude of that increase. Based upon our analysis, the proponents of the bill have overlooked some very important considerations and ramifications and have thus tended to understate the cost impact.

We see the cost of implementing the bill as being comprised of two distinct components. The first is the basic and normal cost difference inherent in U.S. versus foreign flag operations. There seems to be little argument that U.S. shipbuilding costs are almost double those of their foreign counterparts and direct operating costs are at least double. When combining these two elements, we calculate unit transportation costs for U.S. flag vessels are about 50% higher than foreign costs.

---

[1] Privately owned U.S. controlled tanker tonnage as of September 30, 1971, Merchant Ship Register, Military Sealift Command, Oct. 1971 and Inventory Of Foreign Flag "Effective U.S. Control Merchant Ships," MSC, September 30, 1971: United States fleet (commercial), 7,600,000 DWT; "Effective U.S. Control" fleet, 16,200,000 DWT; total, 23,800,000 DWT.

The other cost component results from factors which are peculiar to the bill and can be described as follows:

1. By its very nature, the bill obviously creates a captive market for U.S. flag tankers. Furthermore, there would be insufficient U.S. flag vessels available to meet the demand even when utilizing the currently laid-up U.S. flag tankers. This short position can be expected to continue for many years even with new construction as a result of the growth in imports in the coming years coupled with the large increase in U.S. flag tonnage required when North Slope Alaskan crude begins to move to market. In this type of situation the fundamental law of supply and demand would seem to drive-up U.S. flag tanker rates. It should be kept in mind that anything that would raise U.S. flag tanker rates, would simultaneously raise the freight rates for moving oil in the U.S. coastwise trades.

2. In a captive market situation, vessel and labor costs can be expected to inflate at an accelerated rate. The proposed legislation provides for no dampening effects on inordinate cost increases such as are built into the Merchant Marine Act of 1970, and there would certainly be no competition to act as a moderating influence.

3. The legislation would act to start the building of a U.S. flag fleet of smaller size ships which would be obsolete and inefficient if and when U.S. ports are modified to handle the larger, deep draft vessels which are most efficient for long haul movements. Since the U.S. presently has no deep water terminals, the vessels constructed to meet the requirements imposed by this legislation would have to be smaller vessels sized to fit within current U.S. port limitations. Since the economic life of a vessel is generally felt to be about 20 years, this fleet of small size vessels would be with us for many years to come.

4. Most existing U.S. flag vessels are not efficient for the long haul movement of crude because of their relatively small size. It is likely, therefore, that in the short term these vessels would be used to transport oil products such as fuel oil. Since oil product imports are heaviest in the northeastern states, the increased cost of using such small vessels in the near term is apt to fall disproportionately on consumers in that area.

5. As mentioned previously, the adoption of discriminatory flag restrictions by the U.S. will tend to encourage foreign oil exporting countries to adopt similar legislation on their oil exports in order to develop their own national flag tanker fleets. Such action could then be expected to raise transportation costs on the remaining 50% of oil moved in foreign bottoms as these vessels, lacking competition, would have no incentive to keep their costs down.

6. As vessel flag restrictions proliferate, vessel owners and charterers will be required to dedicate more and more of their vessels to particular captive and rigid trade routes leaving little or no flexibility to schedule and operate vessels in an optimum manner. In addition to impairing industry's ability to modify operating arrangements to compensate for political or other disruptions in normal supply patterns, this operating rigidity and inefficiency will result in a corresponding increase in the cost of marine transportation.

In addition to overlooking these latter important economic ramifications of the bill, a factor which may not have been considered is the long haul component from the Eastern hemisphere which will become increasingly important in the future.

Considering only operating cost differences between U.S. and foreign flag vessels unit costs will increase by about 50%. The 50% increase necessarily applies regardless of whether the vessel is used in short or long haul service. However, the actual cents per barrel transportation cost increase due to operating costs alone, amount to about 10 cents per barrel for a short haul voyage but about 60 cents per barrel for a long haul, Persian Gulf to U.S. East Coast Voyage.

Now let us address ourselves to the costs of S. 3404. We estimate the normal cost differences inherent in U.S. versus foreign flag operations will cumulatively total about 3.3 billion dollars through 1980. In our judgment, this figure also represents a reasonable assessment of the cost of creating an equivalent size U.S. flag tanker fleet under the Merchant Marine Act of 1970 assuming the granting of both construction and operating differential subsidies and when expressing the construction subsidy on an annualized basis.

Furthermore the added cost impact of the factors peculiar to the bill is estimated to be in the range of 1.7 to 4.1 billion. These costs are less likely to flow from the Merchant Marine Act of 1970.

On what we feel to be a reasonable but yet conservative basis, these two components put the total cost of implementing the bill at 5 to 7½ billion dollars by 1980. Thus putting it very simply, we believe the cost of creating a U.S. flag tanker

fleet of the size envisioned by the bill will be in the range of 50 to 125% more as a result of accomplishing such an objective through the enactment of the bill versus the Merchant Marine Act of 1970.

Moreover, the annual cost impact will have reached a level of 850 million to 1.2 billion dollars by 1980 and will continue to increase to the extent the level of imports rises. This averages out to an increase in 1980 of about $0.50 to $0.70 per barrel of oil moved in U.S. flag bottoms or $0.25 to $0.35 per barrel of total oil imported.

The question of whether this cost increase will increase the price of oil products to the consumer has received much attention. It is, of course, impossible for anyone to predict what prices will actually prevail in a free market because these are the end results of the decisions of many individuals, both buyers and sellers, with different resources, different business strategies and different views of the future. However, the inescapable impact of costs on prices over a period of time is a fundamental economic principle applicable to any business venture. The basic problem stems from lack of understanding of how the oil import program works.

At the outset, it is important to note that the bill puts a 50% U.S. flag requirement on waterborne oil imports subject to quota, allocation, or license. Thus essentially all waterborne oil imports are included not just crude. This is important to remember since there are two basic kinds of offshore imports—one that is subject to quota and allocation and, hence, has a quota "ticket value" associated with it such as crude oil, and the other that has no quota "ticket value" associated with it such as residual fuel oil. Although licenses are required to import residual fuel oil, there is no restriction on the volume of such imports, and hence the license has no economic value. In 1972, about 65% of the offshore imports will fall into the latter category. The National Petroleum Council Outlook indicates about 45% of the offshore imports will still be in this category in 1980. On imports, such as heavy fuel oil where no quota tickets are involved, it would seem obvious that transportation cost is a direct cost of doing business. Sound business principles would certainly suggest that long term increased freight costs of the type contemplated by the bill must eventually be recovered or the fuel oil importer would go out of business.

Turning now to imports subject to quota and allocation, such as offshore crude oil, under the import program limits are set on how much foreign offshore crude can be brought into the country. It is true that the laid-down cost of this crude in the U.S. is currently less than equivalent quality domestic crude—at this time by around $0.90 per barrel on the U.S. East Coast.

Since foreign crude is a lower cost raw material (at least for the present), the right to import this crude is allocated to all refiners throughout the country to ensure that no individual refiner is penalized because of his location. Through this allocation scheme, a refiner located in the Mid-Continent section of the U.S. is allocated the same share of foreign crude imports as a comparable size refiner on the East Coast.

It is obvious, of course, that the inland refiner cannot physically use his import rights to import the crude. Hence, he is allowed to "exchange" his foreign crude quota with someone who can use it, receiving domestic crude in return. In so doing, he realizes the $0.90 per barrel value of the import ticket, or some proportion thereof.

Through this mechanism, the *average raw material mix* of all refiners is made up of a combination of domestic and foreign raw materials for economic purposes. For the inland refiner, all of the crude may physically be domestic crude; but by receiving "ticket value" for his import allocation, he is effectively getting that portion of his domestic crude at the foreign cost. On the other hand, the coastal refiner may actually have domestic crude plus the foreign crude he is allowed by his import allocation in his raw material mix. He may also have more foreign raw material as a result of an "exchange" arrangement; but since he pays a "ticket value" to receive it, it is figured in his raw material mix at the effective domestic cost.

If the basic and long term transportation cost increase which would occur under the bill would directly raise the cost of foreign oil to the coastwise refiner, it would also raise the cost of the raw material mix to the inland refiner since the value he receives for his import quota rights will decline accordingly. Over the long term, it would appear fundamental that both must recover this added cost in the marketplace if they are to stay in business. I would like again to emphasize that according to our analysis the transportation cost increase associated with the crude only portion of offshore imports in 1980 will average about $0.70 to $1.00 per barrel for those barrels moved in U.S. flag bottoms or $0.35 to

$0.50 per barrel when averaged out over all offshore crude imports. This is a far cry from the $0.11 per barrel increase that has been quoted.

These views are supported by the attached Appendix "A"—ECONOMIC ANALYSIS OF THE EFFECT OF HIGHER TANKER COSTS ON U.S. CONSUMERS," prepared by Dr. Richard J. Gonzalez, a nationally recognized consulting economist with an extensive background in petroleum economics. Quoting from Dr. Gonzalez:

"Higher tanker costs for U.S. flag operations would affect consumers both immediately under the conditions that exist now and even more seriously in the future under the conditions that have been developing in foreign countries and are likely to prevail in the future. If the proposed legislation is based on the assumption that consumer costs will not be affected so long as the laid-down cost of oil imported in U.S. flag tankers does not exceed the cost of domestically produced oil, then it must be emphasized that such assumption is incorrect."

RECOMMENDED ALTERNATIVE

Thus far my remarks have dealt with the reasons we oppose the proposed legislation and with the effects it would have on the U.S. maritime industry and the nation. There is yet another compelling reason why we oppose the proposed legislation. We believe that the government now has a sound basis for fostering expansion of the U.S. maritime industry without risking the adverse effects cited previously. This is through modification of the existing Merchant Marine Act of 1970.

The economic problems associated with U.S. flag participation in international trade were recognized when Congress enacted the Merchant Marine Act of 1970. In promulgating the Act, Congress corrected many of the deficiencies of prior legislation, opened the door for both dry and liquid bulk carrier participation and also included some features to stimulate further efficiencies in U.S. shipbuilding. The Act is basically well-conceived, but at the same time does contain provisions which have seriously retarded its use. Section 804 precludes many U.S. flag shipowners including oil companies, the affiliates of which by necessity own and charter foreign flag tonnage, from obtaining and operating subsidy. Similarly Section 805 inhibits companies which own vessels engaged in domestic coastal trade from obtaining an operating subsidy. The construction subsidy and tax deferred capital construction fund provisions are available to domestic affiliates of companies operating vessels internationally. However, a new vessel subsidized and funded in this way would still be unable to compete in international trade without an operating subsidy.

The current law also restricts operating flexibility by requiring trade to the U.S. part of the time. This requirement prevents the owner from offering a charterer the worldwide trading privileges which are required by those engaged in international oil trade and which are provided by foreign flag competition. The inhibiting thrust of this feature is compounded when you consider the development of the larger, deep draft, more efficient vessels and the inability to forecast a date when U.S. ports will be able to accommodate this size of tanker. Considering ourselves to be a leading maritime power, we should encourage our flag vessels to trade internationally without restriction. Trading patterns of vessels do not limit the availability of such vessels to the U.S. in time of emergency or the degree to which these vessels serve the national interest.

The economic penalties imposed on vessel repairs made outside of the U.S. further impair the competitive position of U.S. tankers trading throughout the world.

Notwithstanding these restrictive provisions, tanker construction programs under the Act have been initiated. There are 13 bulk oil and 6 LNG carrier applications that have been approved or are pending and a like number are in various stages of discussion with the Maritime Administration. Thus, the Merchant Marine Act of 1970 has begun to fulfill its intended objective.

The only durable means for fostering a U.S. merchant marine, as may be justified to meet the security needs of the nation, is through a program designed to make U.S. flag tankers fully competitive in the world market. We believe this can be achieved by removing the restrictive provisions from the Merchant Marine Act of 1970.

We recognize that a problem exists with respect to today's surplus U.S. flag tankers. It seems to use that the current law forms a basis for helping to solve this problem in that it provides for waiving restrictions and granting operating

differential subsidies to provide most of these tankers with an improved opportunity to compete in the world market.

The cost to employ the Merchant Marine Act of 1970 will be less than the cost under S. 3404 for developing a U.S. flag fleet of comparable size. Use of the Act will not incur the economic and political risks inherent in S. 3404. Also under the Act, costs will be more appropriately borne by the entire tax base as opposed to selectively imposing them on particular sectors of the economy.

We strongly recommend using the Merchant Marine Act of 1970 to develop and maintain a U.S. merchant fleet which is commensurate with national requirements. The Act need only be amended to give owners of U.S. tankers the opportunity to compete with foreign tanker owners in the international market on an equal, unrestricted basis. The Act incorporates an approach which is generally recognized and accepted among maritime nations as a sound basis for fostering national fleets.

CONCLUSION

In conclusion, it is our conviction that legislation embodying flag discrimination, such as that contemplated under S. 3404 would be contrary to the national interest. With provision for appropriate waivers or amendments, the Merchant Marine Act of 1970 can be utilized to help solve the current surplus porblem in the U.S. flag tanker fleet, as well as to expand it to meet whatever national aspirations may be justified. The Act avoids the harmful aspects of mandatory flag restrictions and brings into focus the basic economic problems confronting the U.S. maritime industry, readily identifies the cost for assessment against benefits, and spreads the cost of national security directly over those who benefit: i.e., the tax-paying public. Close cooperation between labor, management and government would be necessary to correct the deficiencies remaining in the current law.

APPENDIX "A"

ECONOMIC ANALYSIS OF THE EFEECT OF HIGHER TANKER COSTS ON U.S. CONSUMERS—DR. RICHARD J. GONZALEZ

A. Higher tanker costs for U. S. flag operations would affect consumers both immediately under the conditions that exist now and even more seriously in the future under the conditions that have been developing in foreign countries and are likely to prevail in the future. If the proposed legislation is based on the assumption that consumer costs will not be affected so long as the laid-down cost of oil imported in U. S. flag tankers does not exceed the cost of domestically produced oil, then it must be emphasized that such assumption is incorrect.

I am setting forth below observations which support this conclusion:

1. The inescapable impact of costs on prices over a period of time, which may be short or long, is an inescapable economic principle.

2. Commitments made today with respect to tanker transportation will influence costs and prices over the life of the tankers which is generally accepted to be about 20 years and must be evaluated in the light of prospective conditions over that life rather than on the basis of current conditions which are temporary in nature.

3. Over the next 20 years, informed analysts agree on several major points which bear on the costs to consumers of decisions affecting tanker costs:

(*a*) The U. S. will become increasingly dependent on overseas imports by tankers;

(*b*) The increase in imports will be primarily from the Eastern Hemisphere because that is where the large reserves and new supplies are located;

(*c*) The increasingly dominant role of Middle East oil will tend to cause the delivered costs for petroleum from other sources to be determined by the sum of F.O.B. prices at loading terminals on the Persian Gulf plus tanker transportation costs to ports of destination.

4. Foreign crude oil prices are rising sharply, as indicated by the changes in the past two years and by current contracts calling for annual escalation at a rate of about 5% annually through 1975.

5. There is general agreement that U. S. flag tankers cost more to build and to operate than foreign flag tankers.

6. Mr. Hettena, Director of the American Maritime Association, estimates a cost per barrel from Libya to the East Coast for U. S. flag transportation at ATRS+10 at $1.00 compared with $0.55 for chartered foreign flag transportation, a premium of more than 80% and more than one cent a gallon.

7. Until this year, existence of spare U. S. crude oil productive capacity permitted U. S. oil prices to behave independently of foreign prices in emergencies. That will not continue to be the case now that U. S. wells are operating virtually at capacity. In the future, mee ing the needs of consumers will require that foreign oil continue to be imported even when it becomes more costly than domestic supplies.

8. At present, with a vlaue for crude oil import tickets of about $0.90 a barrel, an increase in tanker transporta'ion costs would operate to reduce the value of tickets by the amount of increase in transportation costs, but that does not mean that the added cost would not affect consumers for several reasons:

(*a*) Cos's would increase for the crude oil used by all refineries, including small inland firms for which the value of tickets is an important factor in the average unit cost of crude oil.

(*b*) A reduction in value of tickets due to higher transportation costs could not be absorbed by refineries because of their small profit margin per barrel.

(*c*) Small refineries would have to recover the higher transportation costs and reduced value of tickets through higher prices quickly or else be forced out of business soon by losses, with undesirable effects on the extent of competition which serves to provide consumers with products at the lowest possible prices. In either case, consumers would pay for the impact of higher transportation costs sooner or later.

(*d*) For residual fuel oil, there are no quotas and prices are determined directly by foreign prices plus transportation costs to the U.S. Taxes are by far the largest element in F.O.B. foreign costs, and these are set by governments and are rising steadily. Residual fuel oil imports into the U.S. in 1971 were 565 million barrels. The East Coast derives almost all of its residual fuel oil from foreign sources and would feel the full effect of any increase in F.O.B. transportation costs immediately.

9. The rise in foreign oil prices has reduced the value of oil import tickets from $1.25 in 1970 to $0.90 in 1972. At that rate of change, the value of import tickets will become less than the added cost of transportation in U.S. flag tankers before the end of this decade, or at about the beginning of the useful life of any new tankers built under a change in U.S. policies.

10. Arab oil exporting countries have recently organized a joint tanker company and can be expected to use their control over oil supplies to require that part of their production be carried in their ships in order to increase revenues from their exports. Such limitations are undesirable to the extent that they interfere with flexibility in utilization of available tankers, but they will be encouraged if the consuming countries adopt similar legislations. Unnecessary and undesirable costs burdens on consumers will be the inevitable consequence of measures by either exporting or importing countries limiting the efficient utilization of the lowest cost transportation facilities.

Senator SPONG. Mr. Ervin.

We are very pleased to have you here, we will accept your statement in its entirety and we welcome your testimony.

STATEMENT OF J. J. ERVIN, PRESIDENT, MATHIASEN'S TANKER INDUSTRY, INC.

Mr. ERVIN. Thank you, Mr. Chairman.

In way of introduction, I am John J. Ervin, president of Mathiasen's Tanker Industries, Inc. Our company has been engaged in the operation and ownership of vessels since 1944 and is a wholly-owned subsidiary of the Kewanee Oil Co., which is principally engaged in oil production and chemical manufacturing.

We would like to emphasize that Mathiasen's operations are in no way related to any transportation requirements of our parent company, and we are solely dependent on the demand for U.S.-flag tonnage for the utilization of our vessels. Since the incorporation of this company, our vessels have been engaged in tramp service under con-

tract to various oil companies, distributors, and U.S. Government agencies. We fully support S. 3404 and urge its enactment.

Mathiasen's presently owns or has under long-term lease, five U.S.-flag tankers; two of which are 27,000-deadweight-ton jumboized T-2's and three others are 80,000-deadweight-ton tankers, which were delivered to us from shipyard in 1970 and 1971, one of these vessels has received no assistance whatsoever from the Government. The other two vessels are subject to title XI mortgages under the Merchant Marine Act.

As of this present date one of these three vessels is employed on the west coast carrying oil. The second vessel is presently loading grain for Pakistan, which is hardly the purpose for which this vessel was constructed. The third vessel is presently laid up in Philadelphia.

Actually since the time we contracted for these three large vessels in 1968, to the time they have been delivered, many things have happened in the domestic tanker industry. I will mention these briefly: First, a decrease in the movements of crude oil from the U.S. gulf to the U.S. east coast; second, a reduction in the expectations of crude oil shipments from south Alaska; third, a decline in the movements from U.S. gulf to the U.S. east coast of refined products because of the step-up in volumes of the Colonial and other pipelines; fourth, the delay in the construction of the trans-Alaskan pipeline which was supposed to be completed and opened in 1971; five, the almost total elimination of the movements of residual oil from the U.S. gulf to the U.S. east coast and the reliance of the east coast on foreign sources; six, a reduction of our military overseas requirements which temporarily is on the increase, but in the long range should decline.

While the Merchant Marine Act of 1970 provided for new construction, as mentioned in previous testimony, only five vessels have so far been contracted for. Further, it completely failed to provide for any coverage for existing modern vessels. We have made application for operational subsidy on two of our 80,000-ton tankers. This has not been approved as of this date, and we have not received much encouragement.

Actually the American flag fleet, while it is said to be old and outdated and obsolete, really has been developed to take care of our domestic needs. American ports suffer from shallow draft, length restrictions and reduced terminal facilities and our vessels are very competitive in this area.

I agree that they cannot compete with the VLCC's long-haul trades, but even the VLCC's today cannot trade in our ports, because the ports are too shallow. The comparison is therefore somewhat academic.

While many of our vessels are old, the American tanker fleet includes vessels of 1,400,000 deadweight tons which have been built in recent years. And there is another 1,050,000 deadweight tons of vessels under 125,000 deadweight tons in capacity which are under construction and are scheduled for delivery in 1972 and 1973.

We mention these things at a time when we are looking at a tremendous increase in the petroleum requirements of this country and these requirements appear to have to be met from overseas sources.

The National Petroleum Council has forecasted that the demand for oil will increase from the present level of 15 million barrels a day to 18 million by 1975, 22 million by 1980, and 26 million by 1985.

In the same report they state that the domestic production should plateau to at around 17 to 18 million barrels a day. If this report is correct, our overseas requirements for oil will equal the 56 percent of our domestic supply.

I mention this in two reasons: First, that the impact this would have on our national security. If we are going to become dependent to the extent of 8 million barrels a day on foreign oil carried in foreign ships, and if we see our American base from which the supply of domestic tankers emanates decreasing, we are going to become incapable of controlling the transportation of this oil in any emergency.

Secondly, I mention too that we must look at our balance of payments. Based on an import of 8 million barrels a day, we would project, that without any further increases in cost of foreign crude oil, our balance of payments would require additional dollar outflow of $6 billion a year.

If all this oil were to be carried in foreign ships as is the present imports, this would equal another cost of approximately $2 billion a year. I find it difficult to imagine how we can meet these additional dollar requirements in this area.

I would like to deviate from the testimony to answer some comments made that to the cost of transportation, utilizing American vessels would increase by 50 to 75 cents a barrel, and our costs in American ships would be double other vessels. I think we are comparing different types of vessels. There was a report submitted by Mr. Hettena at the previous hearings in the House of Representatives that clearly indicated the cost increment would equate to something like 11 cents a barrel. I find this calculation to be very accurate. I think you have to compare the costs as to where the tankers are coming from and the size of tanker used.

I would dispute that our costs would increase by as much as has been suggested earlier. I also find it difficult to believe that this cost would be passed along to the consumers. In the last 2 years tanker rates from the Arabian Gulf to the east coast have fluctuated from something less than $1 a barrel to something in excess of $3 per barrel and have now regressed to very low levels of around 50 or 60 cents, and without any appreciable effect on our domestic petroleum prices.

For these reasons which I mentioned, our company supports enactment of S. 3404. I tried to summarize what we have in our statement and I am available for any questions you might have.

Senator SPONG. Mr. Ervin, I don't believe we have any question. I am very appreciative of the statement. Thank you very much.

(The statement follows:)

STATEMENT OF JOHN J. ERVIN, PRESIDENT, MATHIASEN'S TANKER INDUSTRIES, INC.

In way of introduction, I am John J. Ervin, President of Mathiasen's Tanker Industries, Inc. Our company has been engaged in the operation and ownership of vessels since 1944 and is a wholly owned subsidiary of the Kewanee Oil Company, which is principally engaged in oil production and chemical manufacturing. We would like to emphasize that Mathiasen's operations are in no way related to any transportation requirements of our parent company, and we are solely dependent on the demand for U.S. flag tonnage for the utilization of our vessels. Since the incorporation of this company, our vessels have been engaged in

tramp service under contract to various oil companies, distributors and U.S. Government Agencies. We fully support S3404 and urge its enactment.

Mathiasen's presently owns or has under long-term lease, five (5) U.S. flag tankers; two of which are 27,000 deadweight ton jumboized T–2's and three (3) others are 80,000 deadweight ton tankers, which were delivered to us from shipyard in 1970 and 1971. These three large new vessels were constructed at a total cost in excess of $60,000,000. Of these three new buildings, one vessel was built without any Government assistance whatsoever and the other two vessels were constructed with the use of Title XI Mortgage insurance to facilitate their financing.

Two of these vessels were constructed in conjunction with a long-term contract to a major oil company in anticipation of the movement of the North Slope Alaskan oil to the U.S. West Coast which was programmed for 1971. The third vessel of our newbuildings, which was also contracted previously to handle Alaskan crude, is under a relatively short-term charter to a major oil company and terminates in early 1973. Concurrent with the construction and deliveries of these newbuildings, there have occurred very significant changes in the supply/demand balance of the U.S. flag tanker industry, which has created a severe curtailment in demand for these vessels. These are enumerated as follows:

(1) A decrease in the movement of domestic crude oil from the U.S. Gulf Coast to the U.S. East Coast which has been caused by falloff in domestic production and the utilization of imported crude oil almost exclusively for east coast refineries. The falloff in transportation of domestic crude oil in this trade between November, 1970 and November, 1971 amounted to some 10 million barrels per month equal to a reduction of vessel requirements of some 700,000 deadweight tons of U.S. flag tankers.

(2) A reduction in the expectations of production of crude oil from the Cook Inlet area in Alaska. Actual production is almost 100,000 barrels per day below levels originally projected, which is equal to a reduced vessel requirement of 200,000 dwt. in this trade alone.

(3) A decline in the movements of refined products from the large domestic refineries in the U. S. Gulf to the U. S. East Coast markets occasioned by the increase in the capacity of the Colonial pipeline; the construction of satellite refineries offshore from the United States whereby with the exception of Puerto Rico refined products are trans-shipped in foreign flag vessels to various domestic marketing areas; and the granting of exemptions to domestic marketers for the import of various clean products outside the quotas.

(4) The delays in the construction of the Trans-Alaskan pipeline originally scheduled to be completed in 1971. Large U. S. flag tankers were constructed and completed in U. S. shipyards as originally scheduled in anticipation of this start-up in 1971. These vessels now find employment opportunities almost non-existent.

(5) Almost total elimination of the transportation of heavy fuel oil from the U. S. Gulf to the U. S. East Coast, with the eastern area now relying almost fully on the utilization of residual fuels from foreign sources delivered in foreign flag vessels.

(6) A reduction of our military overseas requirements occasioned by the reduction in hostilities in the southeast Asian area. Furthermore, construction of refineries in areas of Korea, Japan, Guam, Okinawa and other such sites facilitate procurement of clean requirements by the military from these local sources, eliminating transportation to these areas by U.S. flag vessels.

As can be seen, without exception, in every area where U.S. flag tankers have historically been employed, the demand for the utilization of these vessels has been reduced by reason of one factor or another, and it is evident that this situation will probably worsen in the foreseeable future, unless some corrective action is taken to offset this severe falloff in demand.

While the Merchant Marine Act, as amended in 1970, provided for the construction of new vessels with operating and construction subsidies, there were no new provisions incorporated in this legislation which gave any measure of comparable assistance to the existing U.S. flag vessels intended for the cabotage trades that were built either with total private sources of capital or with the Government assistance of Title XI Insurance for their financing. With the various domestic requirements that have existed throughout the last several decades, the independent U.S. flag tanker industry has been able to survive without any Government assistance and have developed what is felt to be a very viable fleet of vessels which have been constructed and/or converted to suit the logistic limitations that are placed on such vessels' trading in various U.S. ports with their draft, length, storage and other such restrictions. U.S. ports suffer from

greater natural restrictions than other major petroleum consuming areas, such as Europe and Japan, and these factors have placed definite limitations on the size of U.S. flag vessels which can be safely and economically utilized in domestic trades. These same limitations hamper the ability of these vessels to compete on a worldwide basis under a rate structure governed by costs of VLCC's (Very large crude carriers).

In spite of allegations that the U.S. tanker fleet is old and outdated, a study of the facts reveals that a substantial portion of these vesse's have been built in recent years. The larger sized tonnage which now find employment almost impossible in domestic trades and which, save for their higher U.S. building cost and higher level of operating expenses, is indigenous to all our domestic industries, are equal in every other way to the capability of their counterparts of comparable size in foreign flag competition. In more recent years, some 25 tankers, totalling some 1,400,000 dwt., have been completed in U.S. shipyards and an additional 12 tankers, totalling some 1,050,000 dwt., are presently under construction or on order for delivery in 1972/1973.

At the present time, the United States is having difficulties meeting its own domestic energy requirements and has found it necessary to consider the utilization of a greater percentage of foreign sources of energy, particularly crude oil and petroleum products. A recent forecast of the National Petroleum Council indicates that the level of our petroleum consumption in this country will increase from approximately 15 million barrels per day to something in excess of 18 million barrels per day by 1975, 22 million barrels in 1980 and to 26 million barrels per day in 1985. With forecasted domestic production plateauing at 17/18 million barrels per day, including North Slope production in the latter years. This report indicates a level of dependence on imported oil at nearly 56% of our domestic supply. It is also obvious that as we require additional imports, we will have to procure a greater percentage from producing areas located a greater distance from our shores requiring longer transportation links between these areas and our ports.

Presently, the demand for U.S. flag tonnage appears to have declined in the amount of approximately 1 million deadweight tons (or 8.0%) with indications that this situation will worsen. It would, therefore, appear that as a Nation who is becoming more and more dependent on foreign sources of energy, we are arriving at a position where our ability to control the transportation and redirection of these fue's in any National emergency would be severely dependent on the utilization of foreign built and manned vessels. If this situation continues to prevail, it is evident that many of the tanker owners who have invested through the years in the American tanker fleet will face a crisis of such portion that they will in no way be able to continue to function and their ability to participate in any programs which are envisioned under the Merchant Marine Act of 1970 will be completely eliminated by their financial plight.

It is obvious, therefore, that in some ways we have ignored the companies and investors who have participated throughout the years to maintain investments in the American fleet and the facilities for transporting our petroleum requirements.

We, as a matter of principal, support a strong domestic oil policy with proper restraints on use and dependency of foreign oil imports. However, as increased imports become a reality, we should not make the same mistake by becoming overly dependent on foreign flag vessels for all of this transportation.

It is our feeling that this country must maintain a position which reflects a certain degree of independence in the areas which are vital to our National security and I feel that just as we must have a strong National Defense and a strong domestic petroleum capability, so too must we have a strong transportation capability which only U. S. flag tankers can offer to meet such situations.

We can only look back a few years to see the indispensable role these vessels have played in protecting our national interests, and we feel that the continuing presence of this fleet will prove just as important in the future.

One must also become increasingly aware of the impact of the greater oil imports on our Balance of Payments. Based on the foregoing referenced report of the National Petroleum Council, the cost of imports could exceed 6 billion dollars per year without consideration of further price increases from present levels. Transportation cost associated with the level of imports could exceed 2 billion dollars a year. It is, therefore, obvious that we face a most serious problem with respect to our Balance of Payments should we become committed to a policy of having to procure our transportation of imports from foreign sources as presently being accomplished.

It is, therefore, our feeling that the only way in which we can hopefully sustain the privately owned American flag tanker fleet at a reasonable level consistent with our overall national interest is for the enactment of the legislation which is pending before this Committee, and I strongly recommend a prompt enactment of this Bill which we feel is vital to the survival of a viable domestic tanker fleet. I appreciate the opportunity to present our views before this Committee.

Senator SPONG. Mr. Clark and Mr. Haddock.

STATEMENT OF EARL W. CLARK, CODIRECTOR, LABOR-MANAGEMENT MARITIME COMMITTEE; ACCOMPANIED BY HOYT S. HADDOCK, CODIRECTOR; AND IRWIN M. HEINE

Mr. CLARK. Mr. Chairman, I am reminded of the paragraph in the Scripture which says, "Seeing we are surrounded with such a cloud of witnesses, let us lay aside every weight." I would add to that, "try to get to the point quickly."

Senator SPONG. Bless you.

Mr. CLARK. It being now 12:25, I think we can do this. Mr. Chairman, we have submitted to this committee this document "The Growing Energy Crisis and the U.S. Tanker Fleet" which I am holding up here. We submitted this document to the entire Merchant Marine and Fisheries Committee of the House; we also submitted it to your distinguished committee; and knowing the busy time of Senators, we have put a synopsis in the front, with the hope that on an airplane or at some other time you can squeeze out of your busy schedule time to glance at it.

It is a frightening thing. I think I need not dwell on that, because this committee is very much aware of that.

I am Earl W. Clark, codirector of the Labor-Management Maritime Committee. On my right is Mr. Hoyt Haddock, also codirector, and Mr. Irwin Heine, who is a consultant to this organization.

We will not engulf ourselves in the technical aspects of whether S. 3404 will increase consumer costs. We will leave that to the experts in the field. Mr. Hettena will testify tomorrow and will discuss this matter of the foreign and domestic flag oil transportation cost and its implications. We support the position taken by Mr.. Hettena, which will be described here tomorrow morning.

Just a few highlights we would like to have in the record, Mr. Chairman. I testified before the House Merchant Marine and Fisheries Committee on this "ghost" of retribution. The ghost of retribution by other nations has been thrown around by various government agencies for the past 20 years. It was being thrown around when I was Deputy Maritime Administrator back as early as 1950.

I think much of it is a ghost. I don't say there is not some reality, but much of it is a ghost. I am told that Kuwait and Iraq are already planning for big tankers to carry oil, long before this proposition ever hit this committee or the Congress of the United States. And I understand also that some of the other Arabian countries are also planning the same thing. They are going to build tanker fleets.

And then they come before you and say don't do this thing. Let's have great fear of employing these 25 laid-up U.S. tanker ships, because it is liable to upset the whole world, you see, I don't buy that. I would suggest that your committee and its good staff inquire from

the State Department and those who have expertise in this field, just who of the Arabian countries are already moving in this direction, without regard to this bill whatsoever. I think it would be a fine thing to have in the record and I think the Government should answer that question. They, the oil-producing countries, are already moving on this.

Now, the thing that has concerned me a little, too, as I listened to the testimony, both in the House and Senate, is that the larger oil companies move away pretty much from this matter of rates and into the problem of how they are going to cover their capital costs for the future, how they are going to build the ships, and accomplish expansion.

Let me say to you that if they pursue the course they have over a number of years, I believe, they will do it at the expense of American flag shipping. Of course, they are going to continue to have ships under the Liberian flag; of course, they will have ships under Honduras, Panama, what-have-you, because not only are there tax benefits, great tax benefits in doing so, but they avoid the U.S. economy, and its costs.

So I think the committee needs to look into the basic reason for opposing a bill that merely puts together employment for some 25 tankers at the present time—small tankers in the American flag fleet—whether you are going to sacrifice and send it down the river and have no more U.S. flag fleet at all in this country in order to help the future capital and ship construction needs of the big oil companies. I encourage the committee to look at that because every witness on this subject seems to stress how they are going to provide for their future capital costs, and shipping costs.

I think foreign shipping is the way they are going to do it. The thing that surprises me is that the State Department and the Interior Department take the same trends. The oil companies couldn't have written it better.

It has been pointed out here that there is the subject of treaty conflict. I brought over here the full listing of the most favored nations and the friendship, commerce, and navigation treaty countries which I will not take time to put into the record, because it has been put into the record this morning. France and Spain and Peru and Chile—are moving in the direction of this bill and Japan, by other means.

So I just think the matter of treaty conflict is something that has been overdone. Also, the State Department told me yesterday that there are clauses in these friendship, commercial, and navigation treaties that allow countries to move away from certain restrictions providing it is a matter of national security.

I say to you if you have an opportunity to read this booklet, on the growing energy crisis, that it is a matter now of national security, in our opinion.

Now, Mr. Chairman, I am going to try to conclude, because time is running out and I don't want to overdo after my promise to you in the beginning. But I think we have an overstated impact on the effects

of this bill. Section 901(b)(1) provides that you apply cargo preference only as American-flag ships are available at a reasonable price. That is written into the very context of section 901(b)(1).

Just give me a little time to pursue that. So what do you do by this bill? You may put 25 small tankers to work. You may put some seamen to work. You may help your balance of payments.

Can anyone believe that the Merchant Marine Act of 1970, overnight, will spring full bloom from the head of Zeus? I read a speech recently where some of the Maritime Administration people are now having great concern because shipbuilding under the Merchant Marine Act of 1970 is not moving. I understand the Golden Eagle Co., will build two ships of 80,000 and Shell, three ships; they are small, about 38,000 tons.

Where are the rest of the ships under the 1970 act? Now it is a convenient thing to come in and say you don't need this bill, S. 3404 because the Merchant Marine Act of 1970 will cure everything. Don't you believe it. I am for the Merchant Marine Act of 1970. I testified for it. I give Mr. Gibson every credit for his initiative and the strength of efforts which he put into it. But tanker construction just isn't happening.

So let me conclude by saying don't be afraid of this bill. The Arab countries are already, without such a bill, moving to create their fleets. Other nations are moving in the same direction. If the large oil companies want to provide their future capital assets, be they refineries or be they shipping, construction of ships, whatever they may be, at the expense of American shipping, thus helping accumulate those dollars by operating huge foreign flag fleets, avoiding the American economy, avoiding American labor, avoiding American taxes, then that is one way to do it. I have the highest regard for these companies, but I think on this issue they are absolutely wrong.

I do not think this bill is going to have all of the disruptive results that they claim for it.

Mr. Chairman, I could go on and talk for a long while, but I will close and ask my colleague, Mr. Haddock, if he has any comment to make.

Senator SPONG. Thank you. Mr. Haddock?

Mr. HADDOCK. Mr. Chairman, I will reserve anything I have. We will try to work out a way to get our additional material in the record.

Senator SPONG. I don't want you gentlemen to feel impeded at all by the time situation. We will keep this record open and will expect to hear from you in the future if you think there is anything additional.

Mr. Clark, we are accepting this statement in its entirety.

Mr. CLARK. I neglected to do that and I apologize to the Chair. We will file a full statement on S. 3404 herewith and I neglected at the beginning of my comments to mention this fact. I think we supplied you 75 copies for the witnesses and for the committee.

Senator SPONG. That will be received in its entirety. We thank you for your appearance here this morning.

(The statement follows:)

STATEMENT OF EARL W. CLARK AND HOYT S. HADDOCK, CO-DIRECTORS LABOR MANAGEMENT MARITIME COMMITTEE

Mr. Chairman and members of the Committee:

Our names are Earl W. Clark and Hoyt S. Haddock. We are Co-Directors of the Labor-Management Maritime Committee which is composed of major seagoing and shoreside unions and U.S. flag shipping companies in both the liner and tanker trades. We appreciate the opportunity to present our views on S.-3404.

S.-3404 is a bill to amend Section 901(b)(1) of the Merchant Marine Act of 1936 to provide a transport quota for U.S.-flag ships in connection with oil imports. We support this legislation. The need for such action was never greater.

Certainly, the growing energy crisis presents an exceedingly alarming picture. The full implications of which are just now dawning upon the American people. The greater our industrial development, the greater the demand for oil and its derivatives. However, its use has now gone far beyond the purely industrial process. Modern civilization would have been impossible without it, and the future of civilization appears contingent upon it. Our society is presently so constituted that no large or expanding population can properly survive without it. A modern nation's progress or decline is largely dependent upon it. Dominant nations of the future, as in the past, will be those who either (1) have oil in adequate quantity or (2) being deprived of it, are assured a continued supply from other sources. In the next few years, the United States will no longer be in the former category, and its position will progressively worsen. This compels attention to two fundamental responsibilities: first, the maintenance of successful politico-economic relationships with source nations and, second, the assurance of secure and continued transport to our shores. The latter responsibility is within the particular purview of this treatise. In terms of the current status of our U.S.-flag tanker fleet, it is an awesome one. We have presented to each of the members of this Committee a treatise entitled "The Growing Energy Crisis and the U.S. Tanker Fleet" which contains the most detailed tabulations and analyses of data relating to this subject. We therefore will refrain in this testimony from unnecessary duplication of the material contained therein.

Our Domestic Resourses

Our domestic oil resources are limited and must be protected. They are being supplemented increasingly by oil imports. The original import quota of 12.2 percent of domestic production is being increased by rather extensive waivers to meet the demands of ever-increasing per capita consumption and, at the same time, conserve our domestic supply. It is estimated that by 1985 the national consumption of energy will almost double the amount used in 1970. This will call for even greater conservation of our domestic oil resources. The U.S. will not be able to meet its projected total energy needs from domestic sources even when the Alaska North Slope oil and gas are included. The production of oil and petroleum products from shale deposits and other oil bearing sands is not likely to solve or even appreciably reduce our demand for oil imports. The conversion of such deposits to usable energy is a costly process not yet perfected.

It is estimated that U.S. production of crude oil in 1985, excluding Alaska, will be 3,504.0 million barrels per year, or approximately 9.6 million barrels per day. This is less than in 1970. If we include estimated crude oil production from the North Alaska Slope, an additional 1,095.0 million barrels per year may be added. In either case, this will be most inadequate to meet projected demand.

The Demand-Supply Balance

Let us contemplate what the United States is faced with in the matter of demand and supply balance. For this we have selected petroleum. The following table shows actual figures for 1960 and five year interval projections through 1985.

A PROJECTED U.S. PETROLEUM DEMAND/SUPPLY BALANCE
1970-1985
(millions of barrels per day)

YEAR	ESTIMATED TOTAL U.S. DEMAND (bbls)	ESTIMATED U.S. PRODUCTION (bbls)	ESTIMATED U.S. SUPPLEMENTAL REQUIREMENTS[1] (bbls)
1960	9.7*	7.9*	1.8*
1970	14.7	11.3	3.4
1975	17.8	12.6	5.2
1980	21.8	11.9	9.9
1985	26.5	11.6	14.9

*Actual Data

Source: Office of Oil and Gas, Department of Interior.

While total estimated demand shows rather extensive increases for the 1960-1985 period, U.S. production reaches its peak in 1975, downgrading thereafter, while supplemental requirements sharply advance.

The Alaskan Slope oil field, while a most important addition to our domestic resources, falls far short of stemming the tide of ever-increasing supplementary requirements. This results from several offsetting factors. First, any increased supply from either Canada or the North Alaskan Slope will be rather minimal in terms of greatly augmented U.S. demand, forcing greater reliance upon sharply increased supply from the Eastern Hemisphere. For example, according to the National Petroleum Council, Latin American local demand for petroleum is projected to grow at a rate of 4.7 percent to 1980, while its producing capacity annual growth is estimated at only 1.7 percent to 1985. By that year, Latin America's excess of petroleum supply over its own local demand is expected to reach some two million barrels per day, while U.S. import requirements from foreign sources are expected to reach some ten million barrels per day. Furthermore, our principal supplementing source of future oil imports, the Eastern Hemisphere, is fraught with political and economic disturbances of the most alarming magnitude with U.S. influence on the wane with the prospect of Russian domination. Lest there by any question as to the relative importance of our principal overseas oil producing sources, the following projection is offered:

	1970 (%)	1975 (%)	1985 (%)
Caribbean	50.0	24.8	13.6
West Africa	10.8	13.5	11.5
North Africa	10.8	10.4	7.2
Persian Gulf	17.7	46.3	67.7*
Far East	10.7	5.0	—
Total	100.0	100.0	100.0

*This percentage is somewhat higher than the 64 percent derived from Office of Oil & Gas data, Department of Interior.

Thus, by 1985, every foreign source of oil diminishes in percent of total output except the Persian Gulf area of the Eastern Hemisphere which will produce 67.7 percent of all overseas oil output—a relative increase of approximately 300 percent since 1970.

One does not have to be dubbed an alarmist to observe that the United States and the world are rushing headlong toward a severe energy crisis. It is certainly patent that from what we now know of the available petroleum sources throughout the world, the United States and other areas are dependent upon tankers for their supplies of oil and petroleum products and will become more so. We now come to the crux of our testimony and the principal interest and concern of this Committee. It is most certain that the nation which can supply itself with adequate supplementary oil and gas requirements and protect the lifeline that moves these to our shores will survive through whatever the future holds. The world seems to know this. It is doubtful if America yet does.

The Tanker Fleet

Let us look at the progress in tanker fleet development worldwide since 1956. The following table is pertinent:

THE WORLD TANKER FLEET*

YEAR	NUMBER	DWT MILLIONS OF TONS
1956	2,834	42.9
1960	3,366	63.7
1970	4,232	153.1

*All types

Source: Maritime Administration, Division of Statistics

The mad rush in tanker development is most evident, as is the matter of deadweight tonnage. In 1960 the average size of a tanker in the world fleet was under 19,000 DWT. By 1965 this had increased to 25,000 DWT and by the end of 1970 this figure was 36,200 DWT. After the Suez Canal closure in 1967, tankers of 200,000 DWT became commonplace. By December 1970 there were 131 tankers of 200,000 DWT in the foreign-flag merchant fleets. On order and under construction on that date were an additional 243 tankers of 200,000 DWT, eight of which were between 300,000 and 399,000 DWT with two over 400,000 DWT. Fifty percent of the tankers in the foreign fleet and 70 percent of the tonnage is 10 years old or less. The overall average is only 11.2 years.

Against this picture, the United States has only 262 privately owned tankers totaling 7.4 million DWT, of which 129 of 2.6 million DWT are over 20 years, and 116 of 2.4 million DWT are over 25 years old. Only 40 ships of 1.9 million DWT are 10 years old or less. The average age of the fleet is 19.7 years. We do not have to tell this Committee that the economic and defense security of this nation can no longer be jeopardized by inaction and neglect. What needs to be done? Several things:

1. *An oil transport quota must be established for the U.S. tanker fleet.* This is long overdue. We support S.-3404 which amends Section 901(b)(1) of the Merchant Marine Act of 1936 which would apply the "at least 50%" rule to oil quota import limitations and licenses. Additional import quotas of crude and refined products granted to petrochemical producers, terminal operators, and fuel oil producers, and the removal of residual fuel oil import limitations, have created a most severe impact upon the independent U.S.-flag tanker operators. These commodities, especially residual fuel oil, now depend principally, if not almost entirely, on foreign-flag ships including U.S. company owned "run-a-way" flag vessels. A continuation of the process will all but destroy U.S.-

flag carriage of oil and petroleum products in our foreign commerce, and we shall be caught with no tanker fleet in world trade. We are practically at this point now. In today's uncertain world, no nation should be placed in such a plight. Whether we like it or not, oil and its by-products have become the very lifeblood of industrial society. The welfare of 200 million U.S. citizens and their security depends upon a guarantee that this lifeline not be broken or placed in jeopardy. The words of Rear Admiral George H. Miller, USN, in the February 1972 issue of SEA POWER are ominous. He said, "The United States is now a have-not nation as England has been for generations. Increasing volumes of fuel and other raw materials imported from overseas sources are now essential to the day-to-day operations of our national industrial economy. Importation of these materials must continue uninterrupted even in the face of opposition at sea in order for our nation to continue to function; a prerequisite, of course, to any kind of major effort, military or otherwise—in the hemisphere or overseas . . . the United States could now be deterred from acting—or forced to submit in a relatively short time unless ships can continue in an emergency to bring in great volumes of fuels and raw materials now needed to sustain our civilian-industrial base."

In the face of such a calamitous potential, we are completely unimpressed by the opposition to the cargo preference provisions of this bill by the various Executive Departments, especially the State Department's fear of reciprocal action by foreign governments. Do they not know that France has a statutory stipulation that two-thirds of the crude oil imported for internal consumption is required to be carried in French ships? Also, that Japan has apparently taken measures which have resulted in carrying almost 70 percent of its oil imports in its own flag vessels? Has our own or any other government taken retributive action against Japan or France because of their actions? Do U.S.-flag ships transport oil to France or Japan? We think not. We do not normally export oil. The State Department should be asked what nations have taken reciprocal action against Japan and France. In 22 years of operation, our organization has noted that practically every other maritime nation in the world has worked overtime at law or other methods in reserving cargo for its own national flag merchant vessels and in capturing our foreign trade—the largest in the world—until they now carry approximately 95 percent of our foreign commerce. The State Department has apparently entertained little fear of this adverse situation at all. Perhaps we ourselves need now to exercise a degree of self economic and security preservation against the inroads of foreign nations in our commerce.

2. *"Flags of convenience" domination of oil transport in our foreign commerce must be ended.* Today, few U.S.-flag oil tankers operate commercially in the foreign commerce of the United States. At the end of 1970, U.S. citizen companies had 212 tankers of 13.1 million DWT under Liberian and Panamanian flags. The oil companies owned or controlled 164 such ships, or 77 percent and 68 percent of the tonnage while independent owners had the remainder. As of the same date, U.S. citizens companies incorporated under the laws of the United States were building 45 tankers of 9,240,200 DWT for their foreign affiliates. All were in foreign yards. Almost half or 21 of these were for Liberian and Panamanian flags. It is questionable whether any of these ships will ever seek return to U.S.-flag even to participate in the North Alaska Slope domestic oil trade. Such transfers would certainly be opposed by many American interests. Almost assuredly they will not return for purely U.S. foreign commerce. In the first place, Section 804 of the Merchant Marine Act, as modified by the 1970 legislative amendments, makes eventual cessation of foreign ownership a condition for operating subsidy. This hurdle will probably never be accepted by the major oil companies. The benefits of foreign operation are too lucrative otherwise. The tax benefits enjoyed for operating tankers under Liberian or Panamanian registry are more profitable than any to be enjoyed under the Merchant Marine Act amendments of 1970 and can be invested in any activity, in any

country, without restriction or being subject to the regulations of the Maritime Administration or the Treasury Department. The incidences of cheap labor with unrestrained opportunity to shift from one type of crew to another are overpowering. The freedom to operate advantageously where and how they desire in world markets, including the foreign trade of the United States, without the regulations or restrictions to which U.S.-flag ships are subject, appears an overwhelming incentive. We are unimpressed by the arguments advanced by the major oil companies under their more lofty title "flags of necessity". Further, we do not feel that avoiding U.S. taxes, U.S. regulatory requirements or U.S. standards of wages and labor is necessary. Make no mistake! "Flags of convenience" operation is a convenient tool for achieving maximum profit while avoiding responsibility for strengthening U.S.-flag tanker capability for both our future commerce and the national defense. The use of these so-called "Effective Control" ships vitiates every merchant marine legislative act to foster and maintain a strong U.S.-flag tanker fleet. If such practices were applied to all industrial segments of our economy, this nation would face collapse indeed. The dominance of the so-called "runaway flag" operators in our foreign oil commerce must be ended, for it is now almost complete. Rest assured, with few U.S. tanker vessels in our foreign commerce now, we shall perhaps soon have none unless the Congress acts to provide some reasonable transport quota for U.S.-flag vessels seeking to participate in the oil trade of our foreign commerce. Let us hope that the "Flags of Convenience" do not ultimately become the "Flags of Doom" for this nation.

CONCLUSION

In supporting the transport quota for U. S. flag shipping, we urge the Committee to act now in providing a flat percentage of our oil imports in U. S.-flag ships, as has been set forth in this pending legislation. We would even like to see the bill include liquified natural gas. This is in no sense an extreme position in terms of the growing energy crisis and the immediate future economic health and security of this nation. The time is now. Tomorrow may be too late.

We thank the Committee for this opportunity to state our views.

Earl W. Clark

Hoyt S. Haddock

Co-Directors

Senator SPONG. The hearing will be in recess until 10 o'clock tomorrow morning.

(Whereupon, at 12:45 p.m., the hearing was adjourned, to reconvene at 10 a.m., May 2, 1972.)

MARINE PROGRAMS, FISCAL YEAR 1973

TUESDAY, MAY 2, 1972

U.S. SENATE,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON MERCHANT MARINE,
Washington, D.C.

The subcommittee met at 10 a.m. in room 5110, New Senate Office Building, Hon. William B. Spong, Jr., presiding.

Present: Senator Spong.

Senator SPONG. The hearings will come to order.

The first witness this morning is Mr. Ran Hettena, president of OSG Bulk Ships, Inc.

Mr. Hettena, we are pleased to have you with us this morning.

STATEMENT OF RAN HETTENA, PRESIDENT, OSG BULK SHIPS, INC., AND DIRECTOR, AMERICAN MARITIME ASSOCIATION; ACCOMPANIED BY JOSEPH KLAUSNER, COUNSEL; AND JACK GOLDSTEIN, ECONOMIST

Mr. HETTENA. I have with me this morning Mr. Joseph Klausner, counsel for the American Maritime Association, and Mr. Jack Goldstein, my associate, who is an economist with our firm.

The American independent tanker owners operate a fleet of 112 tankers totaling 3.4 million deadweight tons, including a large number of other vessels. They have until recently remained substantially self-sustaining, and may claim to be the only sector of American ocean shipping that has constructed a new generation of efficient ships without Government subsidy—perhaps the only such sector in this century, or at any rate, since World War I.

Since 1966, these owners have committed more than $500 million in tax paid funds to new construction. My own company has invested $108 million in new tankers in the last 3 years alone.

Current developments have much altered this satisfactory condition. Expectations for new markets have been disappointed, and what may be structural changes are shrinking the historic markets for independent tonnage.

The opening of Alaska has been postponed for at least some years, and substantial tonnage built especially for that trade will be coming out of the yards without defined profitable employment.

At the same time, a marked shift seems to be occurring in sources of oil supply, from indigenous to foreign production. This shift is controlled by national import policy, but quotas are being rapidly expanded.

Some forecast an increase of over 300 percent in water-borne imports by 1985, up to 13 million B/D; by that year, a twelvefold rise in crude imports alone is anticipated, from 650,000 B/D in 1970 to 8 million by 1985.

While this shift is taking place, refined products are being diverted to the recently doubled Colonial pipeline, with expectations that it may soon be redoubled and extended into New England. Price competition with the pipeline is severe, as well as with oil company tonnage.

Secondary markets upon which independent tankers have been accustomed to fall back seasonally have also been shrinking, owing to long range rather than transient causes.

Direct Government and Government-financed chartering has naturally contracted with our contracting foreign military and foreign aid commitments. In both areas, intense competition has arisen from oil company tonnage, bidding freight rates that are not economically possible for companies wholly dependent on vessel operation for their revenue.

From all these causes, 855,000 deadweight tons of tankers are currently laid up, and much other tonnage is operating at rates scarcely distinguishable in financial result.

Of course, such results do not cover fixed charges and cannot long be sustained.

Moreover, the large new vessels built for the Alaska service will be delivered in the next several years, and hang heavily over the market.

Our long-range estimate on presently visible trends is that about 2 million tons of shipping is excess to foreseeable demand. The calculations are in our written statement.

The necessary consequence would be accelerated scrappings and foreign transfers, before a new equilibrium of supply and demand could be established at a much lower level of American tonnage.

This trend represents, we believe, a waste and dislocation of valuable resources, and a ponderable loss to the United States in terms of international payments and national defense. A fine fleet is withering at the same time that our reliance—some say our dependence—on imported oil is growing. We are buying more oil, and relying for its carriage entirely on foreign shipping.

The Congress has hitherto determined that such tendencies are contrary to the economic and defense interests of the country.

The bill that the chairman has introduced in association with Senator Beall proposes as a solution that at least 50 percent of quota imports of crude oil and refined products other than residual oil shall be carried on American ships, to the extent they are available at rates fair and reasonable for American carriers.

We believe the bill will serve the national interest, and with minimal cost to the economy, including the consuming public.

The committee will naturally wish to measure the cost of extending this relief to the tanker industry.

A. The bill entails no direct cost to the Government. Unlike other forms of cargo preference, the cargo in question is neither owned, shipped nor financed by the Government, but moves entirely in the private commercial sector.

Also, as we understand the law, to the extent that vessels might carry cargo subject to this preference, they would not receive sub-

sidies designed to meet foreign-flag competition, or would remit them pro tanto if already paid.

B. We have carefully considered the question of cost to the consuming public. In order to weight the effect on price of requiring American carriage of half the imported crude oil and refined products, it is necessary to examine the import control system.

The landed cost of imported oil at coastal points, which consists of the sum of its FOB price, the cost of transportation and applicable duty, is generally less than the landed cost of domestic oil at the same points, which consists of the same cost constituents (except duty). In District I, which is the whole East Coast, the difference is at present about $1 per barrel.

Since 1959 national policy has protected domestic crude oil and products by limiting imports to about 12.2 percent of total supply. The mechanism of control is the quota system.

Refiners and certain others are granted licenses to import based on certain defined inputs, with a sliding scale favoring small refiners.

In practice, inland refiners are not able to exercise these rights because overland transportation would consume all or most of the saving; they therefore trade their import licenses, or tickets, for domestic oil.

Since a ticket represents the privilege of importing cheaper oil, and may be traded or in effect sold, it has a market and a market value. The eastern market is district I, whose refiners in practical result have up to now absorbed the great preponderance of imported oil.

The market value of the ticket will of course tend to be the difference in the landed cost of oil from the two sources, foreign and domestic. The equivalence between ticket price and the cost differential of the oil is generally recognized.

It will at once be obvious that this means imported oil is being sold on the east coast market at the domestic price, including the American cost of transportation from the Gulf.

The ticket buyer pays (1) the landed cost of the import plus (2) the ticket price and the sum is the domestic price.

For his part, the ticket seller pays exactly the same for the domestic oil for which he trades his ticket. Even the ticket holder who uses it himself to buy foreign oil pays in reality the full domestic price, for to the cash cost of his foreign purchase must be added the market value of his ticket (technically, opportunity cost).

Suppose now that one factor of the foreign cost changes, either up or down, thus increasing or decreasing the total landed price while domestic price remains steady: for instance, during the last 3 years the cost of transportation has fluctuated violently, first up by 200 percent and then down to half the beginning rate; even term charters rose 40 percent and ropped off by 19 percent from their peak.

This historical case is important because it is analogous to the expectation under the bill that freight costs will rise somewhat in consequence of the employment of American ships.

One thing is clear from that record, which our statement develops fully: the price of crude oil and refined products in the United States in no way reflected these sharp fluctuations. We are, of course, referring to refined products other than residual oil.

But the value of import tickets did.

This is exactly what we would expect. Since their value is the difference between foreign and domestic cost, whenever that difference di-

minishes or increases as foreign cost rises or falls, the value must reflect the change.

It is the mechanism for bringing the selling price of the two resources into equation, in accordance with the principle that commodities of the same quality, regardless of origin, tend to sell at the same price in the same market.

Thus, when the cost of foreign oil rises, ticket buyers refuse to pay a ticket price that does not subtract the amount of that rise.

The reason the ticket holder must accept the price thus determined by the market is found in the nature of his quota interest. He pays nothing for his ticket; it is a gift or grant of the Government and is in reality a windfall, technically called an economic rent.

As such, its value is determined by the market for the commodity, and does not itself determine the price of that commodity. It is residual.

It must therefore absorb changes in the price relations between foreign and domestic oil, and cannot itself control the price of oil at all. Since the foreign oil is already being sold at full domestic price, no change in its landed cost will be incurred by its users, or can be passed on by the quota holder.

To verify this analysis I read to you part of the statement by Secretary Shultz, delivered before the Senate Judiciary Committee on March 3, 1970, when he was Chairman of the Cabinet Task Force on Oil Imports.

With your permission, I will read it in full, because I think it is extremely relevant.

I quote:

> At present, the import program quantitatively limits imports of No. 2 fuel oil, which during 1966–68 supplied only 3 to 7 percent of east coast heating oil demand. Hence, it is evident that the east coast heating oil price is primarily determined not by the foreign heating oil price plus the cost of transportation but by the costs of domestic refining and transport. The circumstance that No. 2 fuel oil refined abroad generally can be delivered to the east coast at less cost than domestically refined No. 2 oil mainly results not in a lowering of the domestic price but in unearned "rents" to the few historical importers now permitted to import No. 2 oil.
>
> Once it is acknowledged that under the present quota system the domestic price of No. 2 oil is independent of the delivered price of product imports, it follows that imposition of even a prohibitively high product tariff would have no effect on the long-run domestic price. That price would still be determined—as at present—by the costs of domestic refining plus transport. Any long-term price rise must stem either from an increase in these costs or from anticompetitive behavior by domestic refiners. Neither would be affected by adoption of a tariff, regardless of its level.

Any variance in the cost of import oil, such as the cost of the transportation factor, would be analogous to the tariff mentioned by Secretary Shultz.

His statement, which is fully applicable to crude oil and other nonresidual refined products, supports our analysis entirely.

We have appended to our statement the similar views of other economists whom we consulted on the question.

Many of the more knowledgeable opponents to the bill admit that past transportation cost increases have not hitherto been reflected in consumer prices, but argue that sustained cost increases for American transportation will in the long-run have to be passed on.

I draw your attention to Secretary Shultz' statement, when he refers to "a prohibitively high product tariff will have no effect on the long-run domestic price."

It is worth comparing the relative magnitude of the additional American shipping cost and of the total cost of crude inputs.

We estimate the extra cost of carrying 50 percent of our imports—mostly short haul—at 11 cents per barrel, and have carried this through to the average cost of all crude—foreign and domestic—utilized by refineries in districts I to IV. Actual average cost in 1971—when there was no flag preference, of course—was $3.413 per barrel. If the preference had been in effect, the average crude cost would have been $3.42 per barrel.

A change of $0.007 per barrel—per gallon it would be $0.00017—cannot significantly affect the prices of refined products. You couldn't possibly find an increase of this magnitude, even if it were there.

Even doubling the tanker cost would only raise average crude inputs by $0.015 per barrel. And even an extreme increase of imports, say to 50 percent of total crude input some have envisioned for 1985, would raise the tanker impact by only 5.5 cents per barrel; but this would be overwhelmingly offset and far exceeded, as a matter of fact, by a reduction in average crude costs of nearly 38 cents per barrel, owing to the much heavier part the cheaper imports would play in the average. At that level—excepted in 1985—the windfall would amount to almost $3 billion.

I think the current situation provides a good illustration of the effect of increasing imports on the quota. Let us assume for the sake of argument that this bill had already been in effect in the beginning of this year, say January 1, 1972.

In 1971, crude imports from overseas averaged 959,000 barrels a day. In 1972 they are expected to rise to at least 1,375,000 barrels a day, and the figures we have for the first 4 months of this year suggest a much higher level.

Let us assume that the ticket value is $1 per barrel and that increased cost of American transportation is 11 cents a barrel. Then we find that this year's windfall, after paying for the added cost of American transportation, would increase by at least $340,000 a day, and the accelerating expansion of crude imports seems at this stage to be inevitable.

We therefore say with confidence that we do not believe that any of the higher cost of American ships would pass beyond the ticket value as a reduction of economic rent. But if it did, it is evident that it would have only a very negligible impact on product prices. Indeed, one beyond measurement.

We therefore say with confidence that introduction of American ships will not raise the price of oil to consumers. It will only transfer to the carriers a part of the benefit or grant which the Government has conferred.

The slight contraction of ticket value or economic rent that would be incurred by small quota holders—we estimate it at 11 percent of historic values—can readily be made up by slightly graduating their quotas in accordance with present official policy.

The expansion of imports everywhere forecast will provide the ready occasion for doing so. I think the illustration I mentioned previously is very much in point.

COST OF NOT ENACTING THE BILL

We said the committee would wish to weigh the cost to the government and to the consuming public of enacting this legislation, and we have suggested that there would be no such cost, but only a redistribution of quota benefits to share them with carriers.

But the committee will also wish to consider the cost of failing to enact the bill. We believe this cost would be heavy, not alone in respect of considerations of national defense, but in our international payments as well.

In our statement, we calculated the effects of carrying exclusively in foreign ships the large increments of oil we expect will be imported.

We point first to the fact that our negative balance of payments on transportation account was $61 million in 1970. This is a negative balance.

However, for the tanker constituent alone, it was $393 million. Thus all other sectors of shipping were actually positive earners by $332 million. The impact of tanker expense at the present comparatively limited level of imports is already very large.

It is interesting to point out that the impact of the tanker transportation alone on the balance of payments may amount to something between 10 and 13 percent of the total deficit in the balance of payments, which was about $3 billion in 1970. Just tanker transportation alone.

We estimate that for crude oil alone (not counting residual oil, refined products or liquid natural gas) the negative balance will rise to nearly $700 million in 1975, $1.2 billion in 1980, and $2 billion by 1985. The cumulative effect would be on the order of $14 billion.

These estimates could easily be exceeded, considering the heights to which freight rates can reach during international crises, even short of war. We have seen this experience in 1970 and the early part of 1971.

Carrying 50 percent of the crude in American ships would reduce this negative balance by about 40 percent: nearly $250 million in 1975, $500 million in 1980, and as much as $800 million in 1985.

The cumulative effect would reduce the negative balance by perhaps $5.6 billion between now and 1985.

Usually, savings on the balance of payments through flag preference are eroded by the excessive cost of earning them, through subsidies and the like.

In the present case, we have shown that there are no such extra costs, whether through subsidy or higher prices, but only a minor redistribution of costs already incurred.

The savings are therefore real, and so substantial as to make it provident, in our opinion, for the Government to claim them by enacting the bill.

We urge adoption of the legislation.

Thank you for allowing me to appear before the committee today.

Senator SPONG. Thank you very much, Mr. Hettena, not only for your statement here, but for the more extensive statement which we will receive into the record of these hearings in its entirety.

Your emphasis has been not only on U.S.-flag tankers, but on independent tankers. Do you think there is any reason for a national policy emphasizing independently owned tankers?

Mr. HETTENA. I believe there would be; yes. Independently owned tankers are perhaps the only transportation service carrying oil that would offer an independent and fully competitive service.

The alternate means of transporting oil to this county are either by company-owned tonnage, largely owned by integrated American oil companies, or by pipelines, again largely owned by the individual oil companies.

Hence, I think it would be healthy if the country could depend on a substantial and effective fleet of independently owned tanker tonnage.

Senator SPONG. In your statement, you noted that oil companies continue to operate their own tankers even when rates are below the layup equivalents. In other words, it would be cheaper to lay them up.

What do you think motivates this seemingly irrational behavior?

Mr. HETTENA. I would expect that the proportion of fixed cost to total cost is much greater for the oil company tonnage. In our case, for instance, when freight rates fall below the marginal level, we can lay up, and in laying up, we can reduce our costs materially. We can discharge the crew, we can discontinue the insurance coverage, and effect savings that way.

I would expect that oil companies would conclude many of these costs are fixed, and therefore the layup rate equivalent would be considerably lower than ours.

There may also be institutional reasons for their continuing operation.

Senator SPONG. Your analysis is that domestic production costs and domestic transportation cost determine the price of the oil, and that an increase in the cost of transporting foreign oil will not affect consumer prices. However, to the extent that the bill would increase demands for U.S.-flag tankers, wouldn't that bid up coastwise tanker costs for domestic oil and thus result in higher prices?

Mr. HETTENA. No; I don't believe so, Senator Spong, because in the first place, the bill provides for the use of American tankers so long as they are available at fair and reasonable rate.

In a competitive market, with complete flexibility for shifts between geographic areas of operation, if rates are maintained at a fair and reasonable level in one area of the market, competition would prevent their rise above that level in the other areas of the market; the ships will simply shift from one area to the other.

But I think more important than that, I have pointed to a surplus in tanker capacity. We have an effective surplus of perhaps 2 million deadweight tons of tankers. The reason for the surplus is the traditional coastwise market has been greatly curtailed. The pipeline expansion has taken over a great deal of the transportation from the gulf to the east coast, and the surge in imports has substituted foreign crude for domestic crude. Reduction in our overseas foreign military and economic commitments has acted unfavorably.

And finally, the delay in the Alaskan pipeline construction has created a great surplus of tankers that had been intended for this trade.

So I don't foresee any real increase in rates. You must not forget that a lot of tankers are operating now at rates equivalent to lay-up.

That means that at these rates the ship owner is indifferent between

operating at a loss or laying up his vessel at a loss; it is about the same.

Senator SPONG. The bill would increase demand for tankers, but not increase supply immediately. So wouldn't rates go up during the lag?

Mr. HETTENA. Well, they would go up above the lay-up rates that we are sustaining now, obviously. But they cannot go up above the fair and reasonable rates, because that is a provision of the bill.

Senator SPONG. You noted that we have a positive balance of payments of $332 million in nontanker sea transportation. How can that be, since we carry less than half of our commercial cargoes even in liner trades?

Mr. HETTNA. Well, the figures we have quoted, Mr. Chairman, are official figures from the Department of Commerce. We have taken them from the balance-of-payments accounts. We believe them to be correct. A considerable factor in the balance is what foreigners spend in this country. In our calculation, we have taken account of that. Foreign ships do buy American stores and particularly in the case of passenger ships. So that foreign shipping has an influence which we have accounted for.

So that on balance, if the heavy transportation by foreign tanker had not created a deficit, we would have had a positive ocean transportation balance of payments.

Senator SPONG. Would you favor applying a flag preference to other imports brought in under quota?

Mr. HETTENA. I think we haven't given any thought to this question. One would have to see whether the quota has a value, and what effect transportation has had on competitive services.

One of the major reasons that we are asking for this preference is that the soaring imports of foreign oil have displaced our traditional business. There is nothing to replace it.

We feel in this particular case that this quota system as it now stands gives to the quotaholder a windfall which comprises not only the difference between the cost of American oil and the cost of foreign oil, but also the cost of American transportation and the cost of foreign transportation, or at least American transportation from the U.S. Gulf.

The consumer is paying not only the domestic crude price, he is also paying the domestic cost of crude transportation. That is in the windfall which is kept by the quota holder.

Now we feel this has to be rectified. But whether this would apply to some other commodities brought in under quota, they would have to be analyzed individually. And if the circumstances are the same, I would be in favor of it. If the circumstances are different, they have to be considered.

Senator SPONG. Thank you. Mr. Rouvelas has a couple of questions.

Mr. ROUGELAS. Mr. Hettena, I am not an economist, but I remember reading that in a competitive market, production will go to the point where marginal revenue equals marginal cost.

It seems to me the fundamental difference between the consumer cost analysis you have done, and that which the opponents have done, is that you are positing that marginal revenue will equal marginal cost, that is, the cost of revenue production, and in their argument, they are talking about a mix of costs. To speak of an average cost of foreign crude and domestic crude posits prices being not competitively determined.

Is that how you see the distinction?

Mr. HETTENA. Yes, I think the major distinction is that we say that marginal costs of oil in this country are those of American oil, and that imports of foreign oil are brought in, well below the marginal level, at a highly profitable level.

Therefore, any increase in that foreign oil cost will not affect prices, because it affects supply only well below the relevant range in which prices are determined.

Some of our opponents have made many different arguments and not all of them are consistent with each other.

I think that basically they have not distinguished between average costs and marginal costs.

Mr. ROUVELAS. But in order for the market price in the United States to reflect average costs, wouldn't you have to posit prices being noncompetitively determined?

Mr. HETTENA. That is generally right. Given the demand, if prices rise, when certain average costs rise, and when marginal costs don't rise, you must have noncompetitive behavior. This could not occur under competition.

Mr. ROUVELAS. The second question I have is some of the opponents of the bill have raised phenomenal difference in rates that occurs on existing preferential cargoes. Those too are subject to the requirement that the rates be reasonable under section 901. Now what—how would you explain the difference in the way you expect this bill to operate with respect to oil cargo and what we have experienced in grain and other preference cargoes?

Mr. HETTENA. The tonnage utilized for the carriage of preferential dry cargoes is obsolete, quite old and very inefficient. It compares unfavorably with the foreign tonnage competing with it.

But much of our American tanker fleet is now or has been renovated, and it is in the process of a massive expansion and modernization. So that many of our tanker units compare, for the trade, with the best of the foreign ships.

Mr. ROUVELAS. But the preference has been in effect for 18 years. Why hasn't there been a modernization of the ships that you posit would occur here?

Mr. HETTENA. Because the preference is unreliable from the point of view of the shipowner. He does not know how much cargo will be given a preference from one year to the next.

Mr. ROUVELAS. So you say there is the more certainty here on oil imports?

Mr. HETTENA. Certainly, if this bill were to be enacted we would know how much demand there would be for the ships, and we would be competing with each other to build new tonnage.

Mr. ROUVELAS. There is just one final question.

Some people have asserted that what enactment of the bill would result in would be the long haul on oil being done to say Canada or Bahamas, and that the imports coming in only from Canada and Bahamas to the United States, so effectively what you would have would be foreign carriage to those areas and then just a little American shuttle service. How would you answer that?

Mr. HETTENA. Well, first of all, the exportation of refineries——

Mr. ROUVELAS. I am not talking about that. That can be controlled by the import program itself. But in the sense of just a transfer occurring there.

Mr. HETTENA. Well, I think the quota system will have to be administered in such a way, as to prevent transshipment, because if transshipment occurred, obviously it would circumvent the use of American ships.

Mr. ROUVELAS. There is nothing in the bill to require the quota system to be administered that way?

Mr. HETTENA. Well, I don't believe the bill as written includes this, but I think it is a very good point that would have to be taken into account.

Certainly if we were to build an offshore terminal 8 miles away and bring crude all of the way from the Persian Gulf and carry it by barge or pipeline for 8 miles, that would not generate any demand for U.S. tankers.

Senator SPONG. Again we thank you for your appearance here this morning.

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

(The statement follows:)

PART ONE.—THE OUTLOOK FOR THE U.S. TANKER INDUSTRY

The American tanker industry last year began a period of chronic underutilization of its available capacity. Under the existing institutional arrangements and cargo requirements, this situation will persist until a sharp reduction in the size of the fleet (via an accelerated rate of scrapping or transfer to foreign ownership) provides a new equilibrium, which will in all probability occur at a level insufficient to meet national security interests.

American tanker independents with no long-term charters will have a choice of competing vigorously with other owners and oil companies for the decreasing volume of domestic and preference cargoes available at lower-than-breakeven rates, or to remove their vessels from the market. In the case of oil company tonnage, in which profitability or minimization of transportation expense often does not appear to be a consideration, superfluous tankers may be utilized in the foreign trades (mainly Caribbean).

From the perspective of shipowners, the difference between laying up the vessels or continuing to operate them at clearly unprofitable rates is small. The existence of a large surplus tonnage implies that both temporarily employed and unemployed vessels will be producing unsustainable losses for their owners.

The tanker surplus has resulted from factors affecting demand for U.S.-flag tankers as well as past commitments to modernize and expand. It is appropriate to present the discussion in two essential parts: the first, projecting the demand for domestic tankers; the second, measuring the prospective size of the fleet.

I. DEMAND FOR U.S.-FLAG TANKERS

The market for U.S. tankers consists of three major sectors: (1) U.S. Government (MSC); (2) foreign trade (including PL 480 grain and foreign petroleum); and (3), domestic (coastwise, Alaskan, and other). The domestic market accounts for more than 70% of total employment, and will be discussed in relatively greater detail.

A. *MSC Tanker Requirements.*—Changing military needs had a powerful impact on the domestic tanker market during the 1960's and early 1970's. From a level of approximately 600,000 DWT in the early 1960's, military hirings doubled by the end of 1965 and tripled by mid-1967, as U.S. involvement in Southeast Asia accelerated. Tanker tonnage committed to MSC has since fallen steadily to a current level of about 1 million DWT as participation in the war has been reduced and the nation's worldwide military presence scaled down. Even at the lower level, however, indications are that MSC is still overtonnaged. In recent years a major element in the spot tanker market, MSC sought no additional tonnage from the middle of 1971 to the flurry currently resulting from

Far East developments. Other tankers will probably return to the commercial market as their long-term charters with MSC are completed. On the basis of available commercial intelligence, and assuming that active U.S. military involvement overseas will not be necessary in the 1970's, the following table may provide a close approximation of MSC tanker chartering in the 1970's:

MSC PERIOD CHARTERS[1]—U.S.-FLAG TONNAGE

Expiring	Number	Deadweight tons (thousands)	Expected d.w.t. to be released	Indicated total chartered d.w.t. remaining (year-end)
1971				981
1972	10	265	79	902
1973	8	287	203	699
1974	2	56	32	667
1975	5	150		667
1976–80	7	223		
Total	32	981	314	

[1] During the above period, it is assumed that MSC will not be engaged in the spot market, except in unusual circumstances, reflecting a condition of overtonnaging.

The recent decision to retire six T–2's from the Navy's nucleus tanker fleet, which may have resulted in part from our representations to the government, though nine 25,000 DWT vessels will apparently be constructed as replacements, may serve to soften somewhat the near-term contraction in MSC chartering. Taking the most optimistic approach, it may be assumed that the approximately 100,000 DWT retired will be directly translated into an extension of charters or new business of an equivalent tonnage. As a result of this adjustment, the *average* tonnage under period charter to MSC is estimated as follows: 1972—940,000 DWT; 1973—900,000 DWT; 1974—785,000 DWT; and 1975—765,000 DWT.

B. *Foreign Trade.*—Historically, U.S. tanker participation in foreign trade has been largely determined by the demand for PL 480 grain transportation. Over time, the quantity of grain carried by U.S.-flag tankers has declined from a peak of 3.4 million tons in 1963 to 1.4 million tons in 1970, or by 59%, with indications that shipments were down again in 1971. The contraction can be traced both to a decrease in foreign-aid appropriations and, in recent years, to acceleration in world grain production.

The share of total foreign-aid grain carried by U.S. tankers is variable, ranging in the past decade from a low of 15% to a high of 40%, and depending on higher petroleum rates or immediate national defense requirements. It may be anticipated that the share of grain cargoes carried by tanker will increase in the future, owing both to the existence of a tanker surplus and the rapid decline of the U.S.-tramp fleet in the past few years.

Recent experience has been that 200,000–400,000 DWT have been customarily employed in the carriage of PL 480 grain. In February 181,000 tons were so engaged. Esso, with an abundance of tanker tonnage, has dominated the preference grain trade for the past two years.

As the foreign-aid program declines and grain supplies in many developing countries improve, prospects for an improvement in tanker demand coming from this sector appear to be limited, although some current interest has developed to South Asia. At an annual level of about 300,000 DWT, this requirement normally will not be of sufficient size to have a major impact on the domestic tanker market. Indeed, with oil company tonnage now dominating this trade, independent tanker owners may be hard pressed to gain any benefit from what cargo remains, since intense competition among many owners for a few charters will tend to keep rates close to their lay-up equivalent.

American flag participation in the foreign petroleum trade must also be considered. Customarily limited to backhauls, U.S. tankers enter the world market on a competitive basis only when world freight rates rise to a level high enough to offset the American cost disadvantage. In 1970, world tanker rates made it possible for a sizable U.S. tonnage (as much as 500,000 DWT) to enter the world market on a profitable basis, and only the composition of the American fleet, lacking large crude carriers, inhibited an even greater participation. World

tanker rates have now returned to normal or lower than normal levels, and the economic grounds for utilizing American tanker tonnage no longer exist.

However, the likelihood is that an increasing tonnage will be moving in the foreign trade in the coming years, composed of tankers designed to move crude oil from the North Slope of Alaska, and therefore rather large for domestic trade, but also of existing oil company tonnage. With spot tonnage available on the world market at a fraction of the cost of operating some of the small vessels being utilized in this trade, the decision to continue using them is based on institutional rather than economic grounds. In the fourth quarter of 1971, for example, the spot Worldscale rate for a medium-sized vessel (22,000–39,000 DWT) carrying crude or residual fuel oil from the Caribbean to the East Coast was W77, equivalent to a rate roughly 40% less than out-of-pocket expenses for a modern American 37,000 DWT vessel, and 20% less than the lay-up equivalent rate, at which lay-up or continued operation yields a similar result. For independent owners, who depend solely on shipping for their livelihood, this option obviously is not available.

In our estimate of the total tanker demand we therefore include only the first class of large ships, for which the foreign trade represents the only available use. The other ships are clearly in surplus, and would be in lay-up were economics the only criterion. If for example, domestic requirements increased by 200,000 DWT, this new demand would be met not by a commensurate reduction in laid-up tonnage but by a transfer of oil company tonnage from the foreign to domestic trade.

Based on the above assumptions, the U.S. tonnage expected to be employed in the foreign trade in 1972–1975 can be identified by name:

[In thousands of deadweight tons]

	1972	1973	1974	1975
Overseas Arctic	62	62	62	62
Overseas Alaska	62	62	62	62
Sohio Resolute	80	80	80	80
Sohio Intrepid	80	80	80	80
Atlantic Richfield N/B (3)		120	240	360
Mobil Oil N/B		126	126	126
Overseas Juneau			120	120
Langfitt Shipping N/B		230	230	230
Hase & Haan Shipping N/B			230	230

C. *Domestic Trade.*—During the past seven years, the domestic tanker requirement has averaged 4.4 million DWT, with a peak of 4.9 million DWT in 1970, stimulated by interruption in the steady flow of overseas crude oil imports which in turn enlarged the replacement movement from the U.S. Gulf to the East Coast. Full utilization of the Colonial Pipeline also contributed to the upsurge. In later 1971, the flow of overseas crude oil imports reached new peaks, and U.S. domestic tanker demand fell back, about 4.7 million DWT for the full year.

Data on the employment of domestic tankers in the three main sectors (Coastwise, Alaskan, and all other) are shown below. A discussion of each of these components follows.

DOMESTIC EMPLOYMENT OF TANKERS

[In thousands of deadweight tons]

	1961	1966	1967	1968	1969	1970	1971
Coastwise	3,762	3,070	3,193	3,056	3,129	3,700	3,400
Alaska	45	110	211	353	535	515	520
All other	696	749	825	867	687	688	800
Total	4,503	3,929	4,229	4,276	4,251	4,903	4,720

Source: Maritime Administration.

1. *Coastwise Demand.*—Coastwise demand for tankers is the largest component of domestic requirement. Annual averages of Gulf/East Coast tanker shipments of crude oil and products for the period 1962–71 are given below in thousands of barrels/day.

1962–1,935; 1963–2,040; 1964–1,774; 1965–1,561; 1966–1,705; 1967–1,817; 1968–1,670; 1969–1,654; 1970–1,911; 1971–1,825 (est.).

Coastwise movements of petroleum are affected by the size of the oil import program, refinery locations, pipeline capacity, and weather conditions, among other forces. The prospects and problems for the crude and the products segments of the business will be discussed separately.

a. The key components in forecasting the crude movement are: (a) East Coast refinery capacity; (b) indigenous crude oil production; and (c) the size of the crude oil import quota program.

According to the Bureau of Mines, PAD District I refinery capacity is estimated at 1,505,000 B/D as of the beginning of 1972, and is expected to edge up to 1,695,000 B/D by the start of 1975. Although a number of other projects has been proposed, fears of environmental damage have raised formidable obstacles to expansion of East Coast refinery capacity. At a relatively high 92% of refining capacity, District I crude requirement in 1972–1975 would be as follows:

1972–1,425,000 B/D; 1973–1,465,000 B/D; 1974–1,515,000 B/D; 1975–1,560,000 B/D.

Production of crude oil within District I itself lately has been running at about 40,000 B/D, and is expected to rise somewhat in the next few years, reflecting development of the Jay field in Florida. However, total production should not exceed 50,000 B/D in 1972–1975.

From the imposition of the oil import control program in 1959, District I crude oil imports have been maintained within a relatively limited range of 600,000–750,000 B/D, with the exceptions of 1967 and 1970 when international supply problems reduced the availability of foreign oil. In 1971, the U.S. committed itself to a large expansion of crude imports under quota. In 1972 quotas again have been increased, although the impact on East Coast requirements is not yet clear. On the assumption that total crude oil quotas for Districts I–IV will reach 2.5 million B/D by 1975, the following breakdown is estimated, compared with the experience for the previous three years.

DISTRICT I–IV.—CRUDE OIL IMPORTS

[In thousands of barrels per day]

	1969	1970	1971[1]	1972	1973	1974	1975
Total	1,014	944	1,160	1,400	1,700	2,050	2,500
Less: Canadian overland imports to districts II and IV	277	365	420	465	530	600	675
Overseas imports to:							
District II (Capline)			10	50	75	100	150
District III[2]			55	150	250	375	525
Equals: District I imports	737	579	675	735	845	975	1,150
Canadian	72	87	100	110	120	130	140
Overseas	665	492	575	625	725	845	1,010

[1] Based on 11 months' data, Capline began accepting deliveries of foreign crude in September.

[2] The use of crude oil imports on the gulf coast in 1971 is believed to have been due to the difficulties of digesting a large flow of imports on the east coast in the 2d half of the year and the ability of quota ticket holders to shift the point of receipt to the gulf coast. Expansion of the quota and short supplies will produce a rapid expansion of this movement in the future.

This increment represents about one-half the expected annual addition to national oil demand in the next few years. West Coast crude imports will advance by more than 100,000 B/D per day, permissible product imports by an estimated 150,000 B/D, and domestic crude production by the remaining 100,000 B/D. If the nation's ability to expand its crude oil production declines, the advance in crude imports may be expected to accelerate further.

Of course, development in this direction means a corresponding decline in domestic employment of tonnage.

Summarizing the above, the residual volume of domestic crude oil to be moved by U.S.-flag tanker to the East Coast is estimated as follows:

[In thousands of barrels per day]

	1972	1973	1974	1975
Total, east coast refinery crude requirement	1,425	1,465	1,515	1,560
Less district I production	50	50	50	50
Subtotal	1,375	1,415	1,465	1,510
District I crude imports	735	845	975	1,150
Residuum (carried by American tankers)	640	570	490	360
Tanker tonnage requirement (thousands of deadweight tons on the basis of 1.8 deadweight tons to move 1 barrel per day	1,150	1,025	880	650

These estimates are subject to many imponderables, including changes in public policy, worldwide political uncertainties, economic conditions, etc. They represent our best judgment as to the fundamental course of events, given the national decision to increase imports of crude oil, the limited domestic crude producing capacity at *current* price levels, and difficulties involved in enlarging the East Coast's refining potential.

b. The other major coastwise trade, the movement of refined petroleum products, is subject to problems of a different nature, although having a similar impact on tanker demand. Tankers employed in the transportation of "clean" products face strong competition from the Colonial pipeline, whose through-put capacity has been expanded by a minimum of 300,000 B/D effective in 1972. Since access to the pipeline has in the past been largely reserved to its nine oil-company owners, and may be expected to continue so in the future, the full increase in pipeline potential may only be realized after 1972. Nevertheless, the total growth in refined product movement in the next two years is expected to be carried via the Colonial. Expansion of the market also suggests an early decision again to increase the carrying capacity of the line, and perhaps to extend it to New England, in which case a revival of tanker demand cannot be foreseen.

On the basis of a 4% per annum increase in District I consumption of the main clean products (gasoline, jet fuel, kerosene distillate fuel oil), and no further increase in Colonial capacity during the period, the following estimates can be made.

DISTRIBUTION OF DEMAND FOR MAIN CLEAN PRODUCTS IN DISTRICT I

	Thousands of barrels per day					
	Total district I demand	Supplied by—				Tanker tonnage required
		District I refineries	Pipeline[1]	Tanker	All other (net)	
1969	3,655	1,140	1,377	906	232	1,630
1970	3,790	1,106	1,407	1,042	235	1,875
1971 (estimated)	3,775	1,130	1,375	1,050	220	1,890
1972 (estimated)	3,925	1,160	1,550	975	240	1,755
1973 (estimated)	4,080	1,200	1,700	920	260	1,655
1974 (estimated)	4,245	1,230	1,725	1,020	270	1,835
1975 (estimated)	4,415	1,260	1,725	1,155	275	2,080

[1] From District III to district I, assumes no further expansion of Colonial.
[2] In thousands of deadweight tons.

An offset against the stabilized demand for tankers indicated in this table is the use of large oceangoing barges to move clean products. In direct competition with tankers, and often offering a flexible alternative, such barges have gained a small but increasing proportion of the market. Approximately 300,000 DWT have been constructed, equivalent to roughly 225,000 DWT of tankers. Since these vessels may be used in a number of the domestic trades, the above amount will be deducted from the tanker demand total.

c. Finally, there remains a modest amount of other petroleum products moving via tanker from the Gulf, including unfinished oils, some quantity of residual fuel oils, and small-lot lubricating oils, asphalt and road oils, and petrochemical feedstocks. Volume amounts to somewhat more than 200,000 B/D, requiring

approximately 400,000 DWT of tanker capacity. In the absence of a program to enlarge domestic output of residual fuel oil, there is little possibility of any growth in demand from this source.

2. *Alaska.*—Delay in constructing the TAPS pipeline, and the existence of some uncertainty about its eventual construction, have dampened hopes for an early expansion of the American tanker market. The earliest start-up of the pipeline-tanker transportation network is late 1975 on the unlikely assumption of an immediate beginning of construction.

There remains a demand for tankers to carry 200,000 B/D of crude oil from Cook Inlet to the West Coast. In the last three years, this movement has called for the average use of about 525,000 DWT. No appreciable change either in the volume of oil produced in Alaska or in the tanker requirement is anticipated through 1975.

3. *All Other Domestic Trade.*—During the last ten years, tanker requirements for all other domestic trades encompassing the Pacific, Intercoastal, Hawaii and Puerto Rico components, have ranged from a low of 677,000 DWT in 1963 to a high of 867,000 DWT in 1968, with no discernible trend. In the same period, the average demand for these trades was approximately 760,000 DWT.

II. SIZE OF THE U.S. TANKER FLEET

As of the end of 1970, the tonnage of privately-owned U.S. tankers was estimated by Sun Shipbuilding to be 7,372,000 DWT. Of this total, oil companies owned 4,068,000 DWT, and independents 3,304,000 DWT. Appendix B–1 shows the changes in 1971, including about 322,000 DWT of new deliveries and 43,000 DWT added by conversion, as against scrappings, losses, and transfers to foreign flag of 130,000 DWT. The net annual increase was 235,000 DWT, and the total fleet at year-end was 7,607,000 DWT.

As shown in Apendix B–2, the pace of new deliveries will be rising steeply in 1972 and 1973. In excess of 900.000 DWT is scheduled to be added to the fleet this year, and another 540,000 DWT in 1973. This relatively high rate of tanker construction can be attributed directly to expectation of early development of the North Slope of Alaska.

Assuming a high but not unusual 2½% rate of scrapping (given the large existing tonnage of aged vessels), it appears that the fleet will reach a peak of 8.7 million DWT at the end of 1973, and then decline. Additional construction under the 1970 Act providing subsidy to construction and operation may be undertaken and completed by 1975, but these vessels would be chiefly VLCCs, and would have little impact on the basic supply-demand balance of the domestic industry, because they would be operating exclusively in the foreign trade.

CHANGES IN TOTAL U.S. TANKER SUPPLY

[In thousands of deadweight tons]

	Size of fleet, beginning of year	New construction	Conversions (net)	Scrapped and transferred	Size of fleet yearend
1970					7,372
1971	7,372	322	43	130	7,607
1972	7,607	810	101	[1] 190	8,328
1973	8,328	540		[1] 210	8,658
1974	8,658	120		[1] 220	8,558
1975	8,558			[1] 215	8,343

[1] Estimated.

Sources: Sun Oil Co. "Analysis of World Tank Ship Fleet, 1970," Maritime Administration.

III. CONCLUSION

Combining the demand estimates with the profile of future actual supply yields the conclusion that in the absence of the proposed legislation the excess of tankers characterizing the domestic market in 1971 will continue during the next years, and, indeed, intensify. The following calculations indicate that from a period of virtually full utilization in 1969–1970, excess tonnage will reach about 2 million tons in 1973, before declining.

SUPPLY–DEMAND BALANCE IN THE U.S. TANKER INDUSTRY

[In thousands of deadweight tons]

	Actual			Projected			
	1969	1970	[1] 1971	1972	1973	1974	1975
Demand:							
Government (MSC)	1,474	1,133	1,030	940	900	785	765
Foreign (total)	681	953	830	585	1,060	1,530	1,650
Grain				300	300	300	300
Petroleum				285	760	1,230	1,350
Coastwise (total)	3,296	3,700	3,400	3,310	3,080	3,115	3,130
Crude				1,150	1,025	880	650
Main products				1,755	1,655	1,835	2,080
All other				400	400	400	400
Alaska	534	515	520	525	525	525	525
Other domestic	687	688	800	800	800	800	800
Less: Estimated barge substitution				225	225	225	225
Total demand	6,672	6,989	6,580	5,935	6,140	6,530	6,645
Supply:							
Average size of fleet	7,140	7,336	7,490	7,968	8,493	8,608	8,451
Less: 5 percent allowance for temp. inactive for M. & R	357	367	375	398	425	430	423
Available supply	6,783	6,969	7,115	7,570	8,068	8,178	8,028
Estimated surplus	111	.....	535	1,635	1,928	1,648	1,383

[1] Estimated based on ¾.

The 1972–1975 estimates are not entirely comparable to the previous actual employment data, since they include in the foreign petroleum component only ships that will have essentially no utility in domestic trade prior to the construction of the Alaska pipeline. Utilization of other tankers in the foreign trade by oil companies would be based on noneconomic considerations, given recent world tanker rates. To the extent that such vessels are diverted to the carriage of U.S. petroleum imports from the Caribbean, more U.S. ships would be employed and fewer laid up. However, since this use of existing vessels is not self-supporting, and since any improvement in the domestic market would presumably bring an immediate shift of such tonnage to the domestic trade, such vessels are considered part of the surplus. Obviously, independent owners do not have this option.

The indicated surplus of 1.5–2.0 million DWT in 1972–1974, borne mainly by independent owners, will represent a financial strain that will be impossible to endure. As a result, an accelerated rate of scrapping would ensue, as well as an increased flow of transfers of newer vessels to foreign-flag employment, if permitted by law. Thus, the supply of tankers would in time be adjusted by the market mechanism—at the cost of a modernized and expanding merchant tanker fleet, employment and national security interests.

Part Two—Market Effects of Import Preference

Extension of the cargo preference laws to include 50% of waterborne licensed imports of crude oil and refined products other than residual oil would not increase prices of oil to the consumer. We shall show that such imports are already at present sold to American refiners at prices that reflect *American* transportation costs; and that increased transportation costs to the importer cannot be passed on under existing conditions.

I. Imported Crude and Refined Products Are Already Sold at Prices Reflecting American Transportation Costs

The crude oil quota system began in 1959 when the mandatory oil import program was created under President Eisenhower in response to increasing dependence on foreign sources of petroleum, and a decline in domestic exploration and drilling.

The program's basic purpose, related to the national security, was to assure an adequate supply of petroleum in times of national emergency. Since 1959, imports of crude oil into the U.S. have been limited by quotas. Each year a government

agency decides how much crude shall be imported and who shall import it. So far licenses to import crude have been issued mostly to refiners and petrochemical companies.

Because of the limitation on oil imports, the price of crude oil in the U.S. has been maintained at a level substantially higher than the landed cost of foreign crude. The foreign cost is cheaper on two counts: its FOB price is lower than that of American oil; and per ton-mile it is cheaper to transport in foreign vessels as compared with transporting American oil in American vessels.

But crude of the same quality at the same market location will, like other commodities, sell at the same price irrespective of its origin. The price must necessarily be compensatory of the higher (marginal) cost of the American oil producer (including transportation). The very purpose of the quota system is to encourage production and marketing of higher-cost American oil. This would be enough to establish the opportunity of selling cheaper foreign oil at the American price.

Thus, rights to import granted to refiners, petrochemical companies and others in the form of licenses or tickets are valuable. The tickets have become freely exchangeable, and are traded to coastal refiners, chiefly the major oil companies, at a price reflecting the difference between the delivered selling price of American oil and the *landed cost* of foreign oil. Over the years, the value of the ticket has ranged in the neighborhood of $1.25 bbl, and is currently about $1.00.

When the ticket seller trades his ticket to other refiners better situated to utilize it, the latter thus have paid for the imported oil (1) its landed cost plus (2) the ticket value, or in sum, around the domestic price. This price is already therefore incorporated in their own cost basis for products later sold to the public.

That the ticket has a value reflecting the difference between domestic landed price and foreign landed cost *in itself* proves that the import is being valued at the domestic price.

The market for domestic oil determines the value of the ticket. And we stress again that the domestic price laid down on the East Coast covers cost of American transportation, so that the ticket value reflects the excess of that cost over the freights paid for foreign tonnage to bring in the foreign crude. This literally means that when a refiner buys the ticket he is paying the *American* cost of transportation.

In support of this assertion we cite the statement of the Chairman of the Cabinet Task Force on Oil Import Control, appended to his testimony on March 3, 1970, before the Antitrust Subcommittee of the Senate Judiciary Committee (91st Cong., 2d Sess., The Petroleum Industry, Part IV, pp. 1788–9):

"At present, the import program quantitatively limits imports of No. 2 fuel oil, which during 1966–68 supplied only 3–7% of East Coast heating oil demand. Hence, it is evident that the East Coast heating oil price is primarily determined not by the foreign heating oil price plus the cost of transportation but by the costs of domestic refining and transport. The circumstance that No. 2 fuel oil refined abroad generally can be delivered to the East Coast at less cost than domestically refined No. 2 oil mainly results not in a lowering of the domestic price but in unearned 'rents' to the few historical importers now permitted to import No. 2 oil.

"Once it is acknowledged that under the present quota system the domestic price of No. 2 oil is independent of the delivered price of product imports, it follows that imposition of even a prohibitively high product tariff would have no effect on the long-run domestic price. That price would still be determined—as at present—by the costs of domestic refining plus transport. Any long-term price rise must stem either from an increase in these costs or from anti-competitive behavior by domestic refiners. Neither would be affected by adoption of a tariff, regardless of its level."

Mr. Schultz's statement applies to crude oil as well. And an increase in tariff would be analogous to an increase in transportation cost.

In 1971, East Coast refineries acquired about 30% of their crude requirements from domestic sources, and 49% through exchanges of import tickets. Hence, they demonstrably produced or bought 79% of all crude refined on the East Coast at the full cost of American oil and American-flag transportation, either directly by purchasing domestic oil, or indirectly by paying the landed cost of foreign oil plus the ticket value, which includes the difference in cost between foreign and American oil and tonnage. The remaining 20% of their

crude the refiners themselves imported under quota. This does not change the result. Whether they buy oil or tickets, whether they use their own oil or their own tickets, their (opportunity) cost remains precisely the same: domestic price.

Thus the refiners who import crude are seen already to be paying American costs of transportation as a part of the price they pay for oil, and to be including it in their own cost structure underlying their own price structure to the consuming public.

It is obvious that they will not be called upon either to pay it again or to recover it again should American ships actually begin to carry the oil. There will be no change in their total cost experience.

What will happen is that as the cost of transportation rises, and accordingly with it the landed cost of foreign oil, the ticket value will shrink by an equivalent amount to absorb it.

II

Increased Costs of Transportation Cannot Under Existing Conditions Increase the Selling Price of Imported Crude

We noted earlier that the import tickets give their holders access to a source of oil cheaper than American oil.

Since anyone possessing these tickets can import foreign crude at a lower cost and sell it in the American market at the higher U.S. price, mere possession of the license creates a windfall, which is the ticket value. This windfall is a gift or grant of the government, which on the one hand seeks to maintain a high price for domestic oil by excluding cheaper foreign oil, and on the other hand allows certain persons an exception to import and market a limited quantity of the cheaper oil. The ticket costs its recipient nothing; the windfall costs him nothing. The landed cost to him of foreign oil already comprises all costs of production and transportation; he has met the total costs of the foreign oil before the windfall.

On economic principle, it follows that such an importer can dispose of his total supply at the governing American crude price under present conditions so long as delivered foreign oil is cheaper than domestic; but no increase in actual costs experienced by the importer can be passed on until the entire windfall has been consumed. Until that point, such an increase will merely diminish his unearned profit. And after that point, the extra cost can only be passed on if there is inadequate domestic supply at what would now be the lower price.

Thus an increase in transportation cost from using American ships will not, and indeed cannot, increase the price of oil to the refiners or to the ultimate consumer; it will only take a small bite of the windfall.

To confirm this essentially elementary proposition, we have put the economic question before three independent economists: University Professor Lawrence Klein at the Wharton School of Economics; Robert R. Nathan of Washington, a consultant to many governments, including our own; and Dr. Dan H. Mater, former chief economist of the Maritime Commission. Their answers confirm our own analysis. Our questions and their statements are attached.

Mr. Nathan said:

"It is our conclusion that the transport of the overseas crude imports by higher cost American vessels would not affect the oil price paid by consumers until and unless transport costs closely approximated the differential between the landed cost of overseas crude and the domestic prices of crude oil. Of course all this is predicated on the assumption, as you set forth, that crude oil prices are competitively determined. I think our conclusion is correct even if there were considerable deviation from pure competition.

Basically prices paid for oil by consumers should be determined by the relationships between demand and supply. The costs which meaningfully determine consumer prices are the domestic costs because those are the marginal costs. The volume of imported crude is set by quota and, accepting your figures, accounts for only 5 percent of total U.S. demand and less than 15 percent of East Coast demand. In view of these limited proportions of total supply from overseas, it is quite clear that domestic costs determine the response of supply to demand. It is domestic costs and domestic crude prices which will decide the price to the consumer.

"Of course there is a windfall to those who get import licenses. Since these licenses are freely exchangeable it is like putting money in the hands of those

fortunate enough to receive the licenses. These windfalls do not benefit the consumers of crude oil under competitive conditions.

"Of course our economy doesn't operate under perfect competition and some large recipients of import licenses might look toward average costs and shade their final price below domestic costs in order to capture markets from others. I would not expect, however, that this would be a significant force. In other words, I believe that consumer prices will reflect domestic costs and that if up to one-half of the overseas crude imports were carried by higher cost American vessels, which higher cost represents only a fraction of the difference between the crude price in the U.S. and the landed cost of overseas crude, there would be no effect whatsoever on the oil price paid by consumers."

Thus, the economists consulted have all concluded that, in a market even moderately competitive, increases in transportation costs from the use of American vessels can have no effect on the prices of quota oil. The windfall represented by the ticket value is technically called "economic rent", as Dr. Mater explains. But once the ticket value has been recognized as economic rent, this concept by definition implies that added transportation cost of the magnitude involved cannot possibly raise prices but instead will cause a contraction of the windfall, the ticket value, as if a portion were transferred from the importer to the shipowner. A great body of standard authority could readily be cited, but it seems unnecessary to burden the record when the proposition is really so elementary and so universally recognized.

III

Empirical Verification

The economic analysis is susceptible of empirical verification. Past changes in the landed cost of foreign oil have had no impact on American crude prices.

The following data are extracted from Chart II and Appendix E:

LANDED PRICES OF IRANIAN CRUDE AND WEST TEXAS SOUR

[Quarterly; dollars per barrel]

	Estimated actual f.o.b. price	Foreign-flag tanker cost		Prices of West Texas Sour at the well, 34 deg.
		Spot	All charter	
1969:				
I	1.37	1.12	1.08	2.95
II	1.37	.87	1.00	3.06
III	1.37	1.09	.98	3.05
IV	1.37	1.60	1.00	3.05
1970:				
I	1.37	1.64	1.08	3.05
II	1.37	1.81	1.13	3.05
III	1.37	3.16	1.26	3.05
IV	1.40	3.50	1.51	3.13
1971:				
I	1.58	2.41	1.51	3.29
II	1.74	1.18	1.43	3.29
III	1.78	.62	1.34	3.29
IV	1.78	.92	1.22	3.29

During the three years from 1969 to 1971 it is apparent that foreign-flag spot rates were volatile. Taking the first quarter of 1969 as a base, the rates from the Persian Gulf tripled by the fourth quarter of 1970, and then within nine months dropped to only one-sixth of the peak, a level actually half the starting base three years earlier.

Term charter rates, while less explosive, declined in the first year, and then moved up to a peak, also in the last part of 1970, about 40% above the base. They then leveled off and declined by about a fifth from the peak, but still above the base.

We may also look at the calculated FOB price of Iranian crude. For nearly two years that price remained firm at $1.37 bbl. It began to move up in the last quarter of 1970, reaching $1.78 bbl by the third quarter of 1971, a rise of 30%. Notice that spot transportation occasionally costs more than cargo from the Persian Gulf to the United States. At such times, the movement slacks or stops altogether so long as cheaper American production or alternative nearby foreign supply is available.

We must now compare these variables of FOB price and transportation with the price at which the oil sold in this country. Here it will be sufficient to look at the table and curve showing well-head prices for West Texas Sour, a comparable crude. See Chart II.

It is obvious that the price of domestic crude has little relation to the price of foreign crude, and has no relation at all to the changes in transportation cost.

1. Referring again to Appendix E, estimated FOB prices of imports from the Persian Gulf rose by $0.41 bbl from the 3rd quarter 1970 to the 4th quarter 1971 or by 30%; the American price rose by $0.24 bbl, less than 8%. The inner movements within the period had no relation, the whole American rise being accomplished by the end of 1970, and the price remaining perfectly steady thereafter, while most of the foreign rise was in 1971.

2. Treating the AFRA schedule, which reflects long-term transportation costs, we note that in 1970 freight rates rose from $1.08 bbl to $1.51 bbl or 40%; during the same period domestic oil rates remained virtually stationary. In 1971 the AFRA rates fell by one-fifth; American oil prices actually rose slightly at the beginning of the year and remained perfectly steady thereafter. Of course the picture is even sharper if spot rates are considered. The steady level of American crude prices persists against foreign freight rate fluctuations rising by as much as 200% and dropping by as much as 83% from the peak.

It seems certain that American prices, essentially steady throughout this period, were responding to market forces independent of those affecting transportation costs or even prices of foreign crude. This is the conclusion of OEP itself in a report to the President. So entirely independent were they, that when foreign oil costs were forced up above the American price, oil from distant sources ceased to be imported. If the foreign costs had been the dominant force, not only would the foreign oil have been marketable here at a higher price, but it seems quite probable that the domestic price would have risen concomitantly. The reverse happened: domestic supply was still available at the lower American price and it promptly filled the demand. When the market forces on foreign tonnage modified, and charter rates fell so sharply, the differential was reestablished, and the normal flow of quota oil resumed.

Another factor enters the picture.

The public does not consume bulk crude oil, but its products—gasoline, heating oils, jet fuels. In the short run, each of these markets is dominated by its own competitive conditions, in addition to crude prices. Thus, competition on the retail gasoline level has tended to limit price rises during the last decade. Crude is not the dominant factor here: between 1960–1971, according to the Independent Petroleum Association of America, the weighted average price of three main refined products (motor gasoline, kerosene, light fuel oil) east of California rose by $0.39 or 7.8%, to $5.36 bbl.; crude oil prices moved up $0.54, or 18.4%, to $3.18 bbl. See Appendix F. In the same period refinery operating cost alone was up by $0.19 bbl.

Examining the price movement of the refined products with specific reference to foreign tanker rates, it is obvious from Chart I and Appendix F that there was no correlation whatever. This is statistically verified.

We therefore assert with confidence that increases in transportation cost have no effect on the consumer's price under prevalent conditions.

Our confidence is fortified by a further fact. The actual increased cost from using American ships is far below the tremendous jumps in foreign freight rates in these years, which had no effect at all on American oil prices.

The same rapid fluctuations that we have just examined in freight rates from the Persian Gulf to the East Coast have characterized rates on the Caribbean/U.S. run. For medium-size tankers they were at World Scale 100 in early 1967, averaging W62 for the first half year; they increased to a high of W200 by September 1967. After receding to more normal levels around W100 in 1968 and 1969, rates rose again in 1970 with the spot rate reaching a peak of W302 in November. Thereafter, a steep drop to W61 in September 1971 took place, as tanker supply grew to meet and somewhat exceed demand. It is of interest to note that during this five-year period, efficient American tankers, if available, could have been profitably employed in the spot Caribbean market about one-third of the time. Long-term chartered tonnage shows a somewhat more stable trend, although also subject to considerable fluctuation.

The Caribbean and other shorthaul origins in the past three years still provided more than 50% of our crude imports, and the American flag tanker fleet, as it now stands, was mainly intended for short-haul operation. Economic forces

would continue to compel its utilization in the range of its maximum efficiency even after enactment of the bill. Of course, provision of adequate port facilities would allow construction of a fleet of VLCCs the rates for which would be much lower on the long runs than the present fleet can afford. At the same time, it must not be forgotten that the Cabinet Task Force urged concentration on Western Hemisphere sources out of regard for defense.

U.S. OCEANBORNE CRUDE OIL IMPORTS, BY SOURCE, 1969–71

[In thousand barrels a day]

	1969	1970	1971 [1]	Average, 1969–71
Venezuela	306	268	303	292
Other South American	63	22	12	32
North Africa	135	53	69	86
Nigeria	49	48	95	64
Indonesia	88	70	110	89
Middle East	209	190	359	253
All other	1	----------	11	4
Total	852	651	959	820
Short hauls as percent of total	64.9	60.1	49.9	57.8

[1] Estimated.

Assuming that American ships at least for the near future will thus concentrate in the Caribbean, North Africa and Nigeria, and that relatively efficient vessels of 50,000 dwt and larger will be utilized (see Appendix H), the following estimates can be made:

Source of crude	Cost per barrel of chartered foreign flag transportation [1]	Cost per barrel of U.S. flag transportation at ATRS+10 [2]	Average transportation cost with 50 percent U.S. participation
Venezuela	$0.28	$0.40	$0.34
Libya	.55	1.10	.78
Nigeria	.69	1.10	.90

[1] Source: U.S. Department of the Interior, "Worldwide Crude Oil Prices, Fall 1971". Data are for September 1971.
[2] Rate for a 60,000 deadweight ton U.S. tanker.

Note: Weighted average increase in transportation cost equals 11 cents.

In sum, the use of American vessels to carry 50% of crude imports from the three sources yields an average increase in transportation costs of the order of 11c per barrel (weighted according to actual average U.S. imports in 1969–1971).

Not only is this cost modest in itself, but it is below the sharp swings witnessed in foreign charter rate. Increases in foreign freight rates in a short time of 50¢ to $1.50 bbl have been shown without the smallest visible effect on prices, especially since these prices have included the American freight rate for a decade.

There is a final test of the validity of our conclusion.

During 1971, about 338,000 dwt of American shipping actually engaged in the foreign trade (see Appendix G), principally the short Caribbean run. This is tonnage of the integrated oil companies. There was also some additional American tonnage chartered by the oil companies which was used in the same way.

As these Americans vessels cost more to operate than foreign tankers, their use produces an added freight differential. Is it—as some argue—passed on to the consumer in higher oil prices; or is it—as we assert—absorbed without effect on oil prices?

Let us first suppose that the freight differential is in whole or in part added to the oil price. At current international freight rates independent tankers cannot recover out-of-pocket expenses (let alone capital costs), and even our more modern units are driven into layup. Oil company tonnage—the argument goes—can afford to carry this cargo even in generally less efficient vessels and at much higher cost because oil companies can raise oil prices to the extent of the added

cost. Independent owners operate in a highly competitive climate, and must look to tanker operation as their sole source of revenue. At low international freight rates they are displaced from the foreign market. But if oil company tankers can afford to carry foreign oil at low rates while the more efficient independent tankers cannot, it is only because the former—thanks to a high measure of vertical integration and market power—can transfer the added cost to the consumer.

Thus, two corollaries derive from the proposition that the added cost of using U.S. tankers would increase the price of oil:

1. The price increase could occur if, and only if, the seller's organization is vertically integrated and possesses a significant degree of market power, and

2. If this were so, the character of the industrial organization it would imply would inevitably lead to the economic displacement of independent tankers—a competitive oil transportation service—thereby causing a further reduction of competition in the oil business.

The second proposition, that the freight differential is not transferred to the consumer, of course proves our claim. In this case the freight differential is in general absorbed by the integrated oil company and debited against part of the ticket value which inures to the import quota holder. Quite predictably, this proposition is confirmed by inspection of crude and refined oil prices during the relevant frames. These series, as we have seen, remained invariant in the face of considerable fluctuation of the volume of U.S. tanker tonnage engaged in the foreign trade.*

Part Three—Balance of Payments

The Committee will wish to estimate the cost of a program that reserves carriage of a substantial part of future U.S. petroleum imports to American-flag tankers. There is no cost to the government. If we are right, there is no cost to the consuming public. The sole effect is to transfer to the carrier sector of the industry a part of the grant the government has previously conferred on the refining sector.

But the Committee will also wish to estimate the cost of not having such a program. This cost will be reflected in the balance of payments. It is clear it will be heavy.

The volume and cost of tanker transportation required in the coming years will be a function of (1) the quantity of waterborne oil imports; (2) the sources of the oil and the relative importance of the suppliers; and (3) the cost of constructing, financing and operating a sizable new tanker tonnage. Under these influences, the negative balance of payments will be expanding greatly in the next decade.

According to some expectations, offshore imports of oil may reach 13 million B/D by 1985, compared with less than 3 million B/D in 1970. Waterborne imports of crude oil alone may exceed 8 million B/D; in 1970 this movement stood at 650,000 B/D.

Compounding the effect would be increased reliance on more distant sources of oil supply in the future, particularly from the Persian Gulf. A 60,000 DWT tanker discharging on the east coast can carry about 1.1 million tons of cargo annually from the Caribbean, but only 300,000 tons from the Persian Gulf. Thus, five times as much capacity is necessary to move a given volume of oil from the Persian Gulf as from the nearest offshore source.

Moreover, the cost of operating and constructing foreign-flag tankers, while still materially below that of the U.S., has been increasing at a high rate. Construction costs in particular have risen, in recent years, more than 50% for a VLCC. Our almost total dependence on foreign-flag vessels for oil imports makes this a significant and growing negative factor in our balance. Sophisticated payments analysis requires examination of reflows attendant upon expenditures. an elaborate study in itself.

In estimating the impact of the bill on the balance of payments, we have limited our analysis to tanker transportation alone, because we believe all other propensities to offset will be experienced regardless of vessel flag. This makes it unnecessary to examine reflows anticipated at different levels, which are a function of the basic import rather than of its carriage. It must not be overlooked that on transportation account alone, the entire negative factor at

*The Wholesale Index for Crude Prices (1967=100) remained at 113.2 from December 1970 to date while the index for refined products actually declined from 107.3 in August 1971 to 106.1 in December 1971.

present is tanker transportation. In 1970, the negative balance was $61 million; but tanker payments accounted for an outflow of $393 million; without them, sea transportation would have been a *positive* factor of $332 million. This alone justifies concentration on oil transport.

Our analysis has also been restricted to the estimated savings on crude oil—no allowance was made for the heavy offshore transportation of residual oil, or of refined products, naphtha, or LNG. All estimates are expressed in 1971 dollars (no allowance is made for inflation). Also, it was assumed that the U.S. by 1980 would be typically utilizing 100,000 DWT vessels, and 250,000 DWT vessels by 1985. This presumes that a sufficient number of suitable terminals would be available, and that less efficient vessels still in active service would be diverted to other appropriate trade.

The Balance of Payments appendix (Appendices I–XIV) contains our calculations.

We estimate that the transportation cost of crude oil alone, barring passage of this bill, will generate an annual deficit of more than $1.2 billion in 1980 and $2 billion in 1985. The cumulative deficit for the period 1975–1985 would be $14 billion.

ESTIMATE OF BALANCE OF PAYMENTS DEFICIT ON TANKER TRANSPORTATION ACCOUNT, WITH AND WITHOUT 50 PERCENT U.S.-FLAG CARRIAGE

	1975	1980	1985
Total waterborne crude oil imports (million barrels/day)	2.7	4.7	8.3
Tanker tonnage requirement (million dead weight tons)[1]	18.8	39.0	75.4
Gross freight revenue (million dollars)	792	1,429	2,366
Less: Port expenditures in United States by foreign-flag tankers (million dollars)	125	204	344
Equals: Deficit on current account (million dollars)	667	1,225	2,022
Impact of 50 percent U.S. carriage (million dollars)	+248	+483	+783
Deficit with 50 percent U.S. carriage (million dollars)	419	742	1,239

[1] This compares with the projected increment of more than 90,000,000 d.w.t. by 1985 published by the National Petroleum Council and a forecast of 125,000,000 for total U.S. tanker demand in that year by the Maritime Administration.

However, enactment of the bill would save about 40%, approximately $500 million in 1980, increasing to nearly $800 million in 1985.

These estimates are heavily understated. It must be remembered that they exclude the enormous inflow of residual oil, and take no account of the large quotas for naphtha that are contemplated.

Tanker rates are also volatile, as we have seen, and susceptible to extreme rises during periods of international tension. Although oil company fleets on a worldwide basis account for about 35% of the total, and perhaps 80% with additional tonnage chartered to them on a long-term basis, the impact of a sharply rising spot market on average transportation cost cannot be minimized. In the span of one year—1970—the average transportation cost on *all* charters rose by more than 50%.

In the past, the effect of rising foreign tanker rates on the U.S. was minimized by our small dependence on foreign oil and our large reserve crude capacity in the Gulf Coast. When high tanker rates made it more economical to increase domestic rude output and reduce imports, such a substitution occurred. Now, unless reserve capacity is magnified, or dependence on foreign carriage is reduced, the U.S. will bear the full weight on its international account of any sizable increase in tanker rates.

Cumulative deficits of the order suggested will be difficult to offset in the current state of the nation's monetary affairs, and of the sharp worldwide competition facing American exporters.

Conclusion

We have endeavored to adduce the proofs that the relief which the Spong-Beall bill would afford to a self-reliant but now hard-pressed sector of American shipping would entail a minimum of social costs, whether to the government or the public:

A. It involves no subsidy outlay by the government, unlike the other forms of cargo preference on the statute books.

B. It involves not cost to the consuming public, because the higher costs of using American shipping would not be passed on.

C. It only involves transferring to shipping a small part of the benefit, the windfall, already conferred on other sectors of the oil industry by the quota system. At an average ticket value of $1 bbl, the windfall amounts to over $300 million per year for crude oil; only $33 million would inure to American carriers at their higher costs. This loss is temporary, since the expected large increase in imports will quickly restore and even augment their profits from this source.

D. The departure it involves from free international shipping other nations long ago took on economic and military grounds fully applicable to us. No other nation is content to carry on its national fleet so small a fraction of this critical commodity.

There is a general observation concerning the 1970 Act.

The long-run viability of an American fleet competing in foreign trade will depend heavily upon the use of VLCCs to transport crude oil from the Middle East. Fortunately, with the passage of the Merchant Marine Act of 1970, the availability of construction subsidies that equalize domestic and foreign shipbuilding costs will go far toward minimizing the cost differential of a typical 250,000 dwt VLCC.

Assuming that the construction subsidy would equalize U.S. and foreign building and capital costs, we calculate that the weighted average increase in transportation costs by VLCCs would be significantly less than $0.11 bbl even with considerably longer voyages and no operating subsidies. Contingent upon port improvements to handle VLCCs, participation by U.S. tankers on voyages from the Middle East will not present serious problems. Of course, to the degree that the construction subsidy fails to fully offset the difference in building costs (particularly in the case of existing foreign-flag VLCCs, built prior to the recent rise in prices of new buildings) or to the extent that world tanker rates are depressed, the prospective incremental costs of using American ships would be somewhat enlarged. The possible availability of operating subsidy, at present shrouded in some doubt, will help narrow the gap.

Even so, market rates will be decisive.

Of course, it should be made clear that direct subsidy is not to be superadded to cargo preference, even though in this case there would be no double subsidy, since the government will not be paying any part of the freight rate.

Cargo preference is the only way to protect the current fleet, built and on order without subsidy. When and if the shift is made to VLCCs, the subsidy provided by the 1970 Act has a sound possibility of success.

MARITIME OVERSEAS CORPORATION,
New York, N.Y., January 10, 1972.

DR. LAURENCE R. KLEIN,
University Professor, Department of Economics, Wharton School of Finance and Commerce, Philadelphia, Pa.

DEAR DR. KLEIN: We solicit your views on whether, in the circumstances described below, an increase in the transportation cost of a portion of crude oil imported to the United States East Coast from overseas (i.e., excluding Canada and Mexico) under the present quota system will of itself raise the oil price paid by East Coast consumers.

We express the order of magnitude of the relevant factors by using the most recent data available. All U.S. crude imports are strictly limited by a mandatory oil quota system. Allocations of such import quotas for the East Coast in 1971 averaged 800,000 barrels per day (B/D) compared with total U.S. demand of about 15 million B/D and East Coast demand of about 6 million B/D. Import quota licenses allocated, among others, to domestic coastal and inland refiners and to petrochemical producers are themselves freely exchangeable with a value related to the difference between the East Coast price of crude oil and the landed cost of foreign crude.

As of September, 1971, the Department of the Interior reports the East Coast crude price at $3.83 to $4.02 per barrel depending on quality. It also calculates the East Coast landed cost of overseas crude at between $2.15 and $2.78 per barrel for lower quality oil and between $2.57 and $3.11 per barrel for higher quality oil. The price spread for each quality derives from differences in point of origin and in tanker charter rates. The resulting difference between the East Coast crude price and the overseas crude landed cost ranges between $0.91 to $1.68 per barrel.

We calculate the transportation cost differential between higher cost American flag tankers and foreign flag tankers to be between $0.20 and $0.30 per barrel transported.

Given that:

(*a*) East Coast imports of overseas crude amount to about 13% of East Coast demand,

(*b*) the East Coast landed cost of overseas crude amounts on the average to about 56% to 77% of the crude price on the same market;

(*c*) the transportation cost differential is on the average less than one-third of the difference between the crude rice and the landed cost of overseas crude;

(*d*) without entering into a discussion of the actual conditions of the oil markets, and assuming for this purpose that crude oil prices are competitively determined,

then our question is:

If a fraction (not exceeding 50%) of the overseas crude imports were carried by higher cost American vessels, what would be the effect on the oil price paid by consumers?

Sincerely yours,

RAN HETTENA,

President, OSG Bulk Ships, Inc. and Chairman, Independent U.S. Tanker Owners Committee.

P.S. I enclose a mathematical formulation which may be of incidental use to you.

Enclosures.

APPENDIX

Defining:

Q_e as the volume of East Coast oil demand,

Q_f as the volume of East Coast quota imports of overseas crude,

P_e as the East Coast unit crude price,

C_f as the East Coast landed unit cost of overseas crude,

$R=P_e-C_f$,

F_a and F_f as the unit transportation cost of overseas crude carried respectively by American tanker and by foreign tanker,

$F_d=F_a-F_f$ as the unit transportation cost differential,

Q_{fa} and Q_{ff} as the volume of overseas crude carried respectively by American tanker and foreign tanker,

and given that:

(*a*) $\frac{Q_f}{Q_e} \leqq 0.13$,

(*b*) $\frac{C_f}{P_e} \leqq 0.77$,

(*c*) $\frac{F_d}{R} \leqq 0.3$,

and assuming P_e is competitively determined, what will be the effect on P_e if

$$\frac{Q_{fa}}{Q_{fa}+Q_{ff}} \leqq 0.5?$$

ROBERT R. NATHAN ASSOCIATES, INC.,
Washington, D.C., February 17, 1972.

Mr. RAN C. HETTENA,
Senior Vice President, Maritime Overseas Corp., New York, N.Y.

DEAR MR. HETTENA: I feel terribly guilty for not having written long ago in response to your letter of January 13th. It arrived while I was overseas. On my return there was only one day in Washington and I was off again on an extended trip which included speeches in New York and Puerto Rico and I did not get back to Washington until practically the end of January. Since then a series of hearings and other crises have intervened.

Not only have I studied your letter carefully but I have also discussed it with one or two staff members. It is our conclusion that the transport of the overseas crude imports by higher cost American vessels would not affect the oil price paid by consumers until and unless transport costs closely approximated the differ-

ential between the landed cost of overseas crude and the domestic prices of crude oil. Of course all this is predicated on the assumption, as you set forth, that crude oil prices are competitively determined. I think our conclusion is correct even if there were considerable deviations from pure competition.

Basically prices paid for oil by consumers should be determined by the relationships between demand and supply. The costs which meaningfully determine consumer prices are the domestic costs because those are the marginal costs. The volume of imported crude is set by quota and, accepting your figures, account for only about 5 percent of total U.S. demand and less than 15 percent of East Coast demand. In view of these limited proportions of total supply from overseas, it is quite clear that domestic costs determine the response of supply to demand. It is domestic costs and domestic crude prices which will decide the price to the consumer.

Of course there is a windfall to those who get import licenses. Since these licenses are freely exchangeable it is like putting money in the hands of those fortunate enough to receive the licenses. These windfalls do not benefit the consumers of crude oil under competitive conditions.

Of course our economy doesn't operate under perfect competition and some large recipients of import licenses might look toward average costs and shade their final price below domestic costs in order to capture markets from others. I would not expect, however, that this would be a significant force. In other words, I believe that consumer prices will reflect domestic costs and that if up to one-half of the overseas crude imports were carried by higher cost American vessels, which higher cost represent only a fraction of the difference between the crude price in the U.S. and the landed cost of overseas crude, there would be no effect whatsoever on the oil price paid by consumers.

I hope these observations are of interest to you. Again, please forgive me for the delay.

Sincerely yours,

ROBERT R. NATHAN.

UNIVERSITY OF PENNSYLVANIA,
Philadelphia, Pa., February 21, 1972.

Mr. RAN HETTENA,
Maritime Overseas Corporation,
New York, N.Y.

DEAR MR. HETTENA: The question you pose is an interesting one: If some fraction (not in excess of 50 percent) of overseas crude imports were to be carried by U.S. tankers what would be the effect on the price of oil to domestic consumers?

Your stated assumptions accompanying your question seem to me to be accurate and reasonable, namely, that:

(i) East Coast imports of crude come to about 13 percent of total East Coast demand.

(ii) The East Coast landed cost of imported crude amounts to 56 to 77 percent of the crude price-determined by domestic crude prices.

(iii) U.S. tankers have a cost that is about 20 to 30 cents per barrel over that of foreign tankers. This is less than one-third of the cost differential between the crude price and the landed cost of overseas crude.

(iv) Crude prices are competitively determined.

Under these assumptions, it seems to me unlikely that there would be a noticeable increase in consumer prices for oil in the near future. I have not made a careful statistical study of the entire petroleum market and the present magnitudes of the forces making for price determination. Such a study would require several weeks or months of intensive investigation, but I have looked at the recent statistics of refined petroleum products. The wholesale price index for this category declined from 107.3 (1967: 100) in August to 106.1 in December. This decline is noteworthy because it occurred during a time of dollar exchange depreciation, and there is no discernible tendency towards higher domestic prices even though a fraction of crude consumption is imported.

Given that there is a substantial price differential between domestic and foreign crude and that this differential is much greater than the added unit cost of using U.S. tankers, it would seem that the competitive price would remain at the level determined by the domestic crude price on the East Coast and that the differential would simply be narrowed.

This should be the short run result. In the longer run—more than one year—there may be a tendency for the East Coast price to rise in the higher cost domestic supplies can be increased. There are, however, three basic reasons why this possible rise should not occur in the longer run.

(i) Throughout the world, foreign inflation, measured both by wage increases and price increases, is progressing at a faster rate than in the United States. There are good grounds to believe that our Government's stabilization measures are eventually going to succeed and that we are going to gain, competitively, with respect to the rest of the world. This is clearly the intent of the program.

(ii) The cost of transporting oil is likely to decline in the future as larger tankers and better port facilities are developed. The measures favoring U.S. tankers for oil imports, together with other financial inducements for investment, should enable U.S. fleet owners to modernize with larger and more efficient vessels that will enable us to be competitive in world tanker traffic.

(iii) Domestic crude supplies are limited, and we may be forced to shift on a larger scale to the less expensive imported crude.

In addition to these views of mine on the probable course of future oil prices, insofar as they are affected by tanker rates, let me offer some thoughts why it is a good idea to require some fraction of imports to be carried in U.S. tankers.

In the first place, there is a fairly obvious national security issue. Under the best of circumstances, we could rely on foreign tankers in an emergency, but national security requires planning for the worst of circumstances, and in that event it seems imperative that we should have at ready disposal a good working fleet of U.S. tankers. Under present market conditions in world trade, we are not likely to have the kind of ready fleet unless steps are taken to promote a higher rate of utilization of U.S. tankers in current traffic.

Secondly, it is urgent to increase U.S. exports of goods and services in order to help restore balance of payments equilibrium. The use of U.S. tankers for oil imports represents a service export. We should do everything possible to promote these exports as well as others. To offset the increase in imports that may come about through growing reliance on foreign crude, we should alleviate the balance of payments burden by using domestic tankers to a larger extent.

The increased use of U.S. tankers now should pave the way for our effective participation in the future in the expanding market for super tankers. It is not uncommon for nations to require that crude imports be carried in domestic tankers. In this respect, the proposal is not discriminatory.

Sincerely yours,

LAWRENCE R. KLEIN.

CABIN JOHN, MD.,
March 3, 1972.

Mr. RAN HETTENA,
Senior Vice President, Maritime Overseas Corporation,
New York, N.Y.

DEAR MR. HETTENA: In response to your letter of January 13, 1972, I reply as follows:

1. If a portion of the crude oil now being imported to the East Coast of the United States were to be carried by higher-cost U.S.-flag vessels, no increase in price to consumers would result, assuming that such prices are competitively determined.

The reason that such prices would not increase is that an increase in a seller's cost does not increase the value of the product to its consumers. In other words, the seller will already be charging all that the traffic will bear in his endeavor to maximize his profit or (what comes to the same thing) minimize his loss.

Of course an increase in cost from whatever source always provides the seller with an impulse to increase his price; but he can not do so if there is adequate competition and if buyers are knowledgeable. A trivial change in the product cannot be sold to a knowledgeable buyer as an improvement, at a higher price. And finally competition includes alternative suppliers of the same and similar products, as well as other buyer options that are available if integration or other financial controls by the seller are not present.

The foregoing answer to your question is, in my estimation, technically correct.

I would add to it a further consideration. To have special access to a cheaper source of supply, not open to others, enables the possessor, under competition, to market his commodity at the price commanded by higher-cost supplies. Sometimes this special efficiency is temporary, and only persists in the short run

until other suppliers imitate the efficiency; sometimes it is permanent, as in the case of natural fertility or other unique limitations on supply that can not be duplicated or expanded (inelastic supply). This kind of factor is technically described as price-determined rather than price-determining, because its value is not determined by its own cost (which is zero) but by the market; and the return attributed to it is called economic rent or surplus.

Just as increases in price do not increase the supply of such a unique factor, so a diminution of its rent does not increase its price. If it were taxed, for instance, the supplier would have to absorb the whole tax out of his economic rent. The consumer buys just as much as before, and at no extra cost to himself.

The case you put resembles this situation. The supply of cheaper imported oil is limited by quotas assigned to selected persons under law. They can sell it at the domestic price, yielding a substantial unearned profit, or rent, which costs them nothing. If the government now, as it were, taxes this rent by requiring that it be shared with American carriers, only the profit will be diminished; the price of the import will not rise unless the extra cost exceeds the rent.

This is, of course, elementary. Its applicability arises, it must be remembered, in the presence of competition.

2. Although you ask me to presume competition, the power of large integrated industry and the propensity of entrepreneurs to avoid competition always present the question whether the actual competition is adequate to determine prices.

Competition need be neither perfect nor of the cutthroat variety to be adequate; other degrees of competition are sufficient to produce prices that do not reflect uneconomic costs, or are not unfair to consumers. But it goes without saying, that there are still other degrees of competition which are not sufficient.

In the latter case, given a sufficient degree of market power, any cost increase is likely to be passed on, since an entrepreneur's first thought following an increase in his cost is whether he can pass it on to his customers in higher prices—in part, the whole, or maybe even more; and the larger the increase, whether of labor materials, or otherwise, the more favorably he will consider a price increase.

Considering, moreover, the growing tendency to increase price with or without apparent sufficient justification, especially in a spiraling inflation, it would be particularly worth while (a) to calculate what the use of U.S.-flag vessels to carry the intended portion of imports to the East Coast (averaged with the rates foreign carriers would charge on the part they would still be eligible to lift) would do to the *overall weighted* average unit cost—including the effects of economic countermoves of both customers and competitors; and (b) to trace the industry's history during recent years of price action in relation to its own cost changes; and to observe how the pattern compares with the cost-of-living and other indexes. Such knowledge would place one in a better position to forecast what would happen in this instance. If this study could be refined to trace the effect on the industry's prices of changes in the cost of imported oil or of transportation of such oil, that would not only be a closer case in point, but would tend toshow whether adequate competition exists to establish the principles discussed in paragraph 1 of this letter, or whether on the contrary the degree of market control exists that would suggest the opposite result discussed here.

Gathering these price-influencing data will ascertain the most probable price effect of U.S. carriage.

Sincerely,

DAN H. MATER.

APPENDIX A.—PRIVATE LAID-UP TANKER TONNAGE—U.S.-FLAG TANKERS OF 6,000 DEADWEIGHT TONS OR MORE LAID-UP OR IN IDLE STATUS AS OF APR. 26, 1972

Name	Year built	Idle since	Deadweight tons
Sheldon Clark	1942	Nov. 7, 1970	17,134
Transhuron	1945	Mar. 24, 1971	20,276
Transerie	1944	Apr. 13, 1971	20,285
Barbara	1945	May 24, 1971	26,267
Hess Petrol	1943	July 30, 1971	24,483
Transsuperior	1943	Aug. 7, 1971	20,276
Hess Refiner	1945	Aug. 21, 1971	24,438
Hess Trader	1944	Aug. 31, 1971	24,513
Penn Carrier	1944	Sept 9, 1971	17,296
Marine Dow-Chemical	1954	Sept. 26, 1971	17,205
Manhattan	1962	Nov. 4, 1971	114,669
Thomas Q	1951	Nov 17, 1971	31,991
P. C. Spencer	1953	do	26,587
Atlantic Navgiator	1951	Dec. 28, 1971	31,991
Gulflube	1948	Jan. 18, 1972	12,799
Overseas Joyce	1961	Jan. 19, 1972	49,842
Virginia Trader	1943	Jan. 23, 1972	17,335
Gulfprince	1958	Feb. 4, 1972	34,723
William J. Fields	1945	Feb. 16, 1972	24,559
Transeastern	1959	Feb. 21, 1972	49,339
Esso, New York	1950	Mar. 1, 1972	28,749
Overseas Arctic	1971	Mar. 25, 1972	61,440
Washington Trader	1944	Mar. 28, 1972	17,461
Sohio Resolute	1971	Mar. 31, 1972	80,569
Jules Burg	1943	Apr. 12, 1972	20,872
Overseas Aleutian	1953	Apr. 25, 1972	39,838
Total			854,937

APPENDIX B.—NEW TANKER CONSTRUCTION BY U.S. INDEPENDENTS SINCE FISCAL 1967

Fiscal year	Deadweight (thousands)	Cost (millions)
1967	36.0	$11.0
1968	37.3	11.0
1969	223.5	66.0
1970	216.2	56.0
1971	308.6	88.0
1972 and beyond	1,169.5	277.8
Total	1,991.1	509.8

Appendix B–1—U.S. Tanker deliveries in 1971

New construction:	*DWT*
Overseas arctic	61,700
Sohio intrepid	80,000
Falcon duchess	30,200
Sansinena II	69,800
Sohio resolute	80,000
Total	321,700

	Original, deadweight	New, deadweight	Increase
Conversions:			
Overseas Aleutian	31,200	39,300	8,100
P. W. Thirtle	26,800	57,000	30,200
Amoco Delaware	22,000	27,000	5,000
Total	80,000	123,300	43,300

SCRAPPING AND TRANSFERS TO FOREIGN FLAG

	DWT
Cherry Valley	16,600
Penn Sailor	20,300
Syosset	17,000
Gulfbeaver	21,100
Gulfbear	20,100
Texaco Oklahoma	35,100
	(130,200)
Net Increase in the U.S. Fleet in 1971	234,800

APPENDIX B–2—ANTICIPATED FUTURE DELIVERIES

New Construction—1972

	DWT
Atlantic Richfield N/B	120,000
Falcon Tankers N/B (2)	60,445
Hendy Int'l N/B (2)	139,600
Hendy Int'l N/B	69,800
Hendy Int'l N/B	69,800
Langfitt Shipping N/B	230,000
Mobil Oil N/B	120,000
Total	809,645

1973

Atlantic Richfield N/B	120,000
Hase & Haan Shipping N/B	230,000
Hendy Int'l N/B	69,800
Overseas Juneau	120,000
Total	539,800

1974

Atlantic Richfield N/B	120,000

1972	Original, deadweight	New, deadweight	Increase
Conversions:			
Sabine Towing & Transport	16,700	30,000	13,300
Texaco (4)	80,000	168,000	88,000
Total	96,700	198,000	101,300

Appendix C—Anticipated Future Deliveries of U.S. Flag Tankers

New Construction—1972

	DWT
Atlantic Richfield N/B	120,000
Falcon Tankers N/B (2)	60,445
Hendy Int'l N/B (2)	139,600
Hendy Int'l N/B	69,800
Hendy Int'l N/B	69,800
Langfitt Shipping N/B	230,000
Mobil Oil N/B	120,000
Total	809,645

1973

Atlantic Richfield N/B	120,000
Hase & Haan Shipping N/B	230,000
Hendy Int'l N/B	69,800
Overseas Juneau	120,000
Total	539,800

1974

Atlantic Richfield N/B	120,000

1972	Original, deadweight tons	New, deadweight tons	Increase
Conversions:			
Sabine Towing & Transport	16,700	30,000	13,300
Texaco (4)	80,000	168,000	88,000
Total	96,700	198,000	101,300

APPENDIX D.—U.S. PETROLEUM SUPPLY—DEMAND BALANCE

[In millions of barrels per day]

	1970	1975	1980	1985
Domestic demand	14.7	18.5	22.7	26.4
Processing grain, exports, stock change, etc (net)		(.1)	(.2)	(.4)
REQUIRED SUPPLY	14.7	18.4	22.5	26.0
U.S. production of petroleum liquids (excluding North Slope)	11.3	10.5	9.8	9.1
North Slope crude and condensate		.6	2.0	2.0
Synthetic crude for oil shale				.1
Imports	3.4	7.3	10.7	14.8
Imports as percent of domestic demand	23.0	39.0	47.0	57.0
Waterborne imports	2.6	6.1	8.7	12.8
Waterborne imports as percent of domestic demand	17.7	33.0	38.3	48.5

Source: National Petroleum Council, Oil Subcommittee and Coordinating Subcommittee.

APPENDIX E—LANDED PRICES OF IRANIAN CRUDE AND WEST TEXAS SOUR ON U.S. EAST COAST

[Cost per barrel]

	Posted price, Iranian crude 34° [1]	Estimated actual f.o.b. price [2]	Tanker cost		Estimated landed cost (U.S. east coast) [5]		Prices of west Texas sour at the well 34° [8]	Landes price of wes Texas sour on the U.S. east coast
			Spot [3]	All charter [3 4]	Spot [6]	All charter [7]		
1969								
I–Q	$1.79	$1.37	$1.12	$1.08	$2.60	$2.56	$2.95	$3.61
II–Q	1.79	1.37	.87	1.00	2.35	2.48	3.06	3.72
III–Q	1.79	1.37	1.09	.98	2.57	2.46	3.05	3.71
IV–Q	1.79	1.37	1.60	1.00	3.08	2.48	3.05	3.71
1970								
I–Q	1.79	1.37	1.64	1.08	3.12	2.56	3.05	3.71
II–Q	1.79	1.37	1.81	1.13	3.29	2.61	3.05	3.71
III–Q	1.79	1.37	3.16	1.26	4.64	2.74	3.05	3.71
IV–Q	1.79	1.40	3.50	1.51	5.01	3.02	3.13	3.79
1971								
I–Q	1.98	1.58	2.41	1.51	4.10	3.20	3.29	3.95
II–Q	2.20	1.74	1.18	1.43	3.03	3.28	3.29	3.95
III–Q	2.27	1.78	.62	1.34	2.51	3.23	3.29	3.95
IV–Q	2.27	1.78	.92	1.22	2.81	3.11	3.29	3.95

[1] The price on which taxes are paid. Source—U.S. Department of the Interior.

[2] Based on Department of the Interior estimates of tax paid costs plus an allowance of 35 cents per barrel profit. According to Interior data, this estimate produced a result equal to the quoted spot cargo cost in September.

[3] Source—"Shipping Statistics and Economics." Single voyage tanker fixtures on the PG/West route for tankers of 40,000 to 99,999 deadweight tons, basis worldscale 100 equals $10.36 from Kharg Island to USNH and converted at a rate of 7.5 barrels per ton.

[4] Source—"Shipping Statistics and Economics." Average freight rate assessments (AFRA) covering all chartered tonnage between 45,000 and 79,900 deadweight tons.

[5] Including duty of $0.105 per barrel.

[6] Fob price plus spot tanker cost.

[7] Fob price plus AFRA.

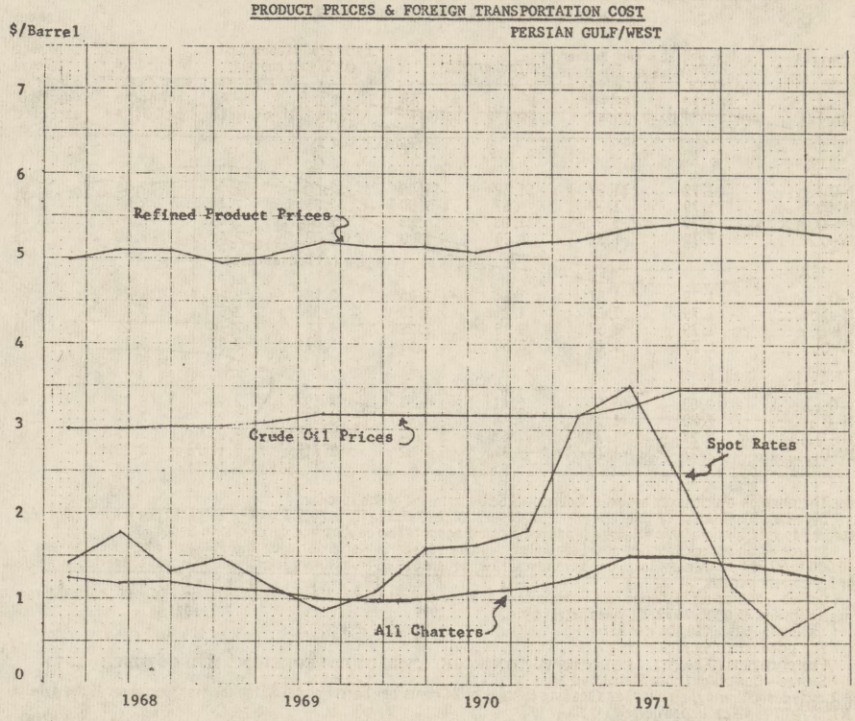
[8] Source—Bureau of Labor Statistics.

[9] Includes gathering, pipeline, and loading charges of 24 cents per barrel and U.S. tanker transportation at the rate of ATRS +10 or 42 cents per barrel.

CHART I

EAST OF CALIFORNIA CRUDE OIL AND REFINED

PRODUCT PRICES & FOREIGN TRANSPORTATION COST



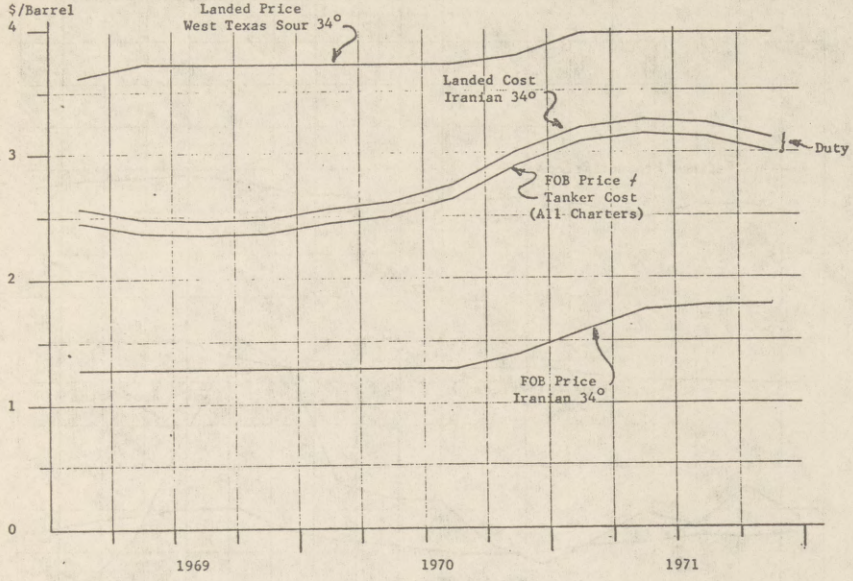
APPENDIX F.—EASTERN WHOLESALE PRICES OF PRINCIPAL REFINED PRODUCTS

	Refined products (cents per gallon)			Dollars per barrel	
	Motor gasoline	Kerosene	Light fuel	Composite 3 products	Crude oil
1960	11.69	10.01	8.93	$4.97	$2.94
1965	11.56	10.15	9.00	4.94	2.92
1966	11.55	10.41	9.13	4.95	2.95
1967	11.76	11.00	9.74	5.10	2.99
1968	11.50	11.09	9.81	5.02	3.01
1969	11.82	11.03	9.89	5.13	3.18
1970	12.01	11.11	10.04	5.21	3.26
1971	12.36	11.61	10.28	5.36	3.48

Source: Independent Petroleum Association of America.

LANDED PRICES OF IRANIAN CRUDE AND

WEST TEXAS SOUR ON THE U.S. EAST COAST



APPENDIX G.—OIL COMPANY TONNAGE EMPLOYED FOREIGN MID-OCTOBER 1971

Vessel:	*DWT*
Amoco Connecticut	20,700
Atlantic Enterprise	31,200
Atlantic Heritage	50,800
Cities Service Baltimore	34,800
Gulfjaguar	20,800
Gulfservice	18,300
Mobilgas	27,800
Texaco Massachusetts	26,500
Texaco Minnesota	26,100
Esso Boston [1]	52,000
Esso Dallas [1]	28,700
Esso Houston [1]	71,500
Esso New Orleans [1]	71,500
Esso New York	27,700
Pennsylvania Sun	51,800
Total	561,200

[1] Carrying backhauls of oil from outbound cargoes of preference grain.

APPENDIX H.—U.S. FLAG TANKERS 50,000 DWT AND OVER

	DWT
Existing:	
Atlantic Heritage	50,800
Arco Prudhoe Bay	70,000
Sinclair Texas	50,100
Hess Voyager	50,000
Esso Baltimore	52,000
Esso Baton Rouge	76,000
Esso Boston	52,000
Esso Houston	71,500
Esso New Orleans	71,500
Esso Philadelphia	76,000
Esso San Francisco	76,000
Pennsylvania Sun	51,800
Texas Sun	51,800
American Sun	80,000
Sansenina II	71,000
Total oil company	950,500
Baltimore Trader	57,900
Manhattan	114,100
National Defender	71,100
Western Hunter	72,300
Golden Gate	61,000
Overseas Alaska	62,000
Overseas Arctic	61,400
Overseas Anchorage	50,600
Joseph D. Potts	80,000
Sohio Intrepid	80,000
Sohio Resolute	80,000
Total independent	790,400
Total existing tonnage as of December 1971	1,740,900
To be delivered:	
Atlantic Richfield N/B (3)	360,000
Mobil Oil N/B	126,000
Total oil company	486,000
Overseas Juneau	120,000
Hendy International N/B (5)	349,000
Total independent	469,000
Total new deliveries[1]	955,000
Grand total, U.S. fleet over 50,000 DWT	2,695,900

[1] Does not include 2 Seatrain VLCC's for which no domestic trade may be feasible in the near future.

Balance of Payments Appendices

APPENDIX I

U.S. PETROLEUM SUPPLY—DEMAND BALANCE

[Millions of barrels per day]

	1970	1975	1980	1985
Domestic demand	14.7	18.5	22.7	26.4
Processing grain, exports, stock change, etc. (net)		(0.1)	(0.2)	(0.4)
Required supply	14.7	18.4	22.5	26.0
U.S. production of petroleum liquids (except North Slope)	11.3	10.5	9.8	9.1
North Slope crude and condensate		0.6	2.0	2.0
Synthetic crude for oil shale				0.1
Imports	3.4	7.3	10.7	14.8
Imports as percent of domestic demand	23	39	47	57
Waterborne imports (million barrels per day)	2.6	6.1	8.7	12.8
Waterborne imports as percent of domestic demand	17.7	33.0	38.3	48.5

Source: National Petroleum Council, Oil Subcommittee and Coordinating Subcommittee.

APPENDIX II

PROJECTED SOURCES OF OVERSEAS CRUDE

[In millions of barrels per day]

Overseas crude imports from—	1970	1975	1980	1985
South America	0.29	0.6	0.6	0.5
West Africa	.05	.2	.2	.2
Libya/Algeria	.05	.2	.3	.3
Indonesia	.07	.3	.2	.3
Middle East	.19	1.4	3.4	7.0
Total	.65	2.7	4.7	8.3

APPENDIX III

ESTIMATED NUMBER OF VOYAGES AND CARGO CAPACITY OF TANKERS ON SELECTED ROUTES

	Voyage distance (miles)	Number of days/ voyage	Number of voyages/ year [1]	Cargo capacity/voyage (deadweight tons)		
				60,000	100,000	250,000
Lagos/USNH/Lagos	9,740	29.9	11.7	58,900	98,600	247,500
Djakarta/L.A./Djakarta	15,798	46.1	7.6	58,300	97,800	245,900
Essider/USNH/Essider	9,086	28.2	12.4	58,700	98,300	246,800
Ras Tanura/L.A./Ras Tanura	22,722	64.7	5.4	58,200	97,600	245,600
Ras Tanura/USNH/Ras Tanura	23,588	66.9	5.2	57,800	97,200	244,700
Ras Tanura/USNH/Ras Tanura	24,598	69.6	5.0	57,700	97,000	244,500
Puerto La Cruz/USNH/Puerto La Cruz	3,818	13.4	26.1	59,300	99,100	248,300
Puerto La Cruz/USG/Puerto La Cruz	3,960	13.8	25.4	59,300	99,000	248,200

[1] 350 days of operation.

Assumptions:

(1) Speed of 16 Knots

(2) Reserve assumed 1 day for each 30 with additional ½ day for loading and discharging

(3) Fuel consumption is calculated at the rate of 70 tons per steaming day, and 90 tons per steaming day of diesel fuel and 170 tons per steaming day of bunker "C" for the respective ships, with a 20% reserve added.

APPENDIX IV

1975: 60,000 D.W.T. SHIPS

	Million barrels per day	Millions tons per year [1]	Numbers of 60,000 d.w.t. tankers required: Annual cargo per ship (tons)	Number of ships required
Lagos/USNH/Lagos	0.2	9.96	689,000	14.5
Djakarta/L.A./Djakarta	.3	14.94	443,000	33.7
Essider/USNH/Essider	.2	9.96	728,000	13.7
Ras Tanura/L.A./Ras Tanura	.5	24.90	314,000	79.3
Ras Tanura/USNH/Ras Tanura	.4	19.92	301,000	66.2
Ras Tanura/USG/Ras Tanura	.5	24.90	289,000	86.2
Puerto La Cruz/USNH/Puerto La Cruz	.6	29.88	1,548,000	19.3
Total	2.7	134.46		312.9

[1] Converted at a rate of 1,000,000 b.p.d. equivalent to 49,800,000 tons per year.

Note: Dead weight tonnage=18,800,000 d.w.t.

APPENDIX V

1980: 100,000 D.W.T. SHIPS

	Million barrels per day	Millions tons per year [1]	Annual cargo per ship (tons)	Number of ships required
Lagos/USNH/Lagos	0.2	9.96	1,154,000	8.6
Djakarta/L.A./Djakarta	.2	9.96	743,000	13.4
Essider/USNH/Essider	.3	14.94	1,219,000	12.3
Ras Tanura/L.A./Ras Tanura	.2	9.96	527,000	18.9
Ras Tanura/USNH/Ras Tanura	.9	44.82	505,000	88.8
Ras Tanura/USG/Ras Tanura	2.3	114.54	485,000	236.2
Puerto La Cruz/USNH/Puerto La Cruz	.3	14.94	2,587,000	5.8
Puerto La Cruz/USG/Puerto La Cruz	.3	14.94	2,515,000	5.9
Total	4.7	234.06		389.9

[1] Converted at a rate of 1,000,000 b.p.d. equaivlent to 49,800,000 tons per year.

Note: Dead weight tonnage=39,000,000 d.w.t.

APPENDIX VI

1985: 250,000 D.W.T. SHIPS

	Million barrels per day	Millions tons per year [1]	Annual cargo per ship (ton)	Number fo ships required
Lagos/USNH/Lagos	0.2	9.96	2,896,000	3.4
Djakarta/L.A./Djakarta	.3	14.94	1,896,000	8.0
Essider/USNH/Essider	.3	14.94	3,060,000	4.9
Ras Tanura/L.A./Ras Tanura	.5	24.90	1,326,000	18.8
Ras Tanura/USNH/Ras Tanura	1.4	69.72	1,272,000	54.8
Ras Tanura/USG/Ras Tanura	5.1	253.98	1,223,000	207.7
Puerto La Cruz/USG/Puerto La Cruz	.5	24.90	6,304,000	3.9
Total	8.3	413.34		301.5

[1] Converted at a rate of 1,000,000 b.p.d. equivalent to 49,800,000 tons per year.

Note: Dead weight tons=75,400,000 d.w.t.

APPENDIX VII

ESTIMATED COST OF OPERATIONS, FOREIGN FLAG TANKERS

	Deadweight tons		
	60,000	100,000	250,000
Daily operating expenses:			
Wages	$780	$800	$820
Subsistence	100	100	100
Stores and supplies	200	225	325
Maintenance and repairs	275	350	550
Insurance	500	1,000	3,800
All other	125	150	200
Total	1,980	2,625	5,795
Annual operating expenses (thousands)	723	958	2,115
Annual fixed costs (thousands) (depreciation and interest)	650	1,080	2,730
Total operating and fixed expense (thousands)	1,373	2,038	4,845
Customary profit (thousands)	600	1,000	1,875
Net freight revenue (thousands)	1,973	3,038	6,720
Net freight revenue, deadweight tons per month (time charter equivalent) (11,5 months)	2.86	2.64	2.34

ASSUMPTIONS

(1) Original construction cost equals $125 per deadweight ton.
(2) Depreciation at 4 percent per year, straight line.
(3) Down payment of 20 percent with remainder payable over 20 years at 6 percent rate of interest.
(4) Rate of profit equals 8 percent per annum on total investment; 6 percent per annum for VLCC.
(5) Salvage value equals $5 per ton.
(6) For insurance purposes, ships are valued at: 60,000 deadweight ton equals $10,000,000; 100,000 deadweight ton equals $15,000,000; 250,000 deadweight ton equals $30,000,000.
(7) All costs are stated in 1971 dollars with no allowance for future inflation.

APPENDIX VIII

ESTIMATE OF NORMAL GROSS CARGO REVENUE

	Deadweight tons		
	60,000	100,000	250,000
Annual net freight expense/vessel (thousands of dollars) (rounded)	$1,973	$3,038	$6,720
Plus: Estimated average annual voyage expense/vessel (thousands of dollars) (rounded)	504	628	1,129
Annual gross freight expense/vessel (thousands of dollars)	2,477	3,666	7,849
Number of tankers required	312.9	389.9	301.5
Total gross revenue (millions of dollars)	792	1,429	2,366

78-255 O - 72 - 21

APPENDIX IX-A

ESTIMATE OF FUEL EXPENSE (1)

	Fuel consumption/voyage (deadweight tons)			Number of voyages per year	Annual fuel consumption/tanker (deadweight tons)			Average fuel price (dollar per ton) ("C"/IFU)	Fuel cost per tanker per year (thousands of deadweight tons)		
	60,000	100,000	250,000		60,000	100,000	250,000		60,000	100,000	250,000
Lagos/USNH	1,920	2,450	4,560	11.7	22,500	28,700	53,400	24.24/24.88	560	710	1,290
Djakarta/L.A	3,060	3,910	7,320	7.6	23,300	29,700	55,600	23.39/25.05	580	740	1,300
Essider/USNH	1,800	2,300	4,270	12.4	22,300	28,500	52,900	22.37/23.65	530	670	1,180
Ras Tanura/L.A	4,350	5,580	10,480	5.4	23,500	30,100	56,600	20.65/22.31	520	670	1,170
Ras Tanura/USNH	4,510	5,780	10,850	5.2	23,500	30,100	56,400	19.83/20.47	480	620	1,120
Ras Tanura/USG	4,700	6,020	11,310	5.0	23,500	30,100	56,600	19.83/20.47	480	620	1,120
Puerto La Cruz/USNH	760	970	1,760	26.1	19,800	25,300	45,900	20.66/22.18	440	560	950
Puerto La Cruz/USG	790	1,000	1,830	25.4	20,100	25,400	46,500	20.66/22.18	450	560	960

Note: Estimate of fuel consumption is based on a 70-ton per day and 90-ton per day consumption of intermediate fuel for the 2 smaller vessels while steaming and 170-ton per day consumption of Bunke "C" for the VLCC. Fuel consumption in port is estimated at 75 tons for all vessels.

APPENDIX IX-B

ESTIMATE OF FUEL EXPENSE (2)

	Deadweight tons								
	Fuel cost per tanker per year (thousands of dollars)			Number of tankers employed			Total fuel expense (millions of dollars)		
	60,000	100,000	250,000	60,000	100,000	250,000	1975	1980	1985
Lagos/USNH	560	710	1,290	14.5	8.6	3.4	8.1	6.1	4.4
Djakarta/L.A	580	740	1,300	33.7	13.4	8.0	19.5	9.9	10.4
Essider/USNH	530	670	1,180	13.7	12.3	4.9	7.3	8.2	5.8
Ras Tanura/L.A	520	670	1,170	79.3	18.9	18.8	41.2	12.7	22.0
Ras Tanura/USNH	480	620	1,120	66.2	88.8	54.8	31.8	55.1	61.4
Ras Tanura/USG	480	620	1,120	86.2	236.2	207.7	41.4	146.4	232.6
Puerto La Cruz/USNH	440	560	950	19.2	5.8	----	8.4	3.2	----
Puerto La Cruz/USG	450	560	960	----	5.9	3.9	----	3.3	3.7
Total				312.8	389.9	301.5	157.7	244.9	340.3

APPENDIX X

ESTIMATE OF TOTAL PORT CHARGES

	Voyages per year per ship	Number of ships			Total number of voyages			Port charges per voyage (thousands of dollars)			Total port charges (millions of dollars)		
		1975	1980	1985	1975	1980	1985	1975	1980	1985	1975	1980	1985
Lagos/USNH	11.7	14.5	8.6	3.4	170	101	40	8	13.5	20.0	1.4	1.4	0.8
Djakarta/L.A	7.6	33.7	13.4	8.0	256	102	61	7	12	22.5	1.8	1.2	1.4
Essider/USNH	12.4	13.7	12.3	4.9	170	153	61	12	17.5	24.0	2.0	2.7	1.5
Ras Tanura/L.A	5.4	79.3	18.9	18.8	428	102	102	8	13.5	25.0	3.4	1.4	2.6
Ras Tanura/USNH	5.2	66.2	88.8	54.8	344	462	285	8	13.5	25.0	2.8	6.2	7.1
Ras Tanura/USG	5.0	86.2	236.2	207.7	431	1,181	1,039	8	13.5	25.0	3.4	15.9	26.0
Puerto La Cruz/USNH	26.1	19.3	5.8	----	504	151	----	8	13.5	22.0	4.0	2.0	----
Puerto La Cruz/USG	25.4	----	5.9	3.9	----	150	99	8	13.5	22.0	----	2.0	2.2
Total		312.9	289.9	301.5	2,303	2,402	1,687				18.8	32.8	41.6

APPENDIX XI

ESTIMATE OF OTHER LEAKAGES (60,000 DWT)

[In thousands]

	U.S.-flag tankers			Foreign-flag tankers		
	Total expense	Spent in United States	Spent abroad	Total expense	Spent in United States	Spent abroad
Daily operating expense:						
Wages	$2,750	$2,550	$200	$780	$50	$730
Subsistence	125	110	15	100	20	80
Stores and supplies	275	225	50	200	50	150
M. & R.	500	500		275	50	225
Insurance	900	450	450	500	125	375
All other	150	125	25	125	25	100
Total	4,700	3,960	740	1,980	320	1,660

Estimated leakage due to:	*Yearly for each ship*
Increase in spending by U.S. flag tankers abroad $740/day or	$270,000
Decrease in spending by foreign flag tankers in United States $320/day or	117,000
Total	387,000

Total number of vessels affected by substitution: 156.5 offset to BOP impact equals $60 million.

APPENDIX XII

ESTIMATE OF OTHER LEAKAGES, 100,000 DEADWEIGHT TONS

	U.S.-flag tankers			Foreign-flag tankers		
	Total expense	Spent in United States	Spent abroad	Total expense	Spent in United States	Spent abroad
Daily operating expense:						
Wages	$2,800	$2,600	$200	$800	$50	$750
Subsistence	130	115	15	100	20	80
Stores and supplies	300	240	60	225	55	170
M. & R.	600	600		350	60	290
Insurance	1,100	550	550	1,000	250	750
All other	160	130	30	150	25	125
Total	5,090	4,235	855	2,625	460	2,165

Estimated leakage due to:	*Yearly for each ship*
Increase in spending by U.S.-flag tankers abroad $855/day or	$312,000
Decrease in spending by foreign-flag tankers in United States $460/day or	168,000
Total	480,000

Total number of vessels affected by subsection: 195 Offset to BOP Impact = $94 million.

APPENDIX XIII

ESTIMATE OF OTHER LEAKAGES, 250,000 DEADWEIGHT TONS

	U.S.-flag tankers			Foreign-flag tankers		
	Total expense	Spent in United States	Spent abroad	Total expense	Spent in United States	Spent abroad
Daily operating expense:						
Wages	$2,900	$2,680	$220	$820	$50	$770
Subsistence	135	120	51	100	20	80
Stores and supplies	375	300	75	325	75	250
M. & R.	900	900		550	75	475
Insurance	4,500	2,250	2,250	3,800	950	2,850
All other	225	190	35	200	30	170
Total	9,035	6,440	2,595	5,795	1,200	4,595

	Yearly for each ship
Estimated leakage due to:	
Increase in spending by U.S. tankers abroad, $2,595/day or	$947,000
Decrease in spending by foreign flag tankers in United States, $1,200/day or	438,000
Total	1,385,000

Total number of vessels affected: 150.8 offset to BOP impact = $209 million.

APPENDIX XIV

SUMMARY OF BALANCE-OF-PAYMENTS IMPACT

[In millions of dollars]

	1975	1980	1985
Gross revenue	792	1,429	2,366
50 percent of gross revenue	396	715	1,183
Less:			
50 percent of fuel expense	79	122	170
50 percent of port charges	9	16	21
Other leakages	60	94	209
BOP impact	248	483	783

Senator SPONG. Mr. Philip Loree, chairman, American Committee for Flags of Necessity.

STATEMENT OF PHILIP J. LOREE, CHAIRMAN, AMERICAN COMMITTEE FOR FLAGS OF NECESSITY; ACCOMPANIED BY LAURENCE LONDON, EXECUTIVE SECRETARY; AND WILLIAM E. FAGEN, PUBLIC RELATIONS COUNSEL

Mr. LOREE. Mr. Chairman, I am Philip J. Loree, chairman of the American Committee for Flags of Necessity. With me today are our executive secretary, Mr. Laurence London, and Mr. William Fagen, our public relations counsel. The American Committee for Flags of Necessity is a trade association whose members are major American companies controlling 91 percent of the Liberian and Panamanian registered tanker tonnage in the U.S. effective control fleet. These same companies also own or operate half of all privately owned tanker tonnage under the American flag. I want to thank you for this oppor-

tunity to express our opposition to S. 3404, a bill which would impose a mandatory flag quota on U.S. commercial oil imports.

I am submitting to your committee at this time a supplemental statement setting forth in detail the basic reasons why we believe S. 3404 is ill advised and unjustifiable. These reasons are: (1) It is not required by the national security, (2) it would subvert a principal purpose of the Merchant Marine Act of 1970, (3) it would result in unnecessary increased transportation costs, and (4) it would have harmful effects on international shipping and free trade among nations.

Because there has been a great deal of confusion and misunderstanding as to the increased costs inherent in the proposed legislation and the impact of those costs on consumers, I propose to focus my presentation today on the cost ramification of S. 3404. In doing this, I do not mean to minimize the other compelling arguments against S. 3404 which are fully outlined in my supplemental statement and which, I am sure, your committee will carefully consider.

Maritime Administrator Gibson has correctly described preference cargoes as "an extremely expensive and * * * relatively inefficient system of indirect subsidy." The same comment could be applied to a mandatory flag quota, imposing national flag preferences on commercial imports of oil. S. 3404 would create an artificial, captive market for American-flag tankers and consequently, would encourage escalating premium rates, inefficient employment of tankers and spiraling labor and other costs—all without the moderating effect of foreign competition which was purposefully built into the subsidy provisions of the Merchant Marine Act of 1970.

Some indication of the disproportionate costs likely to result from a mandatory allocation of commercial cargoes is found in the rate differentials between American-flag and foreign-flag vessels carrying Government generated grain cargoes under the Cargo Preference Act of 1954, which S. 3404 seeks to amend. As you know, under the 1954 act, American-flag ships are guaranteed 50 percent of the Government generated cargoes, and thus are insulated from foreign competition with respect to that portion of the trade. Appendix C, which is attached to my supplemental statement, shows comparisons of published charter rates for single voyages of American-flag and foreign-flag vessels made during the same weeks, carrying the same types and substantially the same amounts of cargoes, from and to the same ports.

To cite just one of the comparisons shown in this study: During the week of August 7, 1971, a charter was fixed for a British-flag dry cargo vessel, *London Citizen*, to carry 10,000 tons of wheat from the U.S. gulf to Saigon at a rate of $13 per ton. During the very same week a charter for the identical cargo and ports was fixed for the American-flag dry cargo ship, *Green Island*, at $45.50 a ton. The result: U.S. taxpayers paid an additional $325,000 for the American-flag ship—for a voyage of approximately 35 days. It should be emphasized, as the other comparisons in appendix C verify, that this is not an isolated example.

As you are aware, oil has never been a Government generated preference cargo and consequently similar comparisons for tanker voyages in the oil trades are not available. However, tankers have engaged in the carriage of preference grain cargoes, and the differentials between American and foreign rates are equally as disproportionate as those

for dry cargo vessels. For instance, as shown in appendix C, the $28.25 per ton rate fixed during the week of May 24, 1969, for the American-flag tanker, *Hess Trader*, carrying 23,000 tons of heavy grain from U.S. gulf to Bombay was almost four times the $7.20 per ton rate fixed during the same week for the Swedish tanker, *Frithiod*, carrying 22,000 tons of heavy grain between the same ports.

I would like to point out that it has been stated earlier by witnesses that the Cargo Preference Act of 195 has a requirement that the rates for American-flag tankers must be fair and reasonable. But that is qualified to the extent that the rates must be fair and reasonable for American-flag tankers. Now, the bill we are talking about today, S. 3404, must be taken in the context of the supply and demand for American-flag tankers, if this bill were enacted.

Basically, at the moment, we have about 530 T2 equivalents in the American-flag tanker fleet. To carry 50 percent of oil imports and to handle our coastwise commitments would require about 640 T2 equivalents. This means that we immediately would have an imbalance between supply and demand, and I think that immediately we could count on the fact that rates in the domestic trades would be driven up as well as rates in the import trades.

Obviously it is necessary to look beyond such rate differentials under the 1954 act to put a price tag on an oil import flag quota. We estimate that if the provisions of S. 3404 were applied to U.S. commercial oil imports the total increased transportation costs through 1980 would be in the neighborhood of $5 billion.

This estimate is made on the basis of what we believe are reasonable and perhaps conservative assumptions, including the following:

(1) That American and foreign ship operating and shipbuilding costs will rise at a level rate of only 5 percent per year over the next 9 years;

(2) That premium rates for American flag tankers in this captive market will somehow not exceed 10 percent of the normal cost of employing these vessels—this I might add is a very conservative assumption in view of the disproportionate rates for preference cargoes mentioned earlier;

(3) That U.S. port and terminal facilities will be available in the late 1970's to accommodate 250,000 deadweight ton tankers;

(4) That approximately 60 tankers of 50,000 deadweight tons and 140 tankers of 75,000 deadweight tons would be employed to transport 50 percent of our oils imports by the mid 1970's and thereafter 30 supertankers of 250,000 deadweight tons would be built to carry the escalating oil imports through 1980;

(5) That these American flag vessels will be built and repaired in the U.S. shipyards;

(6) That inflexibilities in the use and routing of these American flag tankers will create inefficiencies resulting in cost increases limited to 2 percent of total transportation costs—this is also a very conservative estimate—and finally

(7) That, as other nations seek to emulate such discriminatory legislation, increases in the cost of the foreign flag carriage of the remaining 50 percent of U.S. oil imports will not exceed 10 percent of normal foreign flag costs.

The last mentioned assumption merits special and careful consideration. If the producing countries of the world followed our example and found it expedient to place their own national flag quotas on their oil exports to the United States, the total costs of implementing S. 3404 could rise well above the previously mentioned $5 billion through 1980.

American consumers may well question this enormous and unnecessary price tag and its inflationary effects, particularly when justification is lacking in terms of national security and when we have already committed ourselves to underwriting an expansive 10-year maritime program under the Merchant Marine Act of 1970.

The proponents of a mandatory flag quota on oil imports would have us believe that it is possible to get something for nothing. Their spokesman, Mr. Ran Hettena, senior vice president of Maritime Overseas Corp., made that claim here today.

Mr. Hettena's cost argument has been flatly contradicted by the Department of the Interior, the Government agency most familiar with the oil import program. In fact, it seems somewhat strange to me that your committee is here listening to Mr. Hettena, a shipowner, telling you about the oil import program, and listening to me, a representative of a shipowners' trade association, also telling you about the oil import program.

I will go with the Department of Interior. In a letter dated April 3, 1972, to Representative Garmatz, chairman of the House Merchant Marine and Fisheries Committee, Hollis M. Dole, Assistant Secretary of the Interior, advised that:

> The Department of the Interior believes that an increase in the cost of transporting foreign oil to our country will result in an increase in prices to consumers.

Senator SPONG. The Department of Interior has been invited to testify in these hearings and thus far has declined. I would also like the record to show that the chairman would welcome testimony from the Department of Interior and will again urge them to appear. I am glad that you are here as their proxy, but——

Mr. LOREE. I feel like a surrogate secretary.

Senator SPONG. That is all right. Thank you.

Mr. LOREE. Mr. Dole further pointed out that Mr. Hettena's own statistics would result in overall average increased costs of 23 cents per barrel on imported oil, and predicted future increased costs close to 50 cents per barrel, again assuming the use of Mr. Hettena's own estimates. Mr. Dole summarized the Department of the Interior's position as follows:

> In summary, an increase in transportation costs due to a requirement for the use of U.S.-flag ships will result in an increase in the price of residual fuel oil imports which represent 94 percent of our east coast consumption. It will also result in a long-term increase in raw material costs to all refineries in the United States which we believe will have to be passed on to consumers * * *.

While I believe that the Department of the Interior's analysis effectively answers the cost question, I would like to offer some additional comments on the argument advanced by Mr. Hettena. As you can appreciate, these comments are my own and do not necessarily reflect the views of ACFN member companies.

It seems to me that the basic failure in Mr. Hettena's analysis is his contention that the higher cost domestic crude alone determines prod-

uct pricing. In his view, allocation of low-cost foreign crude imports results in a "windfall" profit and nothing more.

Mr. Hettena bases his argument on the premise that the increased costs resulting from enactment of a mandatory flag quota would be borne by the recipients of these allocations or "tickets" as they are sometimes called. But he overlooks the fact that the great bulk of our current offshore oil imports has nothing to do with the "tickets" or the purported "windfall" which he sees as absorbing the billions of dollars in additional transportation costs.

For example, residual fuel oil imports are made, so I understand, under licenses which are readily available upon application and thus, unlike "tickets" for crude oil, have no exchange value whatsoever. Accordingly, any added transportation costs connected with such imports are not covered by Mr. Hettena's "ticket" theory and thus cannot be absorbed by any "windfall," assuming arguendo that such a "windfall" exists.

Based on data published by the National Petroleum Council, waterborne petroleum imports which have no "ticket" value presently make up about 60 percent of the offshore imports which would be subject to S. 3404, and will constitute about 50 percent of total offshore petroleum imports in 1975. I understand that the figure for 1980 is 45 percent.

Thus even at first glance, Mr. Hettena's "ticket" theory is 60 percent invalid today and will be 50 percent invalid by 1975. I submit that it is equally invalid with respect to imports of crude oil which presently are subject to "tickets."

One does not have to be an expert on the oil import program to recognize that Mr. Hettena's analysis overlooks a rather basic fact, and that is that as a result of the allocation or "ticket" system the aggregate cost of the crude input into a given refinery is actually a "mix" of the costs of both domestic and foreign crudes. This aggregation of "mix" of crudes is applicable to all refiners, even to the inland refiner who exchanges his "tickets."

Because "tickets" are allocated on the basis of the refinery's crude input, any refiner, large or small, who runs crude through his refinery to make products knows that he will—either directly through the use of foreign oil or indirectly through exchanges of "tickets"—share in the most savings resulting from crude imports. The end result is that the cost of the product produced by the refiner reflects a "mix" or a weighted average of the costs of both domestic and foreign crudes, not just the cost of the domestic crude as Mr. Hettena contends.

This conclusion is actually supported by Mr. Hettena's own statistics. Chart I attached to his March 8, 1972, statement before the House Merchant Marine and Fisheries Committee is intended to show dollar per barrel relationships between refined product prices, domestic crude oil prices and foreign transportation costs, including the average cost of all charters—term and voyage—for foreign vessels. A copy of this chart is attached to my statement.

It is quite remarkable to observe from Mr. Hettena's chart that from the last quarter of 1969 through the third quarter of 1970 domestic crude prices remained constant, while refined product prices increased as average foreign charter costs increased.

Similarly, the chart shows that domestic crude oil prices remained constant through all of 1971 while refined product prices were declining as average foreign charter costs were declining.

Thus, Mr. Hettena's chart is compelling evidence that he is wrong on two counts. His own statistics show that refined product prices are not controlled solely by the cost of domestic crude. Equally important, his statistics show that there has been a remarkable parallel between refined product prices and average foreign transportation costs in the past few years.

In assessing the validity of Mr. Hettena's negative consumer cost theory, I also believe that we should not lose sight of the fact that enactment of S. 3404 would result in increased transportation costs in the billions of dollars over the coming years. As I mentioned earlier, a conservative estimate puts this price tag at $5 billion through 1980. Thereafter the increased costs of S. 3404 would total as much as $1 billion a year.

In considering cost increases of this magnitude, I submit that certain other factors cannot be overlooked. First, the cost increases inherent in S. 3404 are permanent increases which are not equitable with temporary or cyclical cost increases, shipping or otherwise, which conceivably could be absorbed by industry. Second, these are increases with no corresponding increases in productivity of efficiency which might make it reasonable to believe that costs could be absorbed in lieu of increased prices to the consumer. Third, these added costs would affect the refining industry across the board in much the same fashion, for example, that increased costs are applied to an entire industry upon settlement of an industrywide union contract.

As consumers, all of us are quite familiar with the likely impact of across-the-board cost increases applied to a given industry. If the United Automobile Workers Union wins a big wage settlement or if the Government requires the automobile industry to install high cost safety items, those increased costs are usually passed on to consumers, regardless of the general profit picture for the automobile manufacturers and regardless of the auto industry's highly competitive nature.

There is no one who can convincingly show that the oil industry is any different when permanent cost increases amounting to billions of dollars, without any increases in productivity or efficiency, are imposed on an industrywide basis. This is hardly surprising because it is rather difficult to believe that any industry could somehow absorb billions of dollars in increased costs at the expense of its shareholders and its ever-increasing needs for capital. To believe otherwise would be contrary not only to human experience but to commonsense.

A similar conclusion has been offered by the Chase Manhattan Bank, as reported in the Congressional Record of March 14, 1972 (S. 3946):

> Unfortunately, there is a rather widespread notion that petroleum companies should absorb rising taxes—and other increasing costs—without passing them on to consumers through higher prices, the bank says. "But the proponents of that curious idea do not explain how such a feat of magic can be performed."
>
> It adds that in the long run, "all costs must eventually be recovered through adequate prices, if a business activity is to remain viable. There simply is no other alternative."

I would now like to comment briefly on some of the other reasons why we are convinced that S. 3404 is not in the national interest.

We do not believe that it is possible to establish any national security justification for S. 3404. The fact is that in the event of a national

emergency, the combined American flag and U.S. effective control tanker fleet is fully capable of meeting national security needs. This combined fleet totals more than 24 million deadweight tons and presently carries about 25 percent of U.S. offshore oil imports.

Far more importantly, in an emergency situation, American flag and U.S. effective control tankers could respond with a carrying capacity equal to more than one and one-half times that required for U.S. oil imports and coastwise shipments. There is every reason to believe that this combined fleet, which today accounts for one out of every 7 deadweight tons of tanker tonnage in the entire free world, will continue to be able to provide all of our Nation's tanker needs, at home and abroad, in a national emergency.

It should be added that on at least three different occasions since the advent of the oil import program certain groups have contended that a flag quota on oil imports was mandated by national security considerations. This national security argument was not accepted by the Office of Civil and Defense Mobilization in 1960, by the President's Petroleum Study Committee chaired by the then chairman of the Office of Emergency Planning, in 1962 and by the Cabinet task force on oil import control in 1970.

We also believe that it is impossible to reconcile S. 3404 with the purposes and objectives of the Merchant Marine Act of 1970 which became effective only 18 months ago. One of the basic purposes of the 1970 act was, through direct subsidization, to create an internationally competitive tanker and bulk carrier fleet, with the concurrrent phasing out of the inflated premium rates on preference cargoes. S. 3404 would accomplish just the opposite. It would revive and enormously expand the very system that produced premium rates on preference cargoes. It would result in an internationally noncompetitive tanker fleet, lacking initiative and the need to upgrade and improve operational efficiency.

The enactment of the Merchant Marine Act of 1970 was one of those rare occasions when maritime legislation had the solid and almost unanimous support of the administration, the Congress and the maritime industry. Its basic approach provides the means for building and operating a competitive American-flag tanker fleet in international shipping. While it is apparent that the 1970 act has some drawbacks in terms of producing such a fleet, the answer is not to ignore the act but rather to come up with constructive amendments to make it work.

Finally, it cannot be emphasized too strongly that S. 3404 would undermine long established principles of international shipping and free trade. The bill would create the same type of discrimination which our country has consistently opposed when other nations have sought to reserve a portion of their export or import trades for their own national flag vessels. S. 3404 would violate, so the State Department advises, more than 30 treaties concluded with other nations, and could only invite retaliatory measures against American merchant shipping. At the same time, its enactment could only lead to similar actions by other nations, particularly the oil exporting countries, some of which have already indicated an interest in expanding their own national flag tanker fleets. The end result would be to convert international shipping into a series of one-way protected trades, a situation which could only stifle free and open commerce among nations.

I hope that my comments this morning will be helpful to you in your deliberations on S. 3404, and I will try to answer any questions you may have at this time.

Senator SPONG. Thank you very much, Mr. Loree. We will place your complete statement into the record, and we appreciate your testimony.

I am struck by a seeming contradiction. You assert that the U.S.-flag carriage of oil is not required by our security since we can rely upon the effective control fleet. Then you urge that we use the direct subsidies of the Merchant Marine Act to build a tanker fleet. If U.S.-flag tankers are not needed for our security, why should we spend money to subsidize their construction and operation?

Mr. LOREE. Well, I have never said, Mr. Chairman, that United States tankers are not required by our national security. I think that it is more of a question of how many tankers we can afford, in terms of our national priorities.

If we took away the U.S.-flag tankers, the U.S. effective control tankers would not be sufficient to handle our national security needs. The two fleets together, with U.S. effective control fleet as a supplement or adjunct to the American flag fleet, are capable at this time of handling national security requirements. It is imperative that we build an American flag tanker fleet as well as keep and continue the U.S. effective control fleet, to continue to meet these requirements.

Senator SPONG. We have received detailed estimates of the cost of the legislation from those who favor the bill and from the Department of Commerce. These estimates are much lower than your own. Would you provide a detailed statement of the manner in which you arrived at your estimates, so we might compare and evaluate it.

Mr. LOREE. I certainly would be pleased to do that, Mr. Chairman. If possible, I would like, if you are willing, to have the commerce estimates, so I could comment on those.

Senator SPONG. We would be pleased to furnish you with those, in order that you might answer our question. I noted that you cited the Cabinet task force on oil. As you know, the task force proposed abolishing the mandatory oil import quota program. Do you concur in that proposal?

Mr. LOREE. Do I concur in it? Well, my understanding of the program, Mr. Chairman, as an individual, is that it was founded and grounded on a national security finding. I accept that. I assume that officials in our Executive Branch constantly review this, and if the time came when they deemed the national security interests did not require such a program, I would go along with that. I really do not know enough about the national security finding to be an expert on it. But as a citizen, that is my outlook. There has been a national security finding and I will go along with that.

Senator SPONG. Are you empowered in your representation here this morning to speak for anyone other than yourself with respect to that?

Mr. LOREE. I should point out our association is not like the American Petroleum Institute. It is made up of different kinds of companies, independent tanker companies, a nonoil company and oil companies. We do not have any position as an association on the oil import program.

Senator SPONG. Thank you, Mr. Loree. We may submit additional questions to you, along with the one dealing with your cost estimates. And we will provide you with that information. We are very appreciative of your appearance here this morning.

Mr. LOREE. Thank you, Mr. Chairman.

(The statement follows:)

STATEMENT OF PHILIP J. LOREE, CHAIRMAN, AMERICAN COMMITTEE FOR FLAGS OF NECESSITY

My name is Philip J. Loree. I am Chairman of the American Committee for Flags of Necessity (ACFN), a trade association whose members are major American companies controlling 91% of the Liberian and Panamanian registered tanker tonnage in the U.S. effective control fleet. These same companies also own or operate half of all privately owned tanker tonnage under the American flag. I want to thank you for this opportunity to express our opposition to S. 3404, a bill which would impose a mandatory flag quota on U.S. commercial oil imports.

I am submitting to your Committee at this time a supplemental statement setting forth in detail the basic reasons why we believe S. 3404 is ill-advised and unjustifiable. These reasons are: (1) it is not required by the national security, (2) it would subvert a principal purpose of the Merchant Marine Act of 1970, (3) it would result in unnecessary increased transportation costs and (4) it would have harmful effects on international shipping and free trade among nations.

Because there has been a great deal of confusion and misunderstanding as to the increased costs inherent in the proposed legislation and the impact of those costs on consumers, I propose to focus my presentation today on the cost ramifications of S. 3404. In doing this, I do not mean to minimize the other compelling arguments against S. 3404 which are fully outlined in my supplemental statement and which, I am sure, your Committee will carefully consider.

Maritime Administrator Gibson has correctly described preference cargoes as "an extremely expensive and . . . relatively inefficient system of indirect subsidy." The same comment could be applied to a mandatory flag quota, imposing national flag preferences on commercial imports of oil. S. 3404 would create an artificial, captive market for American flag tankers and consequently, would encourage escalating premium rates, inefficient employment of tankers and spiraling labor and other costs—all without the moderating effect of foreign competition which was purposefully built into the subsidy provision of the Merchant Marine Act of 1970.

Some indication of the disproportionate costs likely to result from a mandatory allocation of commercial cargoes is found in the rate differentials between American flag and foreign flag vessels carrying government generated grain cargoes under the Cargo Preference Act of 1954, which S. 3404 seeks to amend. As you know, under the 1954 Act American flag ships are guaranteed 50% of the government generated cargoes, and thus are insulated from foreign competition with respect to that portion of the trade. Appendix C, which is attached to my supplemental statement, shows comparisons of published charter rates for single voyages of American flag and foreign flag vessels made during the same weeks, carrying the same types and substantially the same amounts of cargoes, from and to the same ports.

To cite just one of the comparisons shown in this study: during the week of August 7, 1971 a charter was fixed for a British flag dry cargo vessel, LONDON CITIZEN, to carry 10,000 tons of wheat from the U.S. Gulf to Saigon at a rate of $13.00 per ton. During the very same week a charter for the identical cargo and ports was fixed for the American flag dry cargo ship, GREEN ISLAND, at $45.50 a ton. The result: U.S. taxpayers paid an additional $325,000 for the American flag ship—for a voyage of approximately 35 days. It should be emphasized, as the other comparisons in Appendix C verify, that this is not an isolated example.

As you are aware, oil has never been a government generated preference cargo and consequently similar comparisons for tanker voyages in the oil trades are not available. However, tankers have engaged in the carriage of preference grain cargoes, and the differentials between American and foreign rates are equally as disproportionate as those for dry cargo vessels. For instance, as shown in Appendix C, the $28.25 per ton rate fixed during the week of May 24, 1969 for the

American flag tanker, HESS TRADER, carrying 23,000 tons of heavy grain from U.S. Gulf to Bombay was almost four times the $7.20 per ton rate fixed during the same week for the Swedish tanker, FRITHIOD, carrying 22,000 tons of heavy grain between the same ports.

Obviously it is necessary to look beyond such rate differentials under the 1954 Act to put a price tag on an oil import flag quota. We estimate that if the provisions of S. 3404 were applied to U.S. commercial oil imports the total increased transportation costs through 1980 would be in the neighborhood of five billion dollars.

This estimate is made on the basis of what we believe are reasonable and perhaps conservative assumptions, including the following: (1) that American and foreign ship operating and shipbuilding costs will rise at a level rate of only 5% per year over the next 9 years; (2) that premium rates for American flag tankers in this captive market will somehow not exceed 10% of the normal cost of employing these vessels (this I might add is a very conservative assumption in view of the disproportionate rates for preference cargoes mentioned earlier); (3) that U.S. port and terminal facilities will be available in the late 1970's to accommodate 250,000 deadweight ton tankers; (4) that approximately 60 tankers of 50,000 deadweight tons and 140 tankers of 75,000 deadweight tons would be employed to transport 50% of our oil imports by the mid 1970's and thereafter 30 supertankers of 250,000 deadweight tons would be built to carry the escalating oil imports through 1980; (5) that these American flag vessels will be built and repaired in U.S. shipyards; (6) that inflexibilities in the use and routing of these American flag tankers will create inefficiencies resulting in cost increases limited to 2% of total transportation costs (this is also a very conservative estimate); and finally (7) that, as other nations seek to emulate such discriminatory legislation, increases in the cost of the foreign flag carriage of the remaining 50% of U.S. oil imports will not exceed 10% of normal foreign flag costs.

The last mentioned assumption merits special and careful consideration. If the producing countries of the world followed our example and found it expedient to place their own national flag quotas on their oil exports to the United States, the total costs of implementing S. 3404 could rise well above the previously mentioned five billion dollars through 1980.

American consumers may well question this enormous and unnecessary price tag and its inflationary effects, particularly when justification is lacking in terms of national security and when we have already committed ourselves to underwriting an expansive 10-year maritime program under the Merchant Marine Act of 1970.

The proponents of a mandatory flag quota on oil imports would have us believe that it is possible to get something for nothing. Their spokesman, Mr. Ran Hettena, Senior Vice President of Maritime Overseas Corporation, contended before the House Merchant Marine and Fisheries Committee on March 8, 1972 that "an increase in transportation costs from using American ships will not, and indeed can not, increase the price of oil to the consumer. . . ."

Mr. Hettena's cost argument has been flatly contradicted by the Department of the Interior, the government agency most familiar with the oil import program. In a letter dated April 3, 1972 to Representative Edward A. Garmatz, Chairman of the House Merchant Marine and Fisheries Committee, Hollis M. Dole, Assistant Secretary of the Interior, advised that:

"The Department of the Interior believes that an increase in the cost of transporting foreign oil to our country will result in an increase in prices to consumers."

Mr. Dole further pointed out that Mr. Hettena's own statistics would result in overall average increased costs of 23¢ per barrel on imported oil, and predicted future increased costs close to 50¢ per barrel, again assuming the use of Mr. Hettena's own estimates. Mr. Dole summarized the Department of the Interior's position as follows:

"In summary, an increase in transportation costs due to a requirement for the use of U.S.-flag ships will result in an increase in the price of residual fuel oil imports which represent 94 percent of our East Coast consumption. It will also result in a long-term increase in raw material costs to *all* refineries in the United States which we believe will have to be passed on to consumers. . . ."

While I believe that the Department of the Interior's analysis effectively answers the cost question, I would like to offer some additional comments on the argument advanced by Mr. Hettena. As you can appreciate, these comments are my own and do not necessarily reflect the views of ACFN member companies.

It seems to me that the basic failure in Mr. Hettena's analysis is his contention that the higher cost domestic crude alone determines product pricing. In his view, allocation of low cost foreign crude imports results in a "windfall" profit and nothing more.

Mr. Hettena bases his argument on the premise that the increased costs resulting from enactment of a mandatory flag quota would be borne by the recipients of these allocations or "tickets" as they are sometimes called. But he overlooks the fact that the great bulk of our current offshore oil imports has nothing to do with the "tickets" or the purported "windfall" which he sees as absorbing the billions of dollars in additional transportation costs.

For example, residual fuel oil imports are made, so I understand, under licenses which are readily available upon application and thus, unlike "tickets" for crude oil, have no exchange value whatsoever. Accordingly, any added transportation costs connected with such imports are not covered by Mr. Hettena's "ticket" theory and thus cannot be absorbed by any "windfall," assuming arguendo that such a "windfall" exists.

Based on data published by the National Petroleum Council, waterborne petroleum imports which have no "ticket" value presently make up about 60% of the offshore imports which would be subject to S. 3404, and will constitute about 50% of total offshore petroleum imports in 1975.

Thus, even at first glance, Mr. Hettena's "ticket" theory is 60% invalid today and will be 50% invalid by 1975. I submit that it is equally invalid with respect to imports of crude oil which presently are subject to "tickets."

One does not have to be an expert on the oil import program to recognize that Mr. Hettena's analysis overlooks a rather basic fact, and that is that as a result of the allocation or "ticket" system the aggregate cost of the crude input into a given refinery is actually a "mix" of the costs of both domestic and foreign crudes. This aggregation or "mix" of crudes is applicable to all refiners, even to the inland refiner who exchanges his "tickets."

Because "tickets" are allocated on the basis of the refinery's crude input, any refiner, large or small, who runs crude through his refinery to make products knows that he will—either directly through the use of foreign oil or indirectly through exchanges of "tickets"—share in the cost savings resulting from crude imports. The end result is that the cost of the product produced by the refiner reflects a "mix" or a weighted average of the costs of both domestic and foreign crudes, not just the cost of the domestic crude as Mr. Hettena contends.

This conclusion is actually supported by Mr. Hettena's own statistics. Chart I attached to his March 8, 1972 statement before the House Merchant Marine and Fisheries Committee is intended to show dollar per barrel relationships between refined product prices, domestic crude oil prices and foreign transportation costs, including the average cost of all charters (term and voyage) for foreign vessels. A copy of this chart is attached to my statement.

It is quite remarkable to observe from Mr. Hettena's chart that from the last quarter of 1969 through the third quarter of 1970 domestic crude priecs remained constant, while refined product prices increased as average foreign charter costs increased.

Similarly, the chart shows that domestic crude oil prices remained constant through all of 1971 while refined product prices were declining as average foreign charter costs were declining.

Thus, Mr. Hettena's chart is compelling evidence that he is wrong on two counts. His own statistics show that refined product prices are not controlled solely by the cost of domestic crude. Equally important, his statistics show that there has been a remarkable parallel between refined product prices and average foreign transportation costs in the past few years.

In assessing the validity of Mr. Hettena's negative consumer cost theory, I also believe that we should not lose sight of the fact that enactment of S. 3404 would result in increased transportation costs in the billions of dollars over the coming years. As I mentioned earlier, a conservative estimate puts this price tag at $5 billion through 1980. Thereafter the increased costs of S. 3404 would total as much as one billion dollars a year.

In considering cost increases of this magnitude, I submit that certain other factors cannot be overlooked. First, the cost increases inherent in S. 3404 are permanent increases which are not equatable with temporary or cyclical cost increases, shipping or otherwise, which conceivably could be absorbed by industry. Second, these are increases with no corresponding increases in productivity or efficiency which might make it reasonable to believe that costs could be absorbed

in lieu of increased prices to the consumer. Third, these added costs would affect the refining industry across-the-board in much the same fashion, for example, that increased costs are applied to an entire industry upon settlement of an industry-wide union contract.

As consumers, all of us are quite familiar with the likely impact of across-the-board cost increases applied to a given industry. If the United Automobile Workers Union wins a big wage settlement or if the government requires the automobile industry to install high cost safety items, those increased costs are usually passed on to consumers, regardless of the general profit picture for the automobile manufacturers and regardless of the auto industry's highly competitive nature.

There is no one who can convincingly show that the oil industry is any different when permanent cost increases amounting to billions of dollars, without any increases in productivity or efficiency, are imposed on an industry-wide basis. This is hardly surprising because it is rather difficult to believe that any industry could somehow absorb billions of dollars in increased costs at the expense of its shareholders and its ever-increasing needs for capital. To believe otherwise would be contrary not only to human experience but to common sense.

A similar conclusion has been offered by the Chase Manhattan Bank, as reported in the Congressional Record of March 14, 1972 (S 3946):

" 'Unfortunately, there is a rather widespread notion that petroleum companies should absorb rising taxes—and other increasing costs—without passing them on to consumers through higher prices,' the banks says. 'But the proponents of that curious idea do not explain how such a feat of magic can be performed.' "

"It adds that in the long run, 'all costs must eventually be recovered through adequate prices, if a business activity is to remain viable. There simply is no other alternative.' "

I would now like to comment briefly on some of the other reasons why we are convinced that S. 3404 is not in the national interest.

We do not believe that it is possible to establish any national security justification for S. 3404. The fact is that in the event of a national emergency, the combined American flag and U.S. effective control tanker fleet is fully capable of meeting national security needs. This combined fleet totals more than 24 million deadweight tons and presently carries about 25% of U.S. offshore oil imports. Far more importantly, in an emergency situation, American flag and U.S. effective control tankers could respond with a carrying capacity equal to more than 1½ times that required for U.S. oil imports and coastwise shipments. There is every reason to believe that this combined fleet, which today accounts for one out of every seven deadweight tons of tanker tonnage in the entire free world, will continue to be able to provide all of our nation's tanker needs, at home and abroad, in a national emergency.

It should be added that on at least three different occasions since the advent of the oil import program certain groups have contended that a flag quota on oil imports was mandated by national security considerations. This national security argument was not accepted by the Office of Civil and Defense Mobilization in 1960, by the President's Petroleum Study Committee in 1962, and by the Cabinet Task Force on Oil Import Control in 1970.

We also believe that it is impossible to reconcile S. 3404 with the purposes and objectives of the Merchant Marine Act of 1970 which became effective only eighteen months ago. One of the basic purposes of the 1970 Act was, through direct subsidization, to create an internationally competitive tanker and bulk carrier fleet, with the concurrent phasing out of the inflated premium rates on preference cargoes. S. 3404 would accomplish just the opposite. It would revive and enormously expand the very system that produced premium rates on preference cargoes. It would result in an internationally non-competitive tanker fleet, lacking initiative and the need to upgrade and improve operational efficiency.

The enactment of the Merchant Marine Act of 1970 was one of those rare occasions when maritime legislation had the solid and almost unanimous support of the Administration, the Congress and the maritime industry. Its basic approach provides the means for building and operating a competitive American flag tanker fleet in international shipping. While it is apparent that the 1970 Act has some drawbacks in terms of producing such a fleet, the answer is not to ignore the Act but rather to come up with constructive amendments to make it work.

Finally, it cannot be emphasized too strongly that S. 3404 would undermine long established principles of international shipping and free trade. The bill would create the same type of discrimination which our country has consistently opposed when other nations have sought to reserve a portion of their export or import trades for their own national flag vessels. S. 3404 would violate more than thirty treaties concluded with other nations, and could only invite retaliatory measures against American merchant shipping. At the same time, its enactment could only lead to similar actions by other nations, particularly the oil exporting countries, some of which have already indicated an interest in expanding their own national flag tanker fleets. The end result would be to convert international shipping into a series of one-way protected trades, a situation which could only stifle free and open commerce among nations.

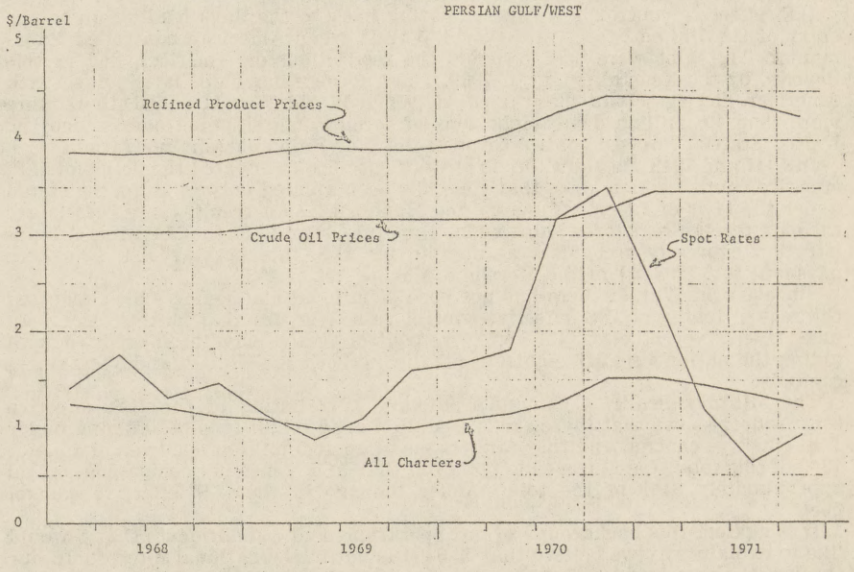
I hope that my comments this morning will be helpful to you in your deliberations on S. 3404, and I will try to answer any questions you may have at this time.

CHART I*

EAST OF CALIFORNIA CRUDE OIL AND REFINED

PRODUCT PRICES & FOREIGN TRANSPORTATION COST

PERSIAN GULF/WEST



* Reproduced from statement of Mr. Ran Hettena before House Merchant Marine and Fisheries Committee on March 8, 1972

Supplemental Statement of Philip J. Loree, Chairman American Committee for Flags of Necessity

My name is Philip J. Loree. I am Chairman of the American Committee for Flags of Necessity ("ACFN"). Our Committee is a trade association which was formed in 1958 to represent U.S. beneficial owners of vessels registered under the laws of Liberia and Panama.

I want to thank you for this opportunity to express our opposition to S. 3404, a bill which would impose a mandatory flag quota on U.S. commercial oil imports.

Our members—all of which are American companies—control almost 17 million deadweight tons of tankers and bulk carriers flying the Liberian and Panamanian flags. Two-thirds of this tonnage is controlled by integrated industrial companies and the remaining one-third is controlled by independent shipping companies.

We refer to these ships as Flags of Necessity vessels because they have made it possible for American shipowners to compete in the world's commercial bulk cargo trades, the most open and competitive segment of the entire shipping industry. Flags of Necessity vessels are competitive because they have essentially the same construction and operating costs as foreign controlled vessels which are predominant in these trades. Since available charters for commercial cargoes such as oil and ore invariably go to ships with the lowest costs and most efficient operations, unsubsidized American flag tankers and bulk carriers, with their much higher construction and operating costs, have been priced out of this international market.

Our member companies also own or operate approximately 3.9 million deadweight tons of American flag vessels. Almost all of these ships are tankers, operating primarily in the protected domestic trades. They account for approximately half of the total tonnage of the privately owned American flag tanker fleet. During the past three years our member companies have built or placed on order in U.S. shipyards upwards of 1.4 million deadweight tons of new American flag tankers.

The Liberian and Panamanian registered ships controlled by our member companies are under U.S. effective control, and consequently are available to the United States in the event of war or national emergency.

U.S. effective control is a concept dating back to the days leading up to the entry of the United States into World War II when American controlled Panamanian flag ships were used to avoid the restrictions on American flag vessels imposed by the Neutrality Act of 1939. These foreign flag ships later joined with American flag vessels in the war effort. When World War II ended, there were more than 1.8 million deadweight tons of foreign flag shipping over which the United States exercised control through the War Shipping Administration.

In 1947 and 1948 the Joint Chiefs of Staff specifically adopted the policy of U.S. effective control which since that time has been applied only to ships registered under the laws of Liberia, Panama and Honduras. As a result, these vessels are the only foreign registered ships which General Order 75 of the Maritime Administration expressly recognizes as eligible for U.S. interim war risk insurance pursuant to § 1283(a) of the Merchant Marine Act of 1936.

Since World War II there has not been a national emergency which required the requisitioning of U.S. effective control vessels or, for that matter, American flag vessels. Nevertheless, U.S. effective control vessels have been credited with aiding the nation's sealift requirements during both the Korean and Vietnamese conflicts.

The Military Sealift Command's January 1972 listing of the U.S. effective control fleet shows that there are 20.9 million deadweight tons of shipping under U.S. effective control, and that tankers make up 16.5 million deadweight tons or 79% of this total. I am pleased to point out that ACFN member companies control approximately 91% of the total tanker tonnage in the U.S. effective control fleet.

It is against this background of our operations and commitments that I would like to explain why we believe that S. 3404 is not in the national interest. In our opinion, the proposed legislation is ill-advised and unjustifiable because (1) it is not required by the national security, (2) it would subvert a principal purpose of the Merchant Marine Act of 1970, (3) it would result in unnecessary increased transportation costs and (4) it would have harmful effects on international shipping and free trade among nations.

NATIONAL SECURITY

The remarks made in introducing S. 3404 contended that the national security demanded such drastic action. We cannot agree that there is national security justification for S. 3404. There is every indication, in fact, that the United States has more than adequate tanker tonnage readily available to meet national security requirements in the foreseeable future.

At the present time there are more than 24 million deadweight tons of privately owned American flag and U.S. effective control tankers recognized by defense officials as available to meet emergency sealift needs of the United States.

The size of this combined fleet is best appreciated when it is considered that these ships represent approximately 1 out of every 7 tons of tanker tonnage in the entire free world. The carrying capacity of the combined American flag and U.S. effective control tanker fleet is larger than any of the tanker fleets of the

other principal industrialized countries of the world. For example, it is five times larger than that of the Russian tanker fleet.

Today only 1 out of every 4 tons of oil imported into the United States is transported by ships in this combined fleet. However, and far more importantly, in the event of a national emergency, this fleet could respond with a carrying capacity equal to more than one and one-half times that required for U.S. oil imports and coastwise shipments.

In terms of the future, the size and growth rate of this combined American controlled fleet is keeping pace with the nation's increasing energy needs. We estimate that at the present time there are approximately 20 million deadweight tons of such tankers on order or under construction. So long as this growth rate continues, and we have no reason to believe that it will not, the combined American flag and U.S. effective control tanker fleet will continue to be able to provide all of our nation's tanker needs, at home and abroad, in a national emergency.

One of the clearest evaluations of the adequacy of tanker tonnage available for national defense purposes was made on June 16, 1967, at the height of our Vietnam involvement, by Secretary of Defense Robert S. McNamara:

"In a full scale national emergency, we believe 'effective U.S. controlled' ships will be as available to DOD as U.S.-flag ships. (More than 80 per cent of the effective U.S. controlled fleet is tankers and bulk carriers.) We have not taken emergency actions to get these ships because we have been able to satisfy our tanker needs without doing so. (We have no need of extra bulk carriers.)

"Should requisitioning be necessary to meet our needs in worsening world conditions, we could call on up to six million additional deadweight tons of U. S. flag tankers and 11 million tons of foreign flag 'effective U.S. control' tankers. This tonnage is equal to more than 1,000 T–2 tanker equivalents. This far exceeds our most demanding defense needs, which would be about 210 T–2 equivalents . . ."

The combined American flag and U. S. effective control tanker tonnage available to the United States has increased by about 7 million deadweight tons since 1967 when the Secretary of Defense made that evaluation. We estimate that at present this total tanker tonnage is equal to about 1,550 T–2 equivalents, and that an additional 1,300 T–2 equivalents are on order or under construction.

Even assuming a marked increase in the tanker tonnage necessary to meet our national defense requirements since 1967, these increases indicate that there will be more than enough tonnage to meet those requirements.

In considering tankers and the national security, it should also be pointed out that in the past (especially at times when the tanker charter market was at a low level), some American flag tanker owners called for a flag quota on oil imports, seeking to use the oil import program as a vehicle for interests clearly outside the scope of the program. Before the Office of Civil and Defense Mobilization (now the Office of Emergency Preparedness) in 1960 and again in 1962 before the President's Petroleum Study Committee, an inter-agency group chaired by the Director of the Office of Emergency Planning, these tanker owners were unable to justify a flag quota on the grounds of national security.

Some tanker owners presented the same argument to the Cabinet Task Force on Oil Import Control in 1969. The only pertinent comment on the relationship of tankers to the national security in the detailed 400-page report submitted by the Task Force to the President in 1970 was a recommendation of the Secretary of Defense that there should be "continuous surveillance to prevent a reduction of the U.S. — or — U.S. controlled tanker fleet." The fleet has increased, not reduced, its carrying capacity since the Task Force submitted its report to the President, and, as indicated earlier, there is every reason to believe that this growth rate will continue.

At the present time there are many tanker owners, both American and foreign, suffering economically because of poor market conditions in an industry that is accustomed to a continually fluctuating market. This is an unfortunate situation, but these cyclical economic depressions cannot be viewed as imperiling the national security, and thus cannot justify anything as drastic as a discriminatory flag quota on commercial cargoes.

THE MERCHANT MARINE ACT OF 1970

We are not suggesting to your Committee that it should remain oblivious to the commercial plight of American flag tanker owners. We do suggest, however, that any relief which your Committee may deem appropriate should be afforded within the philosophy and framework of the Merchant Marine Act of 1970, which became effective only eighteen months ago.

One of the new and innovative provisions of the 1970 Act was to provide direct subsidies to tankers and other bulk carriers. In his message to Congress announcing the new maritime program, President Nixon called for "a new, direct subsidy system" for bulk carriers, "thus allowing us to phase out * * * [the] * * * premium freight rates * * *" paid to bulk carriers receiving government generated preference cargoes.

This new approach was reported upon favorably by your Committee and became one of the key provisions in the 1970 Act, which President Nixon said was designed to challenge American ship operators and seamen to "* * * take their place once again among the vigorous, competitive industries of this nation."

The legislative history of the 1970 Act is clear that one of its principal purposes was to provide a directly subsidized and internationally competitive American flag bulk carrier fleet, with the concurrent phasing out of premium rates for preference cargoes. S. 3404 would accomplish just the opposite.

The proposed legislation would amend the Cargo Preference Act of 1954 and for the first time impose national flag preferences on commercial cargoes. This could only encourage and produce an internationally noncompetitive tanker fleet, lacking initiative and the need to upgrade and improve operational efficiency. It is ironic that the proposed solution to the current commercial plight of some tanker owners in effect would (1) scrap the 1970 Act, (2) establish a new guaranteed market by eliminating foreign competition and (3) foster a condition which has contributed to an ailing U.S. maritime industry.

The tanker owners who are today asking for guaranteed commercial cargoes should, instead, be applying for direct subsidies under the 1970 Act so that they can go out and compete for these very same commercial cargoes. That is what the 1970 Act is all about. If there are reasons why subsidies are unavailable to these shipowners or why they are inadequate to enable them to compete internationally, these owners should be explaining to your Committee what these reasons are and proposing changes in the 1970 Act so that direct subsidization will be sufficient to make them internationally competitive.

INCREASED COSTS

Maritime Administrator Gibson has described preference cargoes as "an extremely expensive * * * relatively inefficient system of indirect subsidy." The same comment could be applied to a mandatory flag quota, imposing national flag preferences on commercial imports of oil. S. 3404 would create an artificial, captive market for American flag tankers and consequently, would encourage escalating premium rates, inefficient employment of tankers and spiraling labor and other costs—all without the moderating effect of foreign competition which was purposefully built into the subsidy provisions of the 1970 Act.

Some indication of the disproportionate costs likely to result from a mandatory allocation of commercial cargoes is found in the rate differentials between American flag and foreign flag vessels carrying government generated grain cargoes under the Cargo Preference Act of 1954, which S. 3404 seeks to amend. As you know, under the 1954 Act, American flag ships are guaranteed 50% of the government generated cargoes, and thus are insulated from foreign competition with respect to that portion of the trade. Appendix C, which is attached to my written statement, shows comparisons of published charter rates for single voyages of American flag and foreign flag vessels fixed during the same weeks, carrying the same types and substantially the same amounts of cargoes, from and to the same ports.

To cite just one of the comparisons shown in this study: during the week of August 7, 1971 a charter was fixed for a British flag dry cargo vessel, LONDON CITIZEN, to carry 10,000 tons of wheat from the U.S. Gulf to Saigon at a rate of $13.00 per ton. During the very same week a charter for the identical cargo and ports was fixed for the American flag dry cargo ship, GREEN ISLAND, at $45.50 a ton. The result: U.S. taxpayers paid an additional $325,000 for the American flag ship—for a voyage of approximately 35 days. It should be emphasized, as the other comparisons in Appendix C verify, that this is not an isolated example.

As you are aware, oil has never been a government generated preference cargo and consequently similar comparisons for tanker voyages in the oil trades are not available. However, tankers have engaged in the carriage of preference grain cargoes, and the differentials between American and foreign rates are equally as disproportionate as those for dry cargo vessels. For instance as shown in Appendix C, the $28.25 per ton rate fixed during the week of May 24, 1969 for the

American flag tanker, HESS TRADER, carrying 23,000 tons of heavy grain from the U.S. Gulf to Bombay was almost four times the $7.20 per ton rate fixed during the same week for the Swedish tanker, FRITHIOD, carrying 22,000 tons of heavy grain between the same ports.

Obviously it is necessary to look beyond such rate differentials under the 1954 Act to put a price tag on an oil import flag quota. We estimate that if the provisions of S. 3404 were applied to U.S. commercial oil imports the total increased transportation costs through 1980 would be in the neighborhood of five billion dollars.

This estimate is made on the basis of what we believe are reasonable and perhaps conservative assumptions, including the following: (1) that American and foreign ship operating and shipbuilding costs will rise at a level rate of only 5% per year over the next 9 years; (2) that premium rates for American flag tankers in this captive marget will somehow not exceed 10% of the normal cost of employing these vessels (this I might add is a very conservative assumption in view of the disproportionate rates for preference cargoes mentioned earlier); (3) that U.S. port and terminal facilities will be available in the late 1970's to accommodate 250,000 deadweight ton tankers; (4) that approximately 60 tankers of 50,000 deadweight tons and 140 tankers of 75,000 deadweight tons would be employed to transport 50% of our oil imports by the mid 1970's and thereafter 30 supertankers of 250,000 deadweight tons would be built to carry the escalating oil imports through 1980; (5) that these American flag vessels will be built and repaired in U.S. shipyards; (6) that inflexibilities in the use and routing of these American flag tankers will create inefficiencies resulting in cost increases limited to 2% of total transportation costs (this is also a very conservative estimate); and finally (7) that, as other nations seek to emulate such discriminatory legislation, increases in the cost of the foreign flag carriage of the remaining 50% of U.S. oil imports will not exceed 10% of normal foreign flag costs.

The last mentioned assumption merits special and careful consideration. If the producing countries of the world followed our example and found it expedient to place their own national flag quotas on their oil exports to the United States, the total costs of implementing S. 3404 could rise well above the previously mentioned five billion dollars through 1980.

American consumers may well question this enormous and unnecessary price tag and its inflationary effects, particularly when justification is lacking in terms of national security and when we have already committed ourselves to underwriting an expansive 10-year maritime program under the Merchant Marine Act of 1970.

INTERNATIONAL SHIPPING AND FREE TRADE

There has been a general recognition among nations since early mercantile days that merchant ships must be free to carry private commercial cargoes in international trade without restriction or discrimination. The United States, as one of the major trading nations of the world, has been a leader in promoting and defending this concept. For example, the Federal Maritime Commission has taken direct retaliatory action when other nations have sought to further their own interests through restrictive or discriminatory practices.

S. 3404 is precisely the kind of national flag discrimination which the United States has consistently and vigorously opposed. If this legislation were enacted, our government could hardly oppose efforts by other nations to carve out segments of their export or import trades for their own special purposes.

We must keep in mind that in recent years national flag pressures have increased throughout the world, as certain nations, including some controlling strategic reserves of oil and ore, have indicated an interest in establishing or enlarging their own national merchant fleets. Just recently, for example, Venezuela announced that it was considering plans to establish its own tanker and ore carrier fleets to carry its exports.

There have been similar pronouncements from other exporting countries in the past. For instance, in 1965 several Arab countries were reported to be exploring plans for ensuring the use of Arab-owned tankers to carry Arabian oil into the world markets. If S. 3404 were enacted, such countries could only be encouraged to emulate the United States by indulging in flag discrimination with respect to their own exports.

This is the gravest danger inherent in S. 3404—the effect that this legislation could well have in sparking off a chain reaction of similar discriminatory measures by exporting countries throughout the world. This is not to discount

the probability of retaliatory measures which would be taken against U.S. merchant shipping by the traditional maritime nations, including some of our closest allies. Such foreign emulation and retaliation in response to S. 3404 could convert international shipping into a series of one-way protected trades, a situation which could only inhibit free trade among nations.

The established policy of the United States toward trade liberalization is a matter of record, and has been supported by several administrations. Our nation's role as a world leader of trade liberalization has been demonstrated by its enactment of the Trade Expansion Act of 1962, its active participation in the General Agreement on Tariffs and Trade (GATT) and in the Organization for Economic Cooperation and Development (OECD). As you know, the 1962 legislation, GATT and OECD are specifically designed to encourage the expansion of world trade on a multi-lateral basis, the reduction of trade barriers and the abolition of discriminatory trade practices. Similar objectives are incorporated into each of the more than thirty treaties of friendship, commerce and navigation which have been concluded with other nations. The State Department has warned that these treaties would be violated by a flag quota on commercial oil imports.

The proponents of S. 3404 seem to believe that superimposing the measures of the Cargo Preference Act of 1954 onto commercial cargoes would be a mere extension of an already accepted principle, and thus would present no problems in terms of international shipping and free trade. This simply is not true. A 1965 State Department position paper admonished that "Any move in the direction of extending U.S. flag preferences into the commercial area would be certain to bring forth a violent foreign reaction and would rightly be recognized as constituting a major reversal in American foreign policy."

The preference measures now in effect under the 1954 Act relate only to non-commercial cargoes exported by the United States on its account and under grants or loans advanced by the government. It is one thing for the United States to decide what ships should carry cargoes in which it has a proprietary interest and for which it directly pays the rate differentials. It would be totally different for the United States to mandate what ships should carry private commercial cargoes in international trade.

CONCLUSION

As I indicated earlier, a flag quota on commercial oil imports is not a new idea. It has been proposed on past occasions as the "easy answer" to the complex problems confronting the American flag tanker industry. Not surprisingly, whenever this proposal was carefully evaluated it became clear that, like most easy answers, a flag quota would create far more serious problems than the one it was originally intended to solve.

I hope that your Committee will reach the same conclusion after carefully evaluating the ramifications of S. 3404.

APPENDIX A

MEMBERS OF THE AMERICAN COMMITTEE FOR FLAGS OF NECESSITY

Alcoa Steamship Co., Inc.
American International Oil Co.
Atlantic Richfield Co.
Chevron Shipping Co.
Cities Service Tankers Corp.
Getty Oil Co.
Gulf Oil Corp.
Marine Transport Lines, Inc.
Mobil Oil Corp.
Naess Shipping Co.
National Bulk Carriers, Inc.
Phillips Petroleum Co.
Standard Oil Co. (N.J.)
Texaco, Inc.
Union Oil Co. of California

APPENDIX B

ESTIMATED OPERATING COSTS FOR TYPICAL TANKERS OF VARIOUS NATIONALITIES (AS OF JAN. 1, 1971) [1]

	Flag and crew			
	United States, American	Foreign, Italian	Foreign, Spanish	Foreign, British
40,000 d.w.t. tanker:				
Crew complement	32	30	30	32
Repair days	20	22	22	22
Operating days	345	343	343	343
Payroll costs	$810,000	$295,000	$200,000	$235,000
Depreciation	1,300,000	745,000	745,000	745,000
Repairs	240,000	150,000	150,000	150,000
Overhead	60,000	35,000	35,000	35,000
Stores and provisions	115,000	100,000	100,000	100,000
Insurances	300,000	240,000	240,000	240,000
Other	20,000	20,000	20,000	20,000
Total annual cost	2,845,000	1,585,000	1,490,000	1,525,000
Cost per operating day	8,246	4,621	4,344	4,446
47,000 d.w.t. tanker:				
Crew complement	32	30	30	32
Repair days	20	22	22	22
Operating days	345	343	343	343
Payroll costs	$810,000	$295,000	$200,000	$235,000
Depreciation	860,000	550,000	550,000	550,000
Repairs	205,000	130,000	130,000	130,000
Overhead	60,000	35,000	35,000	35,000
Stores and provisions	110,000	80,000	80,000	80,000
Insurance	205,000	175,000	175,000	175,000
Other	20,000	20,000	20,000	20,000
Total annual cost	2,270,000	1,285,000	1,190,000	1,225,000
Cost per operating day	6,580	3,746	3,469	3,571

[1] Currency revaluations effected during 1971 are not reflected in these comparisons,

APPENDIX C

COMPARISON OF U.S. AND FOREIGN-FLAG CHARTER FIXTURES, 1968 TO AUGUST 1971

Week ending	From—	To—	Cargo	Tons	Vessel name	Flag	Type	Rate	Total	Difference in total cost: American over foreign
Jan. 13, 1968	U.S. gulf	Bombay or Kandla	Heavy grain	20,000	Globe Progress	Am	DC	$30.39	$607,800	$319,800
	do	do	do	20,000	Evros	Lib	DC	14.40	288,000	
Feb. 3, 1968	do	Montevideo	Corn sorghum	22,800	Rambam	Am	DC	20.46	466,488	267,426
	do	do	do	22,750	Senorita	Nor	DC	8.75	199,062	
Mar. 2, 1968	do	South Vietnam	Rice	10,000	Steel Flyer	Am	DC	42.92	429,200	169,200
	do	do	do	10,000	Pacific Breeze	Pan	DC	26.00	260,000	
Mar. 23, 1968	do	do	do	8,250	Transunion	Am	DC	42.92	354,090	144,900
	do	do	do	8,200	Macassar Sky	Lib	DC	25.50	209,100	
June 1, 1968	do	do	do	[1] 10,000	Hoosier State	Am	DC	53.73	537,300	302,300
	do	do	do	[1] 10,000	London Advocate	Br	DC	23.50	235,000	
June 8, 1968	do	Chittagong	Heavy grain	25,000	Barbera	Am	T	34.48	862,000	388,000
	do	do	do	24,000	Souvretta	Lib	T	19.75	474,000	
Aug. 10, 1968	do	Ceylon	Flour	10,000	Salisbury	Am	DC	53.85	538,500	303,500
	do	do	do	10,000	Tournai	Nor	DC	23.50	235,000	
Aug. 24, 1968	North Pacific	Pusan	Wheat	23,000	Marore	Am	DC	20.75	477,250	302,875
	do	do	do	22,500	Asteri	Lib	DC	7.75	174,375	
Mar. 1, 1969	Baltimore	Tunisia	do	20,000	Peary	Am	DC	17.00	340,000	184,200
	do	do	do	19,000	Trade Carrier	Lib	DC	8.20	155,800	
May 3, 1969	U.S. Gulf	Ceylon	Flour	10,000	Silver Hawk	Am	DC	49.50	495,000	236,000
	do	do	do	10,000	Aristogenis	Gre	DC	25.90	259,000	
May 24, 1969	do	Bombay or Kandla	Heavy grain	23,000	Hess Trader	Am	T	28.25	649,750	491,350
	do	do	do	22,000	Frithiod	Swed	T	7.20	158,400	
July 5, 1969	do	Valparaiso or San Antonio.	Corn	15,000	Trans-Gulf	Am	DC	19.90	298,500	171,000
	do	do	do	15,000	Frieda	Lib	DC	8.50	127,500	
Aug. 2, 1969	do	San Antonio or Valparaiso.	Heavy grain	15,000	Trans-Gulf	Am	DC	19.25	288,750	164,190
	do	do	do	14,400	Sithonia	Gre	DC	8.65	124,560	
Aug. 9, 1969	do	South Vietnam	Rice	10,000	Copper State	Am	DC	44.87	448,700	244,450
	do	do	do	9,500	Taipei Victory	Cs	DC	21.50	204,250	
Aug. 23, 1969	do	do	do	10,000	Silver Eagle	Am	DC	49.25	492,500	289,675
	do	do	do	9,500	Madonna	Lib	DC	21.35	202,825	
Sept. 6, 1969	do	Ceylon	Flour	10,000	Silver Eagle	Am	DC	51.25	512,500	296,500
	do	do	do	10,000	Venus Victory	Lib	DC	21.60	216,000	

Nov. 8, 1969	do	do	San Antonio or Valparaiso.	Corn	do	15,000	Trans-Gulf	Am	DC	17.75	266,250	127,525
Jan. 3, 1970	do	do	South Vietnam	Rice	do	15,500	Grand Justice	Lib	DC	8.95	138,725	
Jan. 17, 1970	do	do	Bombay or Kandla	Wheat	do	9,500	Julia	Am	DC	44.90	426,550	205,675
Jan. 24, 1970	do	do	South Vietnam	Rice	do	9,500	Madonna	Lib	DC	23.25	220,875	
Feb. 28, 1907	do	do	Saigon	Corn	do	24,000	Cantigny	Am	T	25.90	621,600	369,600
May 2, 1970	do	do	Colombo	Flour	do	24,000	Sincerity	Lib	T	10.50	252,000	
May 16, 1970	do	do	South Vietnam	Rice	do	9,500	Mormacelm	Am	DC	42.00	399,000	167,675
July 4, 1970	do	do	do	do	do	9,500	Bolina	Pan	DC	24.35	231,325	
Sept. 19, 1970	do	do	do	do	do	9,000	Exchequer	Am	DC	49.28	443,520	195,520
Nov. 14, 1970	do	do	Rio or Santos	Wheat	do	10,000	Grand Loyalty	Pan	DC	24.80	248,000	
Nov. 21, 1970	do	do	Aquaba	do	do	10,000	Columbia Mariner	Am	DC	52.75	527,500	130,000
Dec. 12, 1970	do	do	Chittagong or Chalna	do	do	10,000	Kanaris	Cy	DC	39.75	397,500	
Do	North Pacific	do	do	do	do	9,500	Mormacpine	AM	DC	45.00	427,500	161,975
Feb. 20, 1971	U.S. gulf	do	Casablanca	do	do	9,500	Superina	Pan	DC	27.95	265,525	
Mar. 13, 1971	do	do	South Korea	Corn	do	9,500	Choctaw	Am	DC	44.85	426,075	147,575
Apr. 17, 1971	do	do	do	Wheat	do	10,000	Skarva	Nor	DC	27.85	278,500	
May 1, 1971	Columbia River	Bandar Shapur	do	do	do	14,500	Yellowstone	Am	DC	46.75	677,875	287,975
May 15, 1971	U.S. gulf	Colombo	do	Wheat flour	do	14,000	Simoa	Nor	DC	27.85	389,900	
May 29, 1971	do	Bandar Shaupur	do	Wheat	do	23,500	Penn Leader	Am	DC	24.03	564,705	323,125
June 12, 1971	do	Santa Marta or Cartagena.	do	do	do	23,500	Olympic Pride	Lib	DC	10 28	241,580	
Aug. 7, 1971	do	Saigon	do	do	do	9,950	Columbia Owl	Am	DC	48.75	485,062	246,622
						9,935	Oceana	Pan	DC	24.00	238,440	
						9,000	Green Cove	Am	DC	49.75	447,750	267,750
						9,000	Reliance Fidelity	Pan	DC	20.00	180,000	
						9,560	Longview Victory	Am	DC	41.98	401,328	199,228
						9,400	Pernod	Pan	DC	21.50	202,100	
						21,800	Overseas Carrier	Am	DC	13.95	304,110	177,610
						22,000	Urania C	Gre	DC	5.75	126,500	
						15,500	Yellowstone	Am	DC	34.70	537,850	382,850
						15,500	Tarpon Springs	Lib	DC	10.00	155,000	
						24,000	Merrimac	Am	DC	26.64	639,360	426,860
						25,000	Golar Arrow	Lib	DC	8.50	212,500	
						23,750	Lumber Queen	Am	DC	34.94	829,825	539,745
						24,500	Silver Clipper	Lib	DC	11.84	290,080	
						10,000	Silver Lark	Am	DC	52.96	529,600	283,750
						11,000	Eurytan	Gre	DC	22.35	245,850	
						23,000	Producer	Am	DC	34.51	793,730	513,130
						23,000	Olympic Pegasus	Lib	DC	12.20	280,600	
						21,000	Overseas Progress	Am	DC	11.25	236,250	141,750
						21,000	Sentinel	Lib	DC	4.50	94,500	
						10,000	Green Island	Am	DC	45.50	455,000	325,000
						10,000	London Citizen	Br	DC	13.00	130,000	

[1] Part cargo.

Senator SPONG. We are going to recess for 5 minutes before the next witness testifies.

(Recess.)

Senator SPONG. Thank you, Mr. Maskin. I see you have the same two associates who appeared earlier.

STATEMENT OF ALFRED MASKIN, DIRECTOR, AMERICAN MARITIME ASSOCIATION; ACCOMPANIED BY JOSEPH KLAUSNER, COUNCIL; AND JACK GOLDSTEIN, ECONOMIST

Mr. KLAUSNER. Mr. Chairman, I hope you will allow me to break in long enough to make one observation about the previous testimony.

We were much struck by Mr. Loree's statement that the prices of refined products had visibly reflected the rise in foreign transportation costs. I don't know whether he has consulted mathematical statisticians, but we ran a correlation just to be quite sure of our graph. No doubt the experts will understand what I am about to read; I barely pretend to myself.

The correlation coefficient, which has been worked out on two bases, corrected and uncorrected, is $r=0.4287$. The coefficient of determination, uncorrected, which is r^2, is 0.18378. When these are corrected to find out how much of the data are explained by the theory that they are related, the corrected r is 0.33104, and the corrected r^2 (with a bar over it) is 0.10958.

I am informed that the significance of this is that there is absolutely no relationship between the two sets of data.

Senator SPONG. Thank you.

Mr. MASKIN. Thank you, Mr. Chairman.

With your permission, I would like to be accompanied by the same two gentlemen who accompanied Mr. Hettena. Mr. Hettena is a director of the American Maritime Association. I am the executive director in Washington. We are both here today because we are dealing with different aspects of S. 3404.

I will say that we also have filed a more detailed statement with the committee, which we hope will be incorporated into the record. For purposes of this oral testimony, we will summarize our statement.

Since Mr. Hettena's statement deals with economic aspects of S. 3404, such as its cost to the consumer and its impact on the balance of payments, I will limit myself to other considerations with respect to this legislation; namely, its national defense implications and the extension by other nations of the cargo preference principle to commercial cargoes.

Before doing that, however, I would briefly review the current tanker situation.

A principal factor in the present employment distress of the American-flag tanker fleet—and particularly the independently owned sector of that fleet—has been the rising volume of imports, both of residual and crude oils, virtually all of which has been carried by foreign-flag vessels.

During the short span from 1967 through 1971, in fact, our total overseas oil imports into district I, the eastern seaboard, increased from 1.8 million barrels per day to an estimated 2.7 million barrels per day, over 43 percent; and by 1975, overseas imports into district I

of crude oil alone, which in 1971 were about 0.6 million barrels per day, are expected to rise to 1 million barrels per day, or a further two-thirds.

I would like to interject, Mr. Chairman, that just yesterday, May 1, in the financial section of the New York Times, there was a report which noted that the President's Oil Policy Committee had met last week, and that within 10 days or so the White House was expected to make an announcement which would increase our oil imports for oil east of the Rocky Mountains from 750,000 barrels a day by an additional 250,000 barrels a day.

It also indicates, interestingly enough, that a recommendation has been made that this increase should not come from Canada, from which most of our oil comes overland by pipeline, so that virtually all of it would be seaborne, and it would require more ships, and under our present procedures, these would be foreign-flag ships.

Meanwhile, other factors have unfavorably affected the demand for U.S. tankers, including the delay in construction of the trans-Alaska pipeline from the North Slope, the doubling in capacity of the Colonial pipeline, and the increased participation of proprietary tankers in the fallback markets previously served chiefly by the independent fleet—the preference grain and the military cargo trades.

At the beginning of this month, some 850,000 deadweight tons of American-flag tankers were in layup, of which most were owned by independent operators, including some 180,000 deadweight tons of independent tankers newly built or rebuilt during the past 2 years.

Moreover, much new tonnage, contracted for when all the demand signs were favorable, is coming off the ways or is scheduled for early delivery.

We are in a deep recession, and unless relief is forthcoming, the recession will worsen, with at least 1.5 million deadweight tons, or one-fifth of the entire U.S. tanker fleet, facing layup in the coming months.

As I stated at the outset, I will deal first with national defense aspects of S. 3404, and begin by noting that, as national defense policy, the Merchant Marine Act calls for a U.S.-flag merchant fleet able to carry 100 percent of the Nation's domestic commerce and a substantial portion of its foreign commerce, usually considered to be at least 50 percent.

That is the law, reaffirmed as late as 1970 in the amended Merchant Marine Act.

To us there seems to be a rational basis for this policy, and the numbers have a demonstrable historical validity, as can be seen by reference to World War II.

By 1940, for example—the first full year of the European war and 2 years before our own entry—our total oil movement, which had climbed from 21.1 million tons in 1935 to 30.5 million tons in 1939, dropped to 24.9 million tons because of the withdrawal of foreign vessels from our trades.

By 1942, our first year of full participation in the war, and despite the diversion of 75 percent of our coastwise fleet to the foreign trades, and some new construction, our total oil movement dropped to 17.9 million tons, or 41 percent below the 1939 level.

Had we possessed a fleet at the statutory level in 1939—that is, one capable of lifting 50 percent of our 30 million ton trade that year, or

15 million tons, our total oil carriage in 1942—adding in the 9.3 million tons of foreign-flag tonnage which continued to serve us that year—would have been about 25 million tons, or only slightly below the average 27 million ton total of our oil movements during the pre-war period of 1935–39; and we could have continued to carry this volume until 1944, by which time our crash building program had compensated for our loss of foreign-flag tonnage, as well as our military losses.

Thus, the empirical experience of World War II validates the 50 percent statutory standard.

Today our position is disastrously worse than in 1939, for while our oil movements by 1970 had risen to 182 million tons, or 500 percent more than in 1939, U.S. tankers carried only 8 million tons, the same volume they carried in 1935.

Moreover, our reliance on overseas sources of oil is growing, imports are expected to expand rapidly, and it is anticipated that by 1975 our imports by sea of crude oil alone—which are estimated at 2.5 million barrels per day—will require about 20 million deadweight tons of tankers, or the equivalent of approximately 300 ships of 60,000 deadweight tons each, since at present it is not practical to use VLCC's—very large crude carriers of 200,000 deadweight tons or more—in our trades.

The existing statutory standard, of course, would require us to have 10 million deadweight tons, or more than 150 ships, under the American flag. But even if our total modern American fleet of over 50,000 tons, built or rebuilt since 1960, were thrown into the war movement of imports, we should have only 2.7 million deadweight tons for the foreign import service, or less than 14 percent of the total tonnage required in 1975.

By whatever standards, minimum defense requirements set by law simply are not being approached. Worse still, our existing fleet, including some of its best and modern units, is being wasted.

Are there other reliable sources of tonnage available to meet our requirements?

Generally, we hear in this context of two such sources—the fleets of our allies in NATO and the fleets maintained under "flags of convenience"—notably those of Liberia and Panama—by American companies or others having contractual agreements with our Government to make their ships available upon demand.

But analyses of the situation indicate that neither of these fleets can be relied on to satisfy our needs.

In the event of war, the fleets of our NATO allies would be faced with the same conditions with which we were faced in World War II: Their own demands for oil would grow, not diminish; their demand for ships would increase, not decline; and their fleets would be rendered less, not more efficient, by warlike operations.

The second supposed source of tonnage, as I have noted, is the "flags of convenience" fleet under so-called effective U.S. control.

A study of this fleet, however, made by the Department of Commerce in 1970, shows that 40 percent of the effective control fleet of 282 tankers, on the average, is engaged in non-U.S. trade, and therefore must be deemed subject to the same considerations which we have mentioned with respect to the NATO vessels.

Further, according to the Department of Commerce study, there were in the "effective control" fleet, as of 1968, only 45 tankers between 25,000 and 100,000 tons in size which had been built since 1960. These totaled 2.5 million deadweight tons, to which may perhaps be added 11 ore-oil vessels, ranging between 40,000 and 70,000 deadweight tons, and aggregating some 700,000 tons.

This is probably the extent of the useful Pan-Lib fleet, subject to the reservation expressed by the Department of Commerce—that the manning of these vessels with foreign officers and crews "can be a matter of concern in time of national emergency, particularly if the crews are nationals of non-NATO countries and the ships are not in U.S. trades."

The second matter I wish to cover, as I stated earlier, is the extension of an American-flag preference to commercial cargo.

Thus far, of course, our cargo preference statutes have applied only to cargoes moving under Government auspices, and the extension of the cargo preference principle to commercial cargoes would be new in our practice.

It would, however, not be new—or unusual—in the practice of other important nations. France, for example, has a well established policy of requiring that at least two-thirds of its crude oil imports be carried by its own fleet, and Japan—virtually all of whose raw materials, including petroleum, are imported—also has a well understood policy of national flag preference.

Spain limits its petroleum and other imports to its national flag vessels, and other countries such as Chile and Peru also have restrictions.

Thus, on so vital a commodity as is oil to our industrial economy, both in peace and in war, there is ample precedent for the step we are proposing here.

In fact, no other nation looks to foreign-flag vessels for so large a large a percentage of its carrying capacity.

Senator SPONG. Thank you very much, Mr. Maskin.

You have raised a problem that much of the effective control fleet consists of vessels too large to enter our ports. In an emergency, could these vessels use Canada and the Bahamas as a means of serving our needs?

Mr. MASKIN. I am not quite sure that the Canadian facilities are completely ready for these vessels. They could use offshore points, from which the cargo would then have to be transshipped to the United States. Of course, if we do not take any steps to help the existing tanker fleet, which consists of vessels smaller than the VLCC's, there is a likelihood that these vessels will disappear. We would then have the oil coming in by foreign-flag tanker, to some point like the Bahamas, and still be completely dependent on foreign flags to carry it from that point into the States.

Senator SPONG. Is the present American tanker fleet capable of carrying 50 percent of present oil imports?

Mr. MASKIN. We believe that the present American-flag tanker fleet is capable of carrying the existing level of crude oil imports into district I, which is the movement we are most interested in.

Senator SPONG. Why do you think that the Merchant Marine Act of 1970 is not producing a tanker fleet? If the worldwide tanker market were not depressed, would the 1970 act be working?

Mr. MASKIN. It is my opinion that an improvement in the worldwide tanker market would not be a determining factor in assuring the success of the new maritime program insofar as the building of tankers is concerned. It is true that worldwide tanker rates are one consideration. But there are many other considerations that a shipowner must contemplate when he is planning to build new vessels.

Mr. Blackwell, for example, when he appeared before this committee about a week ago on the authorization bill, spoke of the restrictions on the ability of tanker owners to trade worldwide. And that is just one other consideration. I believe very, very strongly that the primary consideration in leading a ship operator to build under the 1970 act will be the availability of cargo. When shipowners know that cargo will be available and when they know the volume that will be available, they will be encouraged to built even without subsidy. And I think that is proved by the fact that when shipowners thought cargo was going to be available, and was going to be reserved to them, at that time through our cabotage laws, they, as I think Mr. Hettena said, invested something like a half billion dollars of their own money without subsidy, in the past 5 years, in building up the independent tanker fleet.

So it is cargo that is the primary consideration.

Mr. ROUVELAS. You have noted that you have had a large expansion in the number of American-flag tankers coming off the ways for the coastwise trade; you have had a diminishing amount of oil for them to carry and whatnot.

How would you distinguish this situation, not looking at the consumer costs and whatnot, but how would you distinguish this situation from other instances in which the Government is asked to bail out an industry in which there have been bad business judgments made?

Mr. MASKIN. I am rather glad you raised the question, because I think that was the implication of the State Department testimony yesterday. They said they realized that the tanker industry was in an economic recession, but that they did not feel that legislation should be passed to in effect bail the industry out.

I think there are several points to be made here. First, this is not simply a question of an economic recession which is based on cyclical factors, where you expect that with time the situation will improve. I think if that were the case, there are a number of companies, particularly the larger ones, with greater resources, which would just try to ride the thing out. But the entire economic picture at the moment, all of the economic factors, are being restructured by developments which are not cyclical in nature, but are irreversible.

For example, when the Colonial pipeline comes into operation, and I understand that the doubling of its capacity is just about to take place, that will be an irreversible trend.

Also, for example, the military is now in the process of building nine of its own tankers, which are going to replace privately owned tankers. I mean there will certainly be less cargo for privately owned tankers once those new Government tankers get into operation.

That also is an irreversible trend. So it isn't just a question of bailing an industry out of a recession which is temporary in nature. It is

a question of taking action to meet various developments within the industry which are irreversible unless we take steps to provide compensatory cargoes.

Senator SPONG. Thank you very much, Mr. Maskin, for your testimony.

(The statement follows:)

STATEMENT OF ALFRED MASKIN, DIRECTOR, AMERICAN MARITIME ASSOCIATION

Mr. Chairman and members of the committee, in view of the comprehensive statement of Mr. Hettena before this committee, on economic aspects of the legislation we are considering, I propose to limit myself to other considerations which I expect will come to the minds of the committee members in weighing S. 3404. Before doing that, however, I briefly will recapitulate our problem.

The domestic production of crude oil and our capacity for refining it are approaching their limits. Just a few weeks ago, in fact, the Texas Railroad Commission said that within the next few months Texas resources will be inadequate to meet expected demand; and refinery runs, which since 1966 have averaged above 90% of capacity, are officially forecast at full capacity within the next year or two.

Concomitantly, rising demand has impelled a rising curve of imports, both of residual and crude oils. In 1967, total overseas oil imports into District I were 1.8 million b/d; in 1971 we estimate they were nearly 2.7 million b/d, an increase of over 43%.

All this oil, practically speaking, moved by foreign-flag vessel, barring a small quantity of back-haul cargo where the outbound leg was probably in preference grain, some proprietary movement under the same circumstances, and marginal carryings when foreign rates were unusually high, as during the early part of 1971.

By 1975, overseas crude oil imports alone into District I, which were about 0.6 million b/d in 1971, as we estimate, are expected by government and industry forecasters to increase to 1 million b/d, or a further two-thirds.

In the meantime, other unfavorable factors have affected the demand for American tankers. The development of the Alaskan north slope has been postponed, probably by five years even if environmental problems are solved more rapidly than seems at present likely. The doubling of the Colonial pipeline will make further severe inroads on water transportation, complicated by hard competitive pricing practices; and tankers displaced by the pipeline, including large numbers of proprietary tankers, are moving into the fall-back markets hitherto chiefly reserved to the independent fleet—the preference grain trades and the government military trades.

At the beginning of this month some 850,000 dwt of American-flag tankers were in layup, of which most were owned by independent operators, including some 180,000 dwt of independent tankers newly built or rebuilt during the past two years.

Moreover, the factors we have cited are all interacting at a time when much new tonnage, contracted for when all the demand signs were favorable, is coming off the ways or is scheduled for early delivery.

We are in a deep recession; and unless relief is forthcoming, the recession will worsen, with layup facing at least 1.5 million dwt, or one-fifth of the entire U.S. tanker fleet, during the coming months.

The bill before this Committee, S. 3404, has the primary virtue, as we see it, of placing the cost of solving our problem squarely on the factor chiefly responsible for the problem by requiring an allocation to American tankers of part of the imports of oil, thus causing the rising import market to absorb part of the tonnage it has in effect dislocated from the domestic market.

The testimony which Mr. Hettena is presenting to the Committee shows that the cost of this allocation, not large in itself, is not likely to be passed on to the public, because the market price of oil is fixed by American production. Furthermore, it of course will entail no cost to the government by way of subsidy or otherwise.

I, as I stated at the outset, will deal with certain non-economic aspects of the legislation, the first of which is national defense. National defense is an area in which private persons are probably not the best authority. We must deal with it, however, because it is a touchstone of our national maritime policy.

As national defense policy, the Merchant Marine Act calls for a merchant fleet able to carry 100% of the nation's domestic commerce and a substantial portion of its foreign commerce, usually taken to mean a 50% share. That is the law, reaffirmed as late as 1970 in the amended Merchant Marine Act.

To us there seems to be a rational basis for this policy, and the numbers have a demonstrable historical validity.

What is national defense? It comprises more than transporting and maintaining our armed forces; more even than the production of military equipment. It involves feeding our whole economy, sustaining the economy and military machines of our allies, and maintaining many friendly neutrals. That is no doubt why the merchant marine, as a mechanism of defense, has always been entrusted to a civilian department which must fit purely military needs into the nation's comprehensive defense requirements.

The experience of our previous wars has been that world tonnage undergoes three basic stresses:

1. It is withdrawn from our trades into the main services of the national flag (cross services are starved).
2. It is diminished by direct military attack.
3. It becomes less productive through port crowding, and roundabout or convoy routings.

World War II illustrates these effects. The period of the '30s was not unlike the '50s, witnessing a continuing decline in American-flag carryings from a postwar high of 75%, notwithstanding a steadily increasing movement of oil. In 1935, total tanker movement in foreign trade was 21.1 million tons, of which American vessels carried 8 million tons, or over 38%; in 1939, the total was 30.5 million tons, and the American constituent was smaller both absolutely and relatively—5.5 million tons, or 18%.

In 1940, the first full year of the European war, and two years before our own entry, our oil movement dropped to 24.9 million tons, because of the withdrawal of foreign tonnage from our trades; and although our own ships raised their carryings back to the 1936 level, about 7.2 million tons—which was 30% more than in 1939, and represented 29% of the total 1940 movement as opposed to the 18% of the year before—they were unable to make up for the decline in foreign tonnage, which fell in the single year from nearly 25 million tons to 17.7 million.

The position was far worse by 1942, our first year in the war. By diverting 75% of our coastwise fleet to foreign service, and with some net new construction under the Merchant Marine Act, our flag carryings by then had struggled up to 8.6 million tons, or 48% of the oil trade; but foreign carryings had fallen to less than 9.3 million tons, a decline of 63% from 1939. As a result, the oil movement had dropped to less than 17.9 million tons, 41% below the 1939 level.

There can be no question that the economy, gearing for war and in the first year of war, thirsted for every drop of oil; yet because of an inadequate fleet and because of the disappearance from our trades of the world fleet, together with all the losses and mishaps of battle, our imports of oil dropped by more than 40% below the last peace-time year.

Not until 1944 did we move so much again, and then only because our fleet had now been built up to absorb the whole slack, and carried in that year over 70% of our total exports and imports, while the foreign fleet remained at the same 9-million ton level until after the war.

Had we possessed a tanker fleet at the statutory level in 1939—that is, one capable of lifting 50% of our trade that year—we could have maintained practically our full prewar average demand level (nearly 27 million tons during 1935–39) until 1944, by which time our building program had compensated for the loss of foreign tonnage and our total military loss; and our trade would have been about 25 million tons instead of the 17.9 million tons actually moved in 1942. Thus the 50% standard of the 1936 Act is historically validated.

On the face of things, the present position is disastrously worse than in 1939. Our tanker traffics in foreign trade have risen astronomically, to 182 million tons in 1970, the last year reported by the Maritime Administration, or about 500% more than in 1939. But American vessels carried only 8 million tons, or some 4%, less in fact than we carried in 1942.

The American fleet engaged in the 1970 carriage was about 1 million dwt, out of our then total fleet of about 7 million dwt, the rest of its capacity having been employed in domestic operations that year. Present capacity is thus a negligible factor in meeting current need.

Our defense posture also must take account of future growth and of our growing reliance on overseas sources of oil. Of course, in wartime, domestic oil consumption undergoes stricter regulation through rationing and reduction of waste. However, American refining capacity and crude production at present prices appear to be pushing their limits, and there is controversy as to whether the United States will ever be self-sufficient in oil again. Imports therefore are expected to rapidly expand, and actual demand is the best rough estimate of the defense requirement.

By 1975 our imports by sea of crude oil alone are estimated at 2.5 million b/d, requiring about 20 million dwt of tankers. Since at present it is not practicable to use VLCC's in our trades, we employ a conceptual ship of 60,000 dwt and calculate that over 300 ships will be employed to carry these imports. The existing statutory standard would require us to have 10 million dwt or more than 150 ships under the American flag, and that assumes the most efficient use of tonnage, which we know is impossible in wartime.

Now the statutory standard is, of course, not merely not met; it is flouted. Even if the total modern American fleet over 50,000 tons (built or rebuilt since 1960) were thrown into the war movement of imports (assuming maximum overland domestic movements), we should have only 2.7 million dwt for the foreign import service, or less than 14% of the total tonnage required in 1975.

By whatever standard, minimum defense requirements set by law are simply not being approached. Worse still, our existing fleet, including some of its best and most modern units, is being wasted.

Are there other reliable resources of tonnage available to meet these present and impending requirements?

General we hear in this context of two such resources. Sometimes we are told that we may look with confidence to the fleets of our allies in NATO. At other times we are reminded of fleets maintained under so-called flags of convenience by American companies or others having contractual agreements to make these ships available upon demand. Assuming utmost good will, these resources do not go far toward alleviating the problem.

Our allies will be faced with exactly the same conditions that we have described with respect to World War II. Their own demands for oil will grow, not diminish; their demands for ships will increase, not decline; and their fleets will be rendered less, not more efficient by war-like operations. The most careful rationing of shipping resources will not make available for our trades vessels now fully committed to European and Far Eastern services, largely out of the Middle East and secondarily out of Africa. Moreover, the mediation of the market place will not be available to divert tonnage into the service of the highest bidder. National military requirements will discipline vessel operations.

A further factor is the increasing concentration of new foreign construction into very large crude carriers, the VLCCs, ranging from 200 thousand tons, upward. Such vessels cannot at present operate in the American trades, although we should suppose that in time of war a crash effort might be expected to arrange suitable facilities. That could not be done overnight, and strong resistances are evident to a peacetime program. The Canadian facility that has been announced my provide a guide and be useful in itself, but that is also some years away, and we read that this project also apparently is encountering difficulties.

The second source of tonnage, ships considered to be under effective United States control, was analyzed by the Department of Commerce in 1970. The figures related to 1968, but the trend and principle are sufficiently illustrated. In that year there were 282 tankers deemed to be under effective control, of which 174 of 7.1 million dwt made at least one voyage in American foreign trade, carrying about 44 million long tons of cargo, practically all of which were imports of crude petroleum from Venezuela, North Africa and the Persian Gulf. This represented 27% of the total tanker trade in that year, which was 163 million tons.

Thus 40% of the effective-control fleet on average is engaged in non-U.S. trade, and must be deemed subject to the same considerations mentioned above in respect of NATO ships.

Its units are not only required in the services they now ply, but consist as well to a large extent of VLCCs. In 1970, there were 19 such ships, totalling 4.5 million dwt, 34% of the entire Pan-Lib capacity. The Commerce Department remarks of this group: "Their speed of 15 knots is comparatively slow and their value to the United States during wartime, because of their size, speed and service, may be open to question." In addition, in 1970 there were 45 ships of less than 25,000 tons, which are also of doubtful value.

We note that in 1968 there were only 45 tankers between 25 and 100,000 tons in size which had been built since 1960; they totalled 2.5 million dwt, to which may perhaps be added 11 ore-oil vessels, ranging between 40,000 and 70,000 dwt, and aggregating in all some 700,000 tons. This is probably the extent of the useful Pan-Lib fleet, subject to a further qualm expressed by the Department of Commerce: "With few exceptions the EUSC (Effective United States Control) tankers were staffed with foreign officers and crews. While such staffing results in lower operating costs compared with the wages paid to officers and crews on U.S.-flag tankers in peacetime, it can be a matter of concern in time of national emergency, particularly if the crews are nationals of non-NATO countries and the ships are not in U.S. trades."

It is not possible to determine the applicability of this feature both to age and size of ships, but about 3 million tons of ships ranging between 25,000 and 100,000 dwt were NATO-crewed in 1968. We assume for this purpose that the 2.5 million tons of relatively new tonnage would fall in this category.

The trend of participation in American commerce is declining for these vessels, no doubt because of the increasing concentration on VLCCs. Already in 1968 the percentage of total participation had dropped to 26.8 percent from 32.3 percent in 1963, and for imports alone, by far the more significant element, the decline was from 35.1 percent to 28.6 percent.

The whole problem of effective control is thus clotted with official doubt of the efficacy of the contracts, the nature of the manning, and the suitability of the tonnage itself for American service. Figures are not available specifying what percentage of the Pan-Lib tanker fleet fits within all of these limits; we conclude however that it is a steadily diminishing quantity, which even now, resolving all doubts favorable to control, is remote from meeting the statutory standard of an adequate fleet.

I have attempted to deal with this problem without the acrimony that usually accompanies public discussions of it, but I cannot help pointing out that the national policy, as declared in Title I of the Merchant Marine Act, is that "It is necessary for the national defense * * * that the United States shall have a merchant marine * * * owned and operated *under the United States flag* by citizens of the United States insofar as may be practicable." That qualification related only to the controversy as to whether the merchant marine should be publicly or privately owned, not foreign- or American-owned. But the statutory emphasis is on flag operation. Foreign registry of a major component of our defense does not meet the statutory object.

I turn now to another question: extension to a section of commercial cargo of American-flag preference.

Hitherto, the preference statutes have covered cargo moving under government auspices whether by gift or generous financing.

Here we propose to extend the preference to one area of our commerce strictly controlled by federal license for the protection of indigenous production.

This extension would be new in our own practice, but it is not new in the practice of other important nations. I am appending an excerpt from the Japan Economic Journal of November 30, 1971. There it will be seen that official Japanese policy is to carry 50 percent of that country's exports and 54 percent of its imports by the year 1975. In addition to public funding, interest subsidies, tax subsidies, and government reinsurance equivalent to our own mortgage insurance, there is a well understood policy of flag preference for a country virtually all of whose raw materials, including petroleum, are imported.

I call attention also to French policy. According to the State Department, in 1970 the French tanker fleet carried 62 percent of French petroleum imports. "At an interministerial meeting in July 1971 the French government noted the fall in the percentage of crude imports carried by its own fleet which at one time was 90 percent and cited the necessity to add 6 million deadweight tons so that by 1975 the fleet could carry two-thirds of France's needs." Most of the new tonnage, by the way, will be provided by VLCCs (and I may note that American oil companies desiring to participate in the carriage of oil to their own refineries in France are required to build and operate tanker fleets under the French flag; the two major such companies in 1971 owned 10 percent of total French-flag tonnage, and have announced important programs of new construction to meet the Ministry's expansion program).

Thus on so vital a commodity as is petroleum to the industrial economy of the world, there is ample precedent for the step we here propose. No other nation looks to foreign vessels for so huge a percentage of its carrying capacity.

[From the Japan Economic Journal, Tuesday, Nov. 30, 1971]

DUE TO WORSENING OF MARKET, MOT PLANS TO REVISE SHIPPING POLICY ON BASIS OF LOWER DEMAND ESTIMATE

The recent steep deterioration of the international shipping market is leading the Ministry of Transport to reexamine its long-term policies for buildup of Japan's commercial shipping fleet.

As the first step, the ministry intends to revise downward the demand outlook for shipping services through fiscal 1975 on which is based the current 6-year maritime transport buildup program.

Under the situation, the Japanese Shipowners' Association is calling on the Government to take a series of measures to help the industry such as:

1) Raising of the proportion of public fund loans as well as an increase in the subsidy on interest payment on commercial loans in the government-backed shipbuilding program.

2) Tax privileges, including extention of the property tax exemption on oceangoing ships beyond its expiry at the end of next March.

3) Re-insurance by the government to lessen shipowners' insurance premiums.

The program, inaugurated in fiscal 1969, calls for Japan's holding of a total tonnage of 45 million tons of oceangoing ships in fiscal 1975 so that Japanese ships can handle 50 per cent of the country's exports and 54 per cent of imports in the fiscal year.

To achieve these targets, the program says, there is need to create new ships aggregating 28 million tons, including 19.5 tons to be build under the government-backed shipbuilding program.

The government-backed shipbuilding program is to depend on loans from public funds for 65 per cent of the total cost. Moreover, the government is to subsidize 2 percentage points of interests shipbuilders pay on loans from commercial banks.

The Japanese shipping industry, however, is undergoing an unprecedented hardship as a result of deterioration of the domestic economy and the currency crisis.

On the other hand, the international shipping market, which peaked out in October last year, has been on a rapid decline in reflection of the stagnant industrial production in major industrial countries.

The U.S. dock strikes in West Coast ports since last July has turned out to be a heavy blow at Japanese shipping companies, moreover.

On top of these squeezes came the slowdown of moves of cargoes due to the new U.S. economic policies and the flotation of the yen, which also brought about exchange losses in shipping contracts denominated in foreign currencies.

Senator SPONG. We will hear next from Mr. Michael Klebanoff, president, Ogden Marine.

I might say that we are going to recess these hearings at just a few minutes before noon and tomorrow we will hear from Mr. David Steinberg and Mr. O. William Moody.

If Mr. Klebanoff is not finished by a few minutes before noon, we will submit our questions to him.

STATEMENT OF MICHAEL KLEBANOFF, PRESIDENT, OGDEN MARINE, INC.; ACCOMPANIED BY MARVIN J. COLES, COUNSEL FOR COMMITTEE OF AMERICAN TANKER OWNERS, INC.

Mr. KLEBANOFF. With your permission, I have Mr. Marvin J. Coles, counsel to the American Independent Tanker Owners committee.

I am Michael Klebanoff. I am president of Ogden Marine, Inc. Subsidiaries of that company own three modern American-flag tanker vessels built at full American costs, operated by American crews, and without receipt of subsidy of any kind. Our companies also operate 11 additional American-flag dry cargo ships and six foreign-flag vessels, including a 266,000-ton very large crude oil carrier (VLCC).

I appear today in support of S. 3404, a bill which would require that at least 50 percent of licensed oil imports shall be carried on American-flag tanker vessels. My support of this bill is twofold: As a tanker owner, I know it is essential for the economic well-being of the American tanker fleet. But much more important, as an American citizen I believe that this bill is required if we are to have a tanker fleet sufficient to assure the Nation's ability to maintain an adequate energy supply both in peacetime and in times of war or national emergency.

In recent years, the United States has become increasingly dependent upon foreign sources of crude oil and petroleum products. At present, we import over 2 million barrels a day of crude and products, and it is doubtful that we have the oil production capacity to supply today's needs if this were curtailed.

But all Government and other projections which I have seen show that within the next several years we will be far more dependent upon foreign imports for a substantially greater portion of our energy needs. Unfortunately, much of the additional oil which we will require is available in sufficient volume only in politically unstable areas. Moreover, while at present much of our oil imports are from nearby Western Hemisphere sources, the additional supplies will in large part be required to come from far more distant areas, involving tanker voyages of roughly five times the distance from Venezuela to New York.

Recognizing the need for maintaining an adequate American oil industry, our Government some years ago instituted an oil import program designed to protect American production in order to assure availability of adequate oil reserves in the event of national need. As a matter of Government policy, it has been recognized that the United States must have control over adequate supplies of crude oil as an essential energy source. But while the oil import program has been helpful, the increase in consumer demand for petroleum has so far exceeded th development of American crude oil reserves that the volume of foreign imports has been steadily rising. And the oil import program has also one grievous omission: it has not provided for an adequate American tanker fleet to insure that the Nation will be able to move the foreign oil which it requires and which it will continue to require in steadily increasing volume.

The oil import program protects (1) the producers of American crude oil by limiting the volume of lower cost foreign supplies, (2) the refiners by providing them with import quotas of lower cost foreign crude; (3) the petrochemical companies by giving them input licenses; (4) the importers of residual and distillate fuels; and (5) has even been used to benefit the economies of Puerto Rico and the Virgin Islands. But while waterborne movement of imported crude oil is a vital part of insuring our energy supply, the program completely omits any assistance to maintain an adequate American-flag tanker fleet to move the imported oil.

Actually, the program's exchange provisions have been harmful to the American tanker fleet by disrupting the normal preprogram movement of crude oil and products from the Gulf of Mexico to the east coast by permitting substantially all of the oil licensed for import in all States east of the Rocky ountains to be exchanged and to move into east coast ports.

As the volume of imported oil required to serve national requirements increases, there is a concurrent need to increase, at least on a percentage basis, the number of available tankers to move such oil.

Nevertheless, over the years the percentage of available tanker tonnage to the amount of oil consumed in the United States, as well as to the amount of oil imported for U.S. consumption, has been steadily declining.

No provision whatsoever has been made under the oil import program or otherwise to provide our country with a tanker fleet sufficient to insure that we can actually move the oil which we require not only in times of emergency, but to meet our day-to-day normal energy needs. We must have national control over sufficient tankers to insure that we can move the oil that we require across the seas from their sources of production to American ports.

Unavailability of such a tanker lifeline has become the weakest link in assuring an adequate energy supply for the country's needs. This situation must be cured by maintaining an adequate U.S. tanker fleet. The pending bill, properly administered, will accomplish this purpose.

Neglect of the American tanker fleet in recent years has led to the present dangerous situation. Until recently, the United States was self-sufficient in oil. Our domestic waterborne oil trade was served by American-flag vessels. We had substantially a balance between the consumption of oil, the need for its waterborne movement, and the supply of American tankers.

But in the past years there has been a huge increase in the demand for petroleum in our country. At the same time, American production and reserves has fallen below the capacity to supply this demand so that imports have steadily increased to huge proportions.

In 1960, the total demand for petroleum in the United States was 9.9 million barrels per day of oil equivalent.

By 1970, this had increased to 15.1 million barrels per day; and by 1980, it is estimated by Department of Interior projections that will rise to 22.3 million barrels per day.

Imports of 1.9 million barrels per day in 1960 have risen to 3.4 million barrels per day by 1970. And it is estimated to grow to 7.85 million barrels per day by 1980. With oil imports largely substituting for waterborne movements of crude and products from the Gulf of Mexico to USNH, the result has been that the American fleet has seriously declined in proportion to the country's need for waterborne oil transport.

While we previously had a fleet sufficient to carry the waterborne oil movements of the United States, the increase in oil demand and use without current increase in the American tanker fleet has left us hopelessly deficient in capacity to serve our own oil movements.

Today we do not have the capacity to carry our own oil. Within 8 years we will be beyond even the possibility of catching up.

Four factors have resulted in the present state of the tanker fleet and the need for this legislation.

1. The huge increase in the volume of waterborne imports;

2. This increase in foreign oil imports has been carried on foreign-flag tankers;

3. A reduction in domestic demand for tankers has resulted because of the oil import program exchanges as well as the construction and expansion of the Colonial pipeline;

4. The Alaska pipeline has been indefinitely delayed.

As a result of these factors, we have American modern and new American tankers in layup or operating at noncompensatory rates. Unless this is cured, it will mean the demise of our tanker fleet. The existing ships will either be bankrupt or transferred to foreign registry.

Equally important, Congress last year passed a superb program for the rebuilding of our tanker fleets through authorization of construction and operating subsidy. But the owners of existing modern tanker tonnage must be able to employ these ships in order to obtain the equity moneys to build new tankers under the program.

Unless this legislation is enacted so as to provide compensatory employment for our existing modern American tankers, existing tanker owners will not have the equity seed moneys required for the new building program and to be successful this program must have the participation of experienced shipowners.

With our steadily increasing dependence upon foreign oil, we must have sufficient tanker capacity to insure that we will be able to maintain its flow to this country. Foreign-flag tankers cannot be relied upon. The committee will recognize that the foreign tankers have foreign crews whose first loyalty is to their own country rather than to ours.

We have had examples during the Vietnam conflict where foreign crews have refused to sail their vessels for political reasons.

Second, it must be recognized that foreign nations have jurisdiction over vessels of their registry and can control their movements. We all recognize that despite the fact that oil in foreign lands is owned by American companies, actual control of the oil is in the hands of the foreign governments.

This is basically the background reason for the oil import program. It is equally true that despite the fact that some foreign-flag vessels may be owned by American companies, actual control of the vessels is in their foreign crews and in their foreign country of registry. My company owns foreign-flag as well as American-flag ships. While people talk loosely of our having effective control of American-owned foreign-flag ships, in my opinion, this is a dangerous myth.

Crews control their vessels and their loyalty is to their own nation. As I previously mentioned, on some occasions during the Vietnam war, foreign crews have refused to sail their ships to the war zone with cargoes required by our military.

Moreover, before one of our own foreign-flag ships can clear a foreign port, it must have the approval of the consul of the country of registry. Ownership of the vessel is not a controlling factor.

In my opinion, it is essential that we have an American tanker fleet of sufficient size to insure our ability to transport the oil we need under the jurisdiction and control of this country, subject to its laws, and manned by American seamen. Enactment of this bill will provide such a fleet.

Senator SPONG. Well, thank you very much, Mr. Klebanoff. We may submit questions to you for the record of these hearings. I very

much appreciate your appearance here this morning. I hope you have not felt hurried in the testimony and I appreciate your accommodating the committee to the extent that you have.

Thank you very much.

Mr. KLEBANOFF. Thank you, Mr. Chairman.

Senator SPONG. We will be in recess until 10 o'clock tomorrow morning.

(Whereupon, at 11:50 a.m., the hearing was adjourned, to reconvene at 10 a.m. May 3, 1972.)

MARINE PROGRAMS, FISCAL YEAR 1973

WEDNESDAY, MAY 3, 1972

UNITED STATES SENATE,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON MERCHANT MARINE,
Washington, D.C.

The subcommittee met at 10 a.m. in room 5110, New Senate Office Building, Hon. William B. Spong, Jr., presiding.

Present: Senator Spong.

Senator SPONG. The hearings will be in order.

We will hear from Mr. David Steinberg, executive director, Committee for a National Trade Policy.

Mr. Steinberg, we are pleased to see you this morning and appreciate you going over from yesterday.

STATEMENT OF DAVID J. STEINBERG, EXECUTIVE DIRECTOR, COMMITTEE FOR A NATIONAL TRADE POLICY, WASHINGTON, D.C.

Mr. STEINBERG. Thank you, Mr. Chairman, and good morning. I am David J. Steinberg, executive director of the Committee for a National Trade Policy.

Our committee has for over 18 years been a leading advocate of a freer world economy.

Our committee is a broadly-based organization, supported by businesses, large and small, by trade associations and by individuals as citizens and consumers.

I speak for no particular company or group of companies or any particular sector of the American economy.

The sole standard of our committee, Mr. Chairman, has always been what we regard as the interest of the Nation as a whole.

We oppose S. 3404 as the wrong way to deal with whatever problem besets the American Merchant Marine, whatever problem besets the U.S.-flag tanker fleet. We believe it is the wrong way and we believe it is counterproductive.

The proponents of this bill call it a drastic measure required for national security reasons.

It is indeed a drastic measure, but absent is the thorough assessment of the costs of this drastic measure in terms of many considerations that deserve the close attention of your committee.

First, its inflationary effect on the cost of living and on the international competitiveness at home and abroad of U.S. products involving the use of oil as raw material or fuel.

Second, the likely retaliation by affected foreign countries against U.S.-flag vessels and U.S.-controlled flag of necessity vessels, and the

injurious example such practices would set for other countries (some of them oil producers) inclined toward similar cargo rules of their own for exports or imports.

Third, the adverse effect on efforts that urgently need to be made toward greater liberalization of world trade.

Fourth, the costs of all these implications to our balance of payments, costs that are likely to offset substantially whatever marginal benefits such preferences may possibly bring to our international transportation accounts in the very short run.

And, fifth, the effect this proposal would have on the flexibility the U.S. petroleum industry needs in programing oil imports in the most efficient manner, and this we believe is an issue with extensive national security implications.

We believe that fullest attention to all these considerations, including what we regard as the absence of proof that such an extraordinary measure is absolutely indispensable, call for rejection of this bill.

Our committee is not doctrinaire in its opposition to Government interference with the free flow of goods, services, and capital in international transactions. Such distortions may be necessary, in carefully selected situations, to facilitate industry adjustment to new, dramatic changes in international competition, or for other reasons including legitimate reasons of national security. But to the extent these distortions can be justified at all, they should be measures of last resort—temporary, marginal parts of balanced, coherent policies of constructive assistance to ailing industries clearly in need of government help.

Thus, if the U.S. tanker fleet is not adequate or not strong enough for the Nation's needs, a thorough reassessment is needed of all laws and policies materially affecting this important segment of U.S. shipping, a reassessment leading to constructive remedies that reach the core of the problem, with the least possible cost to the Nation's total interest.

Instructive and sobering in this connection are the following questions posed decades ago by Robert Warren in his book "The State in Society":

> Are we sure that the remedies we propose and accept are cures or soporifics? Is it possible that the very facility with which we can relieve certain symptoms is diverting us from the irksome labor of diagnosing the malady?

The problems and needs of the U.S. flag tanker fleet merit the "irksome labor" of careful and constructive diagnosis aimed at strengthening not only the merchant marine but the Nation as a whole.

And, Mr. Chairman, we urge that kind of approach on our Government, on the Congress, and on your committee. Thank you.

Senator SPONG. Thank you very much, Mr. Steinberg.

Your major point seems to be the lack of a thorough assessment of many of this bill's possible consequences.

Why does that lead you to urge rejection of the bill rather than urging that those factors be assessed?

Mr. STEINBERG. Because, Mr. Chairman, it is our belief that a careful assessment of all of these considerations would lead to the conclusion that this proposal, this method of dealing with the alleged weaknesses of the U.S. tanker fleet, the U.S. merchant marine, is not a constructive proposal and would lead to consequences that would be very harmful to the Nation's total interest.

Let me be more specific on that. What this proposal attempts to do, Mr. Chairman, is to extend a kind of "Buy-American" policy to the movements of privately shipped goods in international trade.

Now we can discuss the question of "Buy-American" in terms of Government procurements, and that is another matter. But the trade that is involved here is private trade, even though the trade is strictly controlled by the Government. And a very injurious precedent, it seems to me, is being set or would be set by extending "Buy-American" practices to private trade.

It may be just oil imports now, but what about steel imports, which are also in one way or another controlled by the Government? What about textile imports and dairy imports, and many other kinds of imports that also come under Government control? Surely not for national security reasons, but nevertheless are under Government control.

Therefore this would set a very injurious precedent in that respect.

And when you consider all of the other considerations, such as the very important consideration I believe of the need for flexibility for the U.S. petroleum industry in the manner in which it moves oil from foreign sources to the United States, you have an important national security consideration.

Now I would say, as may statement indicates, I am not opposed and my committee is not opposed to Government injecting itself into international commerce, including international commerce in goods that are privately shipped.

But it seems to me that there ought to be very careful standards for this. What we have before us in this bill is a particular proposal that has been offered outside the context of a very carefully formulated Government assessment of the real needs of the U.S. merchant marine and the U.S.-tanker fleet.

Senator SPONG. I don't know whether you were here when we opened the hearings——

Mr. STEINBERG. I was here yesterday, sir.

Senator SPONG. No, the day before, the first day of the hearings, I made a very brief statement. The purpose of the hearings is to try to make the assessment and evaluation that you are seeking.

The proponents of the measure did not necessarily begin from a point of being wedded completely to the language of the proposal, but we said we felt that some legislative activity was necessary to bring about the very assessment that you are calling for.

Now what you are saying now—and I am not quarrelling with you—but beyond calling for an assessment, implicit in what you just said to me is that you think even after such an assessment has been made that this would not be the approach.

Mr. STEINBERG. I would leave open the theoretical possibility. I would always leave open the possibility of an extraordinary measure of Government involvement in a particular problem as my statement did suggest, governmental involvement in restricting the free movement of goods, services and capital, and free choice on the part of American business, as the measure of last resort.

And I would theoretically envisage or leave open the possibility that after the assessment has been made of the real needs of the U.S. merchant marine in this respect, and the variety of remedies that are available to the Government in dealing constructively with the prob-

lem, there is always left the possibility that the situation may be so serious and so desperate that the Government is left with no choice but to resort to the kind of proposal that is offered in this bill. In this instance, I do not believe the Government's options are so limited as to demand recourse to such costly remedies as S. 3404.

It seems to me that the way the bill is structured, if I may, it envisages a permanent arrangement, that 50 percent of U.S. oil imports would have to move in U.S.-flag bottoms, period, and the terms of reference do not suggest that this is an extraordinary measure that may be necessary only as a very temporary marginal measure of last resort.

I would also suggest, sir, that in dealing with a matter of this kind I consider it essential that the executive agencies of the government that have responsibility in this area be called before this committee, or, indeed, sir, offer to come before this committee to advise the Congress on the concerns, the very legitimate concerns of the Congress and of the chairman in the very important question of the strength of the U.S.-tanker fleet.

Senator SPONG. I am sure you were here yesterday——

Mr. STEINBERG. Yes, sir, and I heard the chairman's comments.

Senator SPONG. When I observed that those who in the past have made judgments are not yet available to us to share their wisdom with us.

Mr. STEINBERG. Well, I was distressed by this yesterday and I am distressed by this today. This is not the kind of close dialogue that ought to be going on between the two ends of Pennsylvania Avenue on this very important issue.

Senator SPONG. Well, I thank you very much for your appearance here this morning.

(The following information was subsequently received for the record:)

COMMITTEE FOR A NATIONAL TRADE POLICY INC.,
Washington, D.C., May 4, 1972.

Hon. WILLIAM B. SPONG, Jr.,
Senate Subcommittee on Merchant Marine,
United States Senate, Washington, D.C.

DEAR SENATOR SPONG: I would like to elaborate briefly on my answers to your questions in your Committee's May 3 hearings on S. 3404.

You asked why my proposal of a thorough assessment of the possible consequences of this bill led me to urge rejection of the bill rather than just urge that these factors be assessed. I would like to augment the answer I gave you by saying that, as my basic testimony implied, I cannot believe that the United States government does not have recourse in this matter to domestic policy remedies capable of solving whatever problem calls for government action. I cannot believe that our government has no other choice than to resort to the kind of control which S. 3404 would require.

My advocacy of a thorough assessment of the implications of S. 3404 was coupled with advocacy of a thorough assessment of the problems and needs of the U.S.-flag tanker fleet and of the most constructive ways to deal with those problems, to the extent that further government assistance is necessary. Thus, I am opposing this bill because of my conviction that a measure so costly to the many other aspects of the national interest that must be considered is not absolutely necessary when one considers the array of other remedies that are available to the government and that would not be injurious to our country's economic objectives in both domestic and foreign policy.

During our colloquy, you summarized my position as not only calling for a thorough policy reassessment of all these issues, but also as implying that, even after such a reassessment, S. 3404 "would not be the approach". I agree with your summation of the essence of my position. I feel that this bill is the

wrong approach even after the thorough reassessment I advocated because, as noted above, such a costly proposal is not a remedy to which the government should have to resort when one considers the many other remedies that are available.

In my oral answer to your question, I said that I would leave open the theoretical possibility of the need for such an extraordinary measure under circumstances where no better choice of remedies was available. As objectionable a remedy as S. 3404 may be, I would not want to rule out, under all circumstances, the availability of such a measure where it was found to be absolutely necessary to cope with a matter of great concern to the nation. But in terms of the realities of this issue—how to best insure the strength of the U.S. tanker fleet without damaging the national interest on many other fronts—it is my conviction that the need for such legislation would not, on its merits, survive vigorous application of the policy standards which I set forth in my testimony and which I repeat in this letter.

It would be greatly appreciated if this letter could be appended to my testimony in the published hearings.

Sincerely yours,

DAVID J. STEINBERG,
Executive Director.

Senator SPONG. Mr. O. William Moody, administrator, Maritime Trades Department, AFL–CIO.

Mr. Moody, we thank you for going over until today also.

STATEMENT OF O. WILLIAM MOODY, JR., ADMINISTRATOR, MARITIME TRADES DEPARTMENT, AFL–CIO; ACCOMPANIED BY BERTRAM GOTTLIEB, DIRECTOR OF RESEARCH, TRANSPORTATION INSTITUTE

Mr. MOODY. Thank you very much, Mr. Chairman. My name is O. William Moody, Jr. I am the administrator of the AFL–CIO Maritime Trades Department. That is the constitutional Department of the AFL–CIO charged with the responsibility for matters affecting maritime labor.

I am also vice president of the Seafarers International Union of North America.

By your leave, Mr. Chairman, I have with me Mr. Bertram Gottlieb, the director of research of the Transportation Institute, which is a management organization active in the areas of maritime research and promotion and development who shares our concerns in this matter.

With your permission, I would like to file the statement which I have presented to the committee——

Senator SPONG. The statement will be received in its entirety, Mr. Moody, and you may testify from it in any manner that you wish.

Mr. MOODY. I would just like to sort of sum up what the statement contains and if I may, comment on some of the testimony that I have heard here in the last 3 days.

On the basis of what I have heard, Mr. Chairman, it would seem to me that by the statements of both the proponents and the opponents of S. 3404 that both sides have made a pretty good case for the need for this legislation.

I would submit to you that even if we were not confronted with an energy crisis, and with an ocean transportation crisis, I think we could still make an excellent economic case for this legislation.

Obviously it would result in a great many American seafaring jobs. There is a table attached to the back of my testimony which estimates

that by the year 1973 this would result in an increase of 3,750 employees and would generate some $25 million in wages.

In the period 1973 to 1985, and we think this is the low side of the estimate, it would generate $1,380 million in wages.

It would obviously provide a great stimulus to U.S. shipyard activity. It would result in an increase in employment, not only in shipyards, but in related industries such as steel production, production of propulsion equipment and all of those countless items that go into the construction of a tanker.

It is estimated that it would produce, this legislation, in a 12-year period, 1973 to 1985, would produce $14 billion worth of shipbuilding, with 372,000 man-years of shipbuilding employment and 1,116,000 man-years of work in related industries, with a total of in excess of 100,000 jobs created in this program.

Obviously this kind of economic activity would have great benefit to all of the American people in terms of increased gross national product, in terms of taxes that would be paid by those workers engaged in this activity. It would have a tremendous advantage in our shipbuilding capability. I am not an expert in shipbuilding, but our shipbuilding unions who are affiliated with the Maritime Trades Department tell us that one of the problems with shipbuilding in this country is that we don't have any sustained long-range shipbuilding program, and we have consequently fluctuations in employment and it is difficult under those circumstances to build up and maintain a steady force of competent craftsmen in this field.

We certainly would get that spinoff value.

I have heard a great deal of comment both when this legislation was heard by the House Merchant Marine and Fisheries Committee and also here before this committee—Senator Cotton alluded to it on the opening day—about the fear, particularly by the New England Senators and Members of Congress, that this legislation might result in an increase of cost of residual fuels to the consumers.

We would suggest that if there is any real fear on this score that the committee consider removing residual fuels from this legislation, in other words, exempting them from the proposal that 50 percent of all oil imports be carried in American flag bottoms.

We don't think this would do real harm to the program for several reasons, the principal one being that the preponderance of this kind of oil, residual fuel, comes from nearby foreign sources anyway, such as Venezuela, and as I said before, if there is any real concern over this, we would suggest that the committee consider removing that fuel from the legislation.

But the economic case that I have just talked about aside, there seems to be pretty general agreement, both in Government and out, that we are faced with a real energy crisis in this country and that we must depend upon foreign sources of energy to a remarkable degree, and that by 1985 we have the prospect that nearly 60 percent of our petroleum and a high percentage of our natural gas will have to come from foreign sources.

To supply this greatly increased quantity of imports would require a tanker fleet that is equivalent to the total world tanker fleet today.

And, Mr. Chairman, I think both you and Senator Beall recognize the danger inherent in this situation because in introducing this legis-

lation you spoke about the national security and the economic factors and the environmental safety that are dependent upon being certain that not only is the source of this energy available to this country, but that also we have the capability of getting it here once we have the source.

I don't want to be accused, as one witness was yesterday, of being a surrogate Secretary of the Interior, but I would like to read one paragraph that I think is highly significant from a speech that Assistant Secretary of the Interior Hollis M. Dole made before a meeting of our Department recently.

He said: "There are certain things about a nation's life that are simply too important to be left to the control of others. One is ocean transport; another is energy. These and a handful of other truly strategic services constitute the irreducible minimum of capabilities which the nation must have under its own control at all times."

Mr. Dole is the man at the Department of Interior that has the primary responsibility for keeping this Nation advised of its energy requirements and resources.

I think that the testimony of Admiral Zumwalt before the Senate Armed Services Committee is significant. He said that during the past years it has become abundantly clear that by 1985 the United States will have to import vast quantities of petroleum that will require the services of, in his words, "several hundred to over 1,000 tankers, each of 70,000 tons, fully committed to deliveries of oil to the United States."

He went on to say that "the potential for coercion of the United States with or without allies inherent in this situation is ominous."

We are just firmly convinced that the national security requires an uninterrupted supply of petroleum imports. We think we are in a tenuous position to have to rely on foreign nations for the source of energy.

But if we also have to rely on third flags and the flags of other nations, including those of the producing countries, if we have to rely entirely on these other countries for the transportation of these sources of energy, it is sheer folly. And that is the situation that we are in today.

We don't have to be in that position, however. We have some 800,000 deadweight tons of tank ships in layup, including some of the largest and most modern tankers in the U.S. fleet, and some that would certainly led themselves economically to the foreign transportation of oil, import of oil. Some of these ships were built for the North Slope trade. There are others that are being built for that Alaskan trade. But these ships are idle now because the pipeline, as we all know, has been held up by controversy over its construction.

The unemployment of these ships places a heavy burden on the U.S. tanker owners. The industry to that degree is in great distress and they are right now in a crisis situation.

This legislation would do much to prevent the destruction of the nucleus we have for a tanker fleet, and would get these ships back on the high seas flying the American flag and doing the job that we all want to see done to revitalize our American merchant marine.

I heard some comments here about the environmental safety aspects of this legislation in that it would give the U.S. Coast Guard a greater

degree of control and much more rigid control over ships coming to this country with large cargoes of petroleum.

We think that this is certainly an advantage, because the record indicates that the American safety standards and the safe operation of American tankers exceeds any in the world. Although American tankers, as we know, have to spend most of their time in the crowded coastal waters of this hemisphere, and more particularly the North American Continent, their safety record as compared with other countries is far better.

If the committee would like, I would be happy to submit some figures we have based on a study by the Liverpool Underwriters Association and Lloyds Registry of Shipping.

Senator SPONG. We would be very pleased to receive those, Mr. Moody.

(The following information was subsequently received for the record:)

A COMPARISON OF WORLD FLEET AND U.S. TANKER LOSSES, 1964–1970

WORLD TANKER LOSSES (OVER 500 GROSS TONS)

Year	Number of losses			Tonnage losses		
	Total	United States	Percent of total	Total	United States	United States percent of total
1964	7	2	29	58,000	21,000	36.0
1965	13	0	0	142,000	----------	0
1966	17	2	12	227,000	31,000	6.0
1967	18	1	5.5	187,000	12,000	6.5
1968	19	0	0	185,000	----------	0
1969	19	0	0	347,000	----------	0
1970	22	0	0	241,000	----------	0
Total	115	5	4.5	1,387,000	46,000	3.5

Source: Liverpool Underwriters Association
Lloyds Register of Shipping

TOTAL WORLD AND U.S. TANKER FLEETS

Number of tankers			Tonnage of tankers		
World	United States	Total	World	United States	United States percent of total
3,843	398	10.5	50,201,000	4,499,000	9.0
3,975	377	9.5	54,666,000	4,511,000	8.3
4,095	362	8.8	59,804,000	4,413,000	7.4
4,158	369	8.9	63,794,000	4,539,000	7.1
4,268	362	8.5	68,804,000	4,482,000	6.5
4,436	357	8.0	76,959,000	4,554,000	6.0
4,623	345	7.5	85,689,000	4,684,000	5.5
Average		8.75			7.0

Source: Lloyds Register of Shipping.

SUMMARY

On a vessel basis—1964 to 1970—U.S. tankers were 8.75 percent of the world fleet, Yet, U.S. tanker losses were only 4.5 percent of world tanker losses.

On a tonnage basis—U.S. tankers were 7 percent of the world tanker fleet. Yet, U.S. tankers were only 3.5 percent of the total world tanker losses.

Thus when compared on a tonnage or vessel basis, the U.S. share of world tanker losses were about half the losses of the average of the world tanker fleet. U.S.-operated tankers safety record is twice as good as the average tanker safety record fleets registered under foreign flags.

THE EXPERIENCE IN LOS ANGELES HARBOR

It is estimated that in 1970 there was one spill for every seven foreign flag tanker vessels in Los Angeles harbor while there was only one spill for every 65 U.S. tankers.

Source: Capt. D. H. Putman, California Fish and Game Commission.

Mr. MOODY. Now, we have heard here from some of the opponents of the bill, including the U.S. State Department, a lot of talk about what we like to call the myth of retaliation by other countries if we try to give our own flag preferential treatment in the matter of ocean transportation.

The Merchant Marine Act of 1970, to which this committee supplied a great deal of leadership in its passage through Congress, we think gives this country one of the finest sets of guidelines of any maritime nation in the world for the development of a great maritime fleet and an ample shipbuilding capability.

The problem is that it just hasn't gotten off the ground, despite the best efforts of the administration. And I would like to point out that the administration, under the capable leadership of Assistant Secretary of Commerce for Maritime Affairs Andy Gibson, has worked very hard at trying to get this program going.

But the chicken and the egg in this proposition is that unless the lending agencies can see cargoes, there are just not going to be any ships built.

Senator SPONG. Do you think that is the reason the 1970 act is not working?

Mr. MOODY. Yes, sir; I think that is the fundamental reason. Unless the lending agencies can see some long-range cargo prospects, they just are not going to come forward to the degree that we anticipated when this program was set up.

You have to remember, you see, despite the conversation about subsidy, subsidy is only part of the cost of constructing a ship, and not a very substantial part at that. You must go to private capital, even though it is Government insured, to get this program going.

Senator SPONG. Do you see any real possibility that the 1970 act is going to work?

Mr. MOODY. I think it will work, because there are so many of us that are determined to make it work, Senator Spong.

For example, labor, management, and Government have gotten together on a tripartite program and are working at it very energetically, having meetings all over the United States to try to convince the shippers in this country that the American merchant marine is reliable, it is dependable, it can be counted on, and that their interests would best be served if they patronize it.

Senator SPONG. What is the level of seagoing employment now?

Mr. MOODY. It is down drastically, Mr. Chairman. As of now I would guess we have about 530 ships in operation, somewhere in that neighborhood, which is about half of what we had 2 years ago.

Senator SPONG. I didn't mean to interrupt your testimony there, but I wanted to ask you these questions.

We heard some testimony yesterday that not a single American oil company has let a charter to build a U.S.-flag tanker since the 1970 act went into effect, even though some foreign oil companies have. Do you foresee the American oil companies changing their ways in the absence of any legislation?

Mr. Moody. No, I certainly don't, Senator, because we have to remember that the American oil companies over the years to a great degree have become really multinational corporations. It is to their economic advantage to operate these vast fleets of foreign-flag ships that they operate, because they escape the payment of American taxes, they escape more costly American safety standards, they go to foreign shipyards for their building, they don't have to pay taxes on this money because they leave it out there to build ships in foreign yards, they never have to repatriate the earnings from these ships, and I don't think we will ever get it without this legislation.

But I think with the Merchant Marine Act of 1970, if they availed themselves of it, they could operate ships, build ships, on a competitive basis with the foreign-flag operators, particularly if, as is now under consideration by Congress, some latitude is given in the area of foreign to foreign trading.

You see, that is another point. We talk about flexibility. If we couple this legislation with a flexibility of permitting foreign to foreign trade, I don't see why they should have any difficulty with this legislation at all.

Now, I would like to address myself for just a moment to the matter of precedent.

You know, we hear some of the opponents viewing this legislation with great alarm. But this is really not any new departure in the world shipping scene.

For example, the Rochdale Commission, which was organized by the British to study world shipping, reported in 1970 that 30 non-Communist nations practiced flag protection of one kind or another, either legislatively or by regulation or economic practice.

That figure becomes even greater when we consider that the Communist nations are completely protectionist in their attitude toward shipping.

Now, these nations practicing this kind of protectionism since World War II, and with our help, a great many of them, have succeeded so well that they are now carrying 95 percent of our total import and export cargo. And our fleet is largely dependent upon Government cargo at this point.

That is one of the things we are trying to turn around through this program I was telling you about awhile ago. There is no major maritime nation that carries less than 30 percent of its own import-export cargoes.

The Soviets carry well over 50 percent. The French require that two-thirds of all their petroleum imports be carried in French-flag ships, and that all oil carried by U.S. oil companies to their subsidiary French refineries, be carried in foreign-flag ships.

Spain, Chile, and Peru require that all of their oil imports be carried in tankers bearing the flags of those nations.

The Japanese carry at least half of their oil imports, and they are—I don't need to tell you, they are entirely dependent on petroleum imports.

The Venezuelans are considering requiring that 50 percent of their production, their export, be carried in Venezuelan ships.

We understand that there are similar moves afoot in the Arab countries.

So if we adopt a protectionist stance where our shipping is concerned, we are certainly not departing from the world norm.

I think we ought to examine, too, the motives and the organizations of some of those witnesses who testified against this legislation. For example, the Committee for a National Trade Policy which testified here this morning. In their testimony before the House of Representatives, and I believe here today, they said that their interest is the interest of the Nation as a whole.

I would like to ask them, what nation?

I am not sure they are talking about this country.

Of the 25 corporations represented on their board of directors, 18 of them are large multinational corporations which, over the last decade have exported industries and thousands upon thousands of U.S. jobs to other nations. And they say that they speak in the name of our national interest.

Well, I would like to read to you an enlightening quotation from Robert Stevenson, an official of the Ford Motor Co. which sits on the board of directors of this committee. He is executive vice president for international operations of Ford, as a matter of fact.

Here is what he has to say about that company's foreign policy: "It is our goal to be in every single country there is, iron curtain countries, Russia, China. We, at Ford Motor Co. look at the world map without any boundaries. We don't consider ourselves basically an American company. We are a multinational company and when we approach a government that doesn't like the United States, we always say, who do you like, Britain, Germany? We carry a lot of flags. We export from every country."

Mr. Chairman, I contend that that is the philosophy of the Committee for a National Trade Policy.

The Ford Motor Co. may be able to say that it does not consider itself basically an American company, but the American-flag merchant marine would not say that. It is American and its workers are American, and the workers who built it are American. And we think it deserves to be protected from this kind of multinational philosophy that really is dedicated to profit and not to the flags of any nation.

Let's talk about the Committee of European and National Shipowners. Greece, Japan, Netherlands, Norway, Sweden, Great Britain, Belgium, Denmark, Finland, and France among others, are always in the front rank of those who would destroy the American merchant marine.

They are not just against this legislation, they are against all cargo preference legislation for this country, including the Cargo Preference Acts, which this bill seeks to amend.

They were against the Merchant Marine Act of 1970, and it is obvious that they are devoted to the destruction of our fleet as a competitor.

The strange difference over the years between ourselves and the foreigners has been that they have concerned themselves with competing with us, while in our industry, our companies have been too busy competing with each other to really concern themselves with the foreigners.

But I think that attitude has changed in this country. I think that we have got more unity in this industry than we have ever had before.

With this kind of legislation, we can get out there where the action is and do a job.

Now he had a witness here yesterday representing the American Committee for Flags of Necessity. We have also heard that called the American Committee for Flags of Convenience. That is what we would label it.

But in our union, the Seafarers Union, we have always called it the runaway flags; the Committe of the Runaway Flags, that operates the runaway fleet, flying the colors of Liberia and Panama. The committee is the organization of the giant oil companies, which have, I think, the same multinational concerns for profit rather than a primary interest in this nation's national interest.

I heard a great deal of conversation before this commitee yesterday about the interest of the runaway flag of operators as citizens. I think it is only fair to ask what country are they citizens of, Liberia or Panama?

I think we have a right to question their right to talk about the national interest. We would suggest that they should be testifying as shipowners from Liberia and Panama. It seems a bit incongruous that they would question the right of American shipowners to appear before this committee and give their views on this legislation, when they are representing the views of the shipowners of foreign flags.

It seems a bit incongruous that they should talk about the national interest, when by using this device of the runaway flag, they are escaping, as I said before, the payment of American taxes, escaping American safety standards, and escaping the payment of decent American wages.

I would like to disgree just a minute and talk about that. I think the wage factor is the least significant part of the competitive disadvantage of the American merchant marine.

It is becoming increasingly less of a disadvantage in all U.S. industry. I think it would be interesting to note that the average wage increases of Japanese and West German workers in the last 5 years were more than double the percentage of average increases of American workers.

Now, this Committee of Runaway Flag Operators, they also pose this myth of foreign retaliation. I think it is time that we abandon this philosophy of weakness and fear which seems to be the philosophy of the U.S. State Department. I just don't believe that the other nations of the world will shut out the Americans if we should see it to be our duty to protect our national interest in this regard.

No one retaliates against the French for protecting their fleet.

No one retaliates against the Japanese, or the West Germans, or the Scandinavians, or the Soviet Union, and they are completely protected and growing in numbers in world merchant trade routes.

Speaking of the State Department, I think it is probably the most prominent of the opponents of the American merchant marine. The State Department has been saying, ever since World War II, that a merchant fleet is not essential to the national security and the economic well-being of this country. And it was that kind of advice that led us to sell off the greatest merchant fleet in the history of the world for a very cheap song, and to tear down the greatest shipbuilding capability in the history of the world.

The State Department seems to believe that there is something immoral about advocating that a portion of our cargoes be carried in

American-flag ships, particularly when you start talking about AID cargoes.

It seems a bit inconsistent while they say it is immoral for us to carry a portion of this cargo, that it is highly moral for them to insist that the flags of the beneficiary nations carry this cargo. It doesn't make much sense, but anyway, that is their position.

The Department of Agriculture has also always been in the forefront of those who try to withhold cargo from our flags.

We are constantly in a battle to maintain our position there. But, the positions of both of these departments, I submit, are inconsistent with the national policy as expressed by President Nixon, who asked for the program that we now have, and it is inconsistent with the policy of Congress, as stated in the Cargo Preference Act and in the Merchant Marine Act of 1970.

I would like to talk for a second about this effective control theory we have heard about, too: The theory that we don't really need tankers because we have effective control over a great quantity of ships that are available to us.

If we are talking about the ships of our allies, so-called friendly nations, that theory just did not stand up in the Vietnam war. For one reason or another, mostly political, a good many of these nations refused to handle our military cargo. And some of them carried cargo for both sides.

If we had not been able to get out of mothballs a lot of the old rustbuckets still hanging over from World War II, and get them crewed up and mount a major sealift, the merchant marine would not have been able to measure up. We would have been in serious difficulty in the Vietnam sealift.

And if we are talking about the runaway flag fleet, I just don't know how much we can rely upon the dependency of that outfit. If you are talking about ships that are built in Japanese shipyards, crewed by Chinese, with Italian captains, it just becomes a little difficult for me to assess their loyalty to the United States.

In closing, Mr. Chairman, I think that we are confronted here with both a crisis, and a real opportunity as well. I think we have an opportunity to solve a major problem in implementing the Merchant Marine Act of 1970, and building a dependable means of ocean transportation for a vital source of energy. And I think we have the opportunity to bring to life an American shipbuilding industry and an American merchant marine that will provide jobs for thousands of workers, and be of great economic benefit to this Nation.

I certainly thank you, Mr. Chairman, for the time you have given us this morning.

Senator SPONG. Thank you very much, Mr. Moody, for your testimony.

I believe I have asked you almost everything that I needed to amplify during your testimony.

I have looked over your statement and see that you have elaborated on many of the points you made. If we have further questions, the staff will submit them to you.

Mr. MOODY. Thank you very much.

Senator SPONG. Thank you very much and thank you Mr. Gottlieb.

(The statement follows:)

STATEMENT OF O. WILLIAM MOODY, JR., ADMINISTRATOR, AFL–CIO MARITIME TRADES DEPARTMENT

Mr. Chairman and members of the Committee.

My name is O. William Moody, Jr. I am Administrator of the AFL–CIO Maritime Trades Department, an organization created by the AFL–CIO Maritime Trades Department, an organization created by the AFL–CIO to represent the interests of workers in the maritime industry. This Department consists of 45 national and international unions with a total membership of approximately eight million.

I am also a vice president of the Seafarers International Union of North America, AFL–CIO, which represents seafaring men who crew American-flag merchant vessels.

The workers represented by these organizations are directly and vitally affected by the economic conditions of the maritime industry. We appreciate this Committee's continuing concern for the problems faced by the American Merchant Marine.

My purpose in appearing before you today is to urge your support for the enactment of S. 3404. This measure would amend the Cargo Preference Act to guarantee that a minimum of 50 percent of all U.S. oil imports be carried by American-flag ships.

Mr. Chairman, any discussion of this legislation must be directly related to the energy crisis that is confronting our nation today.

Mankind has consumed more energy in the past 30 years than in all previous history. In the next 30 years, we will exceed even that record.

Six percent of the world's population is in the United States. Yet the United States, with a total energy demand equivalent to 33 million barrels of oil each day, consumes 32 percent of the world's energy production. More gas, oil, coal and nuclear power are used in this country than in the Soviet Union, Britain, West Germany and Japan combined.

Today our own resources are no longer sufficient to meet our demand. As Dr. Ralph Lapp, consulting physicist for the Nuclear Science Service, said in testimony before the House Interior and Insular Affairs Committee, "America is in transition in its energy economy from the condition of self sufficiency to one of dependence upon foreign energy sources."

In 1960 this country imported 1.8 million barrels of oil per day, or 18 percent of our demand. In 1970 imports of oil had risen to 3.3 million barrels per day, or 23 percent of our demand of 15 million barrels.

By 1985 it is estimated that the United States' energy consumption will nearly double to the equivalent of 63 million barrels of oil each day. We will have to import neary 60 percent of our petroleum, or more than 14 million barrels per day. At the same time, the United States will have to import approximately 25 percent of its natural gas supply in order to overcome a domestic gas deficit which Dr. Lapp has estimated to be as large as our total gas consumption in 1969. This country will, at that time, be importing enough oil and gas to provide nearly 30 percent of our energy demand.

To supply the United States with the oil and gas it must import in 1985 will require as much tanker tonnage as now exists in the world—about 160 million deadweight tons. To carry the projected crude imports, we will need more than 2,600 tankers of the 47,000 DWT class, which is the average size now in service. If we were to go to the more economical supertankers, it would take 500 in the 250,000 DWT class to fill our needs. In addition, as many as 100 liquid natural gas tankers with a capacity of 120,000 cubic meters each will be required to meet the domestic need for this fuel.

Senators William Spong, Jr. (D–Va.) and J. Glenn Beall, Jr. (R–Md) sensed the seriousness of this situation when they jointly introduced S. 3404. They said that our national security, our economy, and the safety of our environment demand such legislation. We fully agree.

As our demand for energy increases, our supply of desirable domestic energy will not be able to keep pace, necessitating our becoming more dependent on foreign sources for our energy supplies. However, we have it within our power to prevent a dual dependency; that is, becoming dependent on foreign sources not only to supply our energy, but also dependent on foreign sources to transport these fuels to our shores. We agree with Hollis M. Dole, Assistant Secretary of the Interior, who said:

"There are certain things about a nation's life that are simply too important to be left to the control of others. One is ocean transport. Another is energy. These, and a handful of other truly strategic services constitute the irreducible minimum of capabilities which the nation must have under its own control at all times."

Such a dependency would add to the risk of being shut off from our energy supplies. For example, using a third-party nation as a transportation medium could result in:

A cutoff to the United States of foreign petroleum supplies due to a political or economic dispute between the producing and transporting nations. If Algeria, for example, decides to prohibit French ships from carrying Algerian oil, all French ships are eliminated, whether they were bound to France or the United States.

A cutoff to the United States of foreign supplies by an international corporation that controls vessels importing into the United States under a foreign flag. For example, if the United States pressures the corporation to comply with our stringent safety and pollution control standards aboard its vessels, the corporation could refuse to sail to the United States altogether.

A cutoff to the United States of foreign petroleum by the transporting nation due to a political or economic dispute between the United States and that nation.

There is also the danger of new crises in other parts of the world. We have already experienced a strain on the world's tanker fleet caused by the closing of the Suez Canal and the rupture of the Trans-Arabian Pipeline in Syria. Making the long run from the Persian Gulf around the tip of Africa required the use of more tankers and increased the cost of transporting crude oil from the Middle East and Africa to the United States East Coast refineries.

Mr. Chairman, our national security requires an uninterrupted supply of petroleum imports in the years to come. We are in a tenuous position already because of our reliance upon foreign interests for this vital source of energy.

To extend that reliance upon foreign energy resources to third-party sources of transportation is extremely dangerous.

And yet that is where we stand today.

We are confronted with the spectre of other nations employing their oil reserves for political advantage. We are willing to compound this danger to our national security by perpetuating foreign control of the transportation of these vital energy resources to our shores? This question was best answered by Mr. Andrew Gibson, Assistant Secretary of Commerce for Maritime Affairs in a recent speech in Sweden. He stated that:

"As a major world power the United States needs a strong merchant fleet to contribute to an effective implementation of its foreign and defense policies. President Nixon's concept of the United States' role in the world, known as the Nixon Doctrine, places renewed stress on the foreign policy and defense missions fulfilled by a strong merchant marine."

In recent years we have learned again that national security—in the context of protecting the welfare of our citizens—involves the condition of our economic health, as well.

The merchant marine contributes about $1 billion annually to the credit side of our balance of payments.

In addition, we estimate that by 1985 this contribution to the balance of payments would be at least doubled through the enactment of S. 3404.

American-flag carriage of at least 50 percent of our oil imports would provide many other economic benefits.

To transport a minimum of 50 percent of our oil imports by 1985, the United States would require a fleet of 363 tankers averaging 150,000 deadweight tons in size.

We estimate that each vessel would require an American crew—officers, licensed and unlicensed seamen—of between 25 and 35 men. This, in turn, reflects a potential of 9,000 to 12,000 seafaring jobs. (Chart I)

This takes into account the additional infusion of economic benefits that could develop with the construction and operation of an American-flag fleet of liquid natural gas carriers.

Constructing the required vessels for our petroleum trade in American yards would provide needed employment for shipyard workers. Their wages would return in part to the nation's economy in the form of income taxes and expenditures for domestic goods and services.

Statistics developed by shipbuilding experts indicate the construction of an American-flag fleet capable of carrying at least 50 percent of our oil imports by 1985 would involve 364,000 man-years of work in our shipyards. (Chart II)

An additional million man-years of work would be generated in related industries in the construction and operation of this fleet.

The average private shipyard employment for the first eleven months of 1971 was 128,000, the lowest since 1965. So when we discuss construction of a fleet of hundreds of modern, efficient tankers, we are talking about tens of thousands of jobs for skilled and semi-skilled Americans who are now unemployed.

Our shipyards and shipping industry would become once again productive, profitable ventures with the infusions of billions of dollars of private capital investments.

This will provide a strong immediate boost to the current U.S. tanker fleet. This fleet is now suffering a severe depression due to generally poor world shipping conditions. However, in this shipping depression, the U.S. tanker fleet has been hit harder than any other world fleet.

At the present time, more than 800,000 tons of U.S. tanker vessels are laid up. Many of these ships are among the largest, most modern and efficient in the American-flag fleet. Some were constructed in anticipation of transporting oil from the Alaskan North Slope—business that has been delayed because of the controversy over the construction of the Alaskan pipeline.

This unemployed tonnage represents 11.5 percent of the U.S. tanker fleet—and gives our nation the distinction of leading the maritime world in percentage of its tanker fleet that is in lay-up. The fact that there is no cargo for these vessels has placed an intolerable financial strain on U.S. tanker owners that threatens the very survival of the U.S. tank-ship industry.

Thus this bill is vital not only in that it will foster a new, greatly strengthened U.S. tanker fleet, but because it will also act to prevent the destruction of the existing U.S. tanker fleet. Without this bill, it is doubtful that many tank-ship owners can long survive under the conditions now facing the U.S. fleet.

Deep concern about this aspect of our energy crisis is growing.

Several weeks ago the Commission on American Shipbuilding, consisting of industry and government experts, found the need to submit an urgent interim report—even though it was not due to report its findings until late in 1973.

That report noted that the skyrocketing need for the transportation of energy fuels, if not promptly supported by the coordinated actions of the Federal Government, may, in their words, "be irrevocably lost to foreign competition."

The Commission said this loss would take from Americans a potential multi-billion dollar U.S. market over the next decade—a market we cannot afford to lose.

One additional advantage inherent in this legislation is that it would provide protection for our environment. We, too, are angered when our beaches and shorelines are damaged by oil spills. But we must recognize that we are running dangerously low in our supply of oil. And, that we will have no choice but to import increasing amounts in the future. However, we believe that the use of United States-flag vessels to carry oil will assure that this dangerous and potentially pollutant cargo will be carried in the safest manner possible.

American-flag vessels must comply with legislation designed to protect our environment. Should we become dependent on foreign-flag vessels, it is possible that we would be forced to lower our standards so these vessels would agree to enter our waters. Pollution prevention controls are expensive to the shipowner, and foreign interests may not share in our concern for the U.S. environment. By using American-flag vessels, the United States Coast Guard would have primary responsibility and absolute control over construction, loading and off-loading, ship manning levels and crew proficiency standards and would enforce these rules.

Mr. Chairman, we have been disturbed at the frequent displays of hypocrisy by opponents of S. 3404 in their expressions of fear of retaliation by other nations should this bill be enacted.

Trade between nations has always been regulated. It always will be regulated. The Rochdale Commission, organized by the English government to study the British fleet and the world shipping situation it would face in the future, reported in 1970 that 30 non-communist nations practice some form of flag protection for their trade. This figure is even greater when the communist nations' fleets are added and when countries who have recently begun such practices are added, such as France.

Thus the practice of flag preference is a prevalent one and is continuing to grow. The Rochdale Commission concluded its comments on the subject in 1970 by saying that this was one of the most serious problems faced by the British fleet.

The reasons for regulations are quite apparent in the case of the American Merchant Marine. In the past, the development of the American Merchant Marine has been hindered by the failure of shipping legislation to rapidly adapt to changing economic and competitive conditions within the industry.

This Committee was instrumental in redirecting Federal assistance to our merchant fleet to the extent that we now have, in the Merchant Marine Act of 1970, maritime guidelines that are equal to the best in the world.

Our urgent need today is to direct our efforts toward the realities of worldwide maritime competition in order to meet the goals that were intended by this Committee and the Congress in the Merchant Marine Act of 1970.

And the realities in today's oceanborne commercial competition revolve around cargo guarantees for home-nation fleets. The failure to guarantee a fair share of American imports and exports for American-flag carriers is now threatening the existence of our merchant fleet.

Nations that protect their home fleets in the foreign trade through cargo laws, regulations, administrative policies and private agreements have succeeded in taking 95 percent of America's cargoes from the U.S.-flag fleet. And nearly all bulk cargo in the foreign trade, including oil, is now monopolized by foreign shipping interests.

At the same time, no other major maritime nation carries less than 30 percent of its own trade and many approach 50 percent. The Soviet Union carries well over 50 percent of its ocean commerce on ships carrying the Red flag.

And oil is given special treatment. France demands that two-thirds of her oil imports be carried aboard French ships. In addition, all the oil carried by American-owned companies to their own refineries in France must be transported in French-flag vessels.

Spain, Chile, and Peru require that all oil imported to their lands be carried by tankers bearing their flags.

Japan, by administrative procedure, guarantees its fleet at least half of all its oil carriage.

Venezuela is considering a measure making it mandatory that Venezuelan-flag tankers transport 50 percent of all oil exports.

And we now see that the Arab nations have set a policy toward the creation of their own national tanker fleets. Can there be any doubt that the customers dependent upon the oil supplies of Arab nations will find themselves bound to ship a share of that oil on vessels flying the flags of Arab nations?

Yet in the face of these and other severe trade restrictions against the United States, the Committee for a National Trade Policy opposed the legislation before us today in the name of free world trade.

In their statement before the House of Representatives Merchant Marine Committee, this organization stated that the sole standard for their opposition is based on, and I quote, "the interest of the nation as a whole."

This leads us to ask—what nation?

Of the 25 corporations represented on the Board of Directors of the Committee for a National Trade Policy, 18 are multinational firms. Many of them have stripped industry from America and placed it in low-wage countries, while at the same time retaining their U.S. marketing structures.

They say they speak in the name of our national interest. Among the firms with seats on the Board of Directors is the Ford Motor Company. Let me read to you an enlightening quote from Robert Stevenson, executive vice president for International Operations of the Ford Motor Company as reported in Business Week magazine. He stated:

"It is our goal to be in every single country there is, Iron Curtain countries, Russia, China. We at Ford Motor Company look at the world map without any boundaries.

"We don't consider ourselves basically an American company. We are a multinational company. And when we approach a government that doesn't like the U.S., we always say, 'Who do you like? Britain? Germany? We carry a log of flags. We export from every country.'"

Mr. Chairman, I contend that this is the philosophy of the Committee for a National Trade Policy—a philosophy that is void of loyalty to any nation . . . a policy that is dedicated to profit at any price.

While the Ford Motor Company may be able to say it does not consider itself "basically an American company," the American-flag merchant marine will not. It is American. And it deserves to be protected from multinational companies that are utilizing every opportunity to destroy us.

Another organization opposed to this legislation is the Committee of European National Shipowners. Its membership consists of the private merchant fleets of the world's major shipping nations—(Greece, Japan, the Netherlands, Norway, Sweden, Great Britain, Belgium, Denmark, Finland and France among them. These private fleets include those of some of the largest shipping companies in the world and they have a tradition of being in the front ranks of those who would destroy the American Merchant Marine. These foreigners have no reservations about meddling in U.S. affairs!

They testified against the U.S. Cargo Preference Act, the only form of cargo assistance available to our dwindling merchant fleet.

They testified against the Merchant Marine Act of 1970.

They published and distributed to the members of Congress a pamphlet titled, "Cargo Preference—Boon or Barrier," which attacked all preferential government cargo treatment for the U.S. Merchant Marine at a time when our share of our own nation's cargo is a paltry 5 percent.

And now they are again mounting yet another attack against a measure that might revive the American-flag fleet, strengthen our economy and enhance our national security.

The Committee of European National Shipowners, in opposing this legislation, added to its record of opposing every single piece of legislation that could be of assistance to the U.S. merchant marine. By their record, it can be said that they are devoted to the destruction of our fleet as a competitor on the world's seas.

And they have nearly succeeded, Mr. Chairman.

And then we have the American Committee for Flags of Necessity. This is the organization of the runaway fleet—the American owners of vessels flying the colors of Liberia and Panama and Honduras. This is the organization, too, of the giant oil companies that don't want to pay American taxes, don't want to pay American wages, and don't want to abide by American standards of ship safety.

They, too, tell us that other lands will retaliate if the United States Government decides to develop a tanker fleet in the foreign trade by requiring that a minimum of 50 percent of its oil imports be carried aboard American-flag vessels.

What is their true fear, Mr. Chairman? Is it not that America may rise, like other maritime nations, to the point where it is willing to protect for its own merchant fleet the cargoes that keep that fleet in existence?

Is it not that our government, like other maritime governments, will see the wisdom in having a profitable, viable merchant fleet under its flag to protect our national security, including our national economy?

We do not believe that other nations will shut out the American-flag fleet because our government sees as its duty the protection of that fleet.

No one has retaliated against the French for their restrictions. No one has shut out the Japanese fleet because of the protective Japanese trading policies.

Indeed, no one has retaliated against the fleet of the Soviet Union which is completely protected by the state, and which each day grows in numbers and in influence on the world's ocean trade routes.

The opponents of S. 3404 seem to be in the line of those who find great dangers inherent in any action to protect the American shipping industry.

The most prominent opponent of the American Merchant Marine is the U.S. State Department. The Department has repeatedly asserted that the merchant marine is not essential to the security and economic interests of the U.S. and should, therefore, be sacrificed to accomodate foreign trading interests.

The Department of Agriculture too, has been consistent in following policies that withhold vital cargo from the American-flag fleet and favoring our foreign-flag competitors.

The position is inconsistent with our national policy as expressed by President Nixon. He has repeatedly expressed his firm conviction of the importance to our national defense and to our economy of a strong merchant marine.

We are convinced that there remains a determination—shown so clearly in the overwhelming adoption of the Merchant Marine Act of 1970—to save the United States Merchant Marine.

Thus, the benefits of this bill are great. It will provide immediate and long term employment for our tanker fleet. It will provide new jobs and will revive our shipbuilding industry. It will help our balance of payments toward stability. And it will provide greater safeguards for our environment.

Our organization, the AFL–CIO Maritime Trades Department, on February 11, adopted a resolution committing us to total support of the legislation before us. This action was followed immediately by the endorsement of our position by the AFL–CIO Executive Council.

We acted because we know that we have reached the point where we must take hold of this opportunity to fulfill the intent of Congress as expressed in the Merchant Marine Act of 1970.

S. 3404 gives us the chance to strengthen the American Merchant Marine through an effective legislative approach that will have a major beneficial impact upon our industry, our economy, our national security and our environment.

The seriousness of the threat that a weakened American Merchant Marine poses to the security of our nation has been made explicit by Admiral Elmo R. Zumwalt, Chief of Naval Operations.

Admiral Zumwalt told the Senate Armed Services Committee that during the past years it has become clear that by 1985 the United States will have to import vast quantities of petroleum that will require the services of, in his words, "several hundred to over 1,000 tankers, each of 70,000 tons, fully committed to deliveries of oil to the U.S."

Noting the crisis nature of the situation, the admiral told the Committee, and I again quote:

"The potential for coercion of the U.S., with or without allies, inherent in this situation is ominous."

Mr. Chairman, we are confronted with both a crisis and an opportunity. S. 3404 would give us the legislative foundation from which to develop an American-flag tanker fleet that would protect us in the transportation of the petroleum that we simply must have to survive. And it would bring back to life an American industry that would provide jobs for hundreds of thousands of workers, profits for investors and strength for our nation.

Appendix

SHIPBOARD WAGES AND EMPLOYMENT AS A RESULT OF ENACTMENT OF S. 3404

Year	Actual jobs available [1]	Wages generated [2]	Number of employees [3]
1973	2,500	$25,000,000	3,750
1974	5,605	56,050,000	8,407
1975	6,640	66,400,000	9,960
1976	7,675	76,750,000	11,512
1977	8,710	87,100,000	13,065
1978	9,745	97,450,000	14,617
1979	10,780	107,800,000	16,170
1980	11,815	118,150,000	17,722
1981	12,850	128,500,000	19,275
1982	13,885	138,850,000	20,827
1983	14,920	149,200,000	22,380
1984	15,955	159,550,000	23,932
1985	17,000	170,000,000	25,500
Total		1,380,800,000	

[1] Based on median of the various ship and crew sizes possible.
[2] Based on average $10,000 per year per job. No allowance has been made for future wage increases.
[3] Based on 1.5 men per job available.

EFFECTS ON U.S. SHIPYARDS OF PASSAGE OF S. 3404

Tonnage needed 1973–1985, under S. 3404	54, 000, 000 DWT [1]
Total Shipbuilding cost, 1973–1985	$14, 000, 000, 000
Man years of shipbuilding, 1973–1985	372, 000
Shipbuilding jobs created per year, by S. 3404 (1973–1985)	26, 500
Man years of work in related industries [2] created by S. 3404, 1973–1985	1, 116, 000
Annual number of jobs in related industries from S. 3404	79, 500

[1] National Petroleum Council.
[2] Three jobs are estimated to be produced in related industries from every job created directly in shipbuilding.

(Whereupon, at 10:50 a.m., the hearing was adjourned.)

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS ON S. 3241 AND S. 3335

STATEMENT OF HOYT S. HADDOCK, EXECUTIVE DIRECTOR, AFL–CIO MARITIME COMMITTEE

We shall limit our remarks to the most salient and important sections of S. 3335, the Maritime Authorization Bill for Fiscal Year 1973. These important sections are those which would provide the quantitative and qualitative upgrading of our U.S. flag merchant fleet.

The state of our privately owned U.S. flag merchant marine continues to decline while other national flag fleets continue on a sharp upswing. We are #7 merchant marine in the world. The #1 merchant marine, flying the runaway flag of Liberia, has over three times the carrying capacity of our fleet. Also, in descending order the merchant fleets of Japan as #2, United Kingdom as #3 and Norway as #4 *each* have over twice our carrying capacity. Greece is #5 and USSR is #6 as world maritime powers.

It should be noted that as of May 31, 1969, our privately owned active U.S. flag merchant fleet had already declined to 888 ships. Now, almost three years later, the decline continues and our privately owned active merchant fleet is down to 613 ships as of February 1, 1972. Moreover, over 75 percent of these ships are obsolete being over 20 years of age. This is quite a contrast to the Soviet Merchant Marine which not only is larger in quantity of ships and deadweight tonnage but has a new fleet with over 80 percent of her ships under 10 years old. In fact, Russia has recently announced a new five year plan (1971–1975) in which they will sharply accelerate building up their merchant marine. In this plan they will concentrate on 150,000 DWT tankers and 100,000 DWT ore carriers as well as on container ships. They also are modernizing port facilities to handle containers. Their goal remains 1980 as the date to become #1 maritime power in the world.

Of the 613 privately owned active ships under our flag on February 1, 1972, 11 are combination, 376 freighters, and 226 tankers. The tankers are in our protected domestic trades and not in our foreign trade.

The decline of our merchant marine has been accelerated by lack of consistency of Governmental policies. In time of war huge amounts have been expended to build and operate ships "in order to save the world". In peacetime the merchant ships have been placed in mothballed reserve fleets for future emergencies. Since the end of World War II some 2,000 ships (of 3,000 gross tons and over), aggregating 13.3 million gross tons, were sold and/or transferred to foreign flags. These figures do not even include scrap sales or new construction sales for export. These foreign sales have stimulated the growth of the runaway flag fleets of Liberia and Panama.

U.S. citizens control about one-third of the Liberian tonnage which is the largest and most modern in the world. U.S. citizens also own over one-half of the ships under Panamanian registry.

Large U.S. corporations which owe the most to the United States are the greatest offenders when it comes to runaway flag ownership. The tanker companies include the Esso group, Gulf Oil, Texaco, Socony, Mobil, Cities Service, Getty Oil, Sinclair, Continental Oil and Phillips Petroleum.

The U.S. owned foreign flag dry bulk carriers are owned and operated by Bethlehem Steel Corporation, United States Gypsum Company, Reynolds Metals Company, Kaiser Cement and Gypsum Corporation, American Sugar Refining Company, Eastern Gas and Fuel Associates, National Steel Corporation, Aluminum Company of America, Utah Construction and Mining Company, Getty Oil Company and Phillips Petroleum.

These wealthy corporations are not just dodging paying American-level wages, they are dodging U.S. taxes and even safety standards. They are the men without a flag which makes our merchant marine an S.O.S. upside-down flag fleet.

Our employment is dropping precipitously. In May 1969 the 888 U.S. flag, active privately owned, deepsea merchant ships were manned by 44,924 licensed and unlicensed seamen. This had been a decrease from the 47,390 seamen employed on 927 U.S. merchant ships in mid-1968.

As of February 1, 1972, there were 613 privately owned active oceangoing ships with only 27,771 jobs. Thus, from mid-1968 to February 1, 1972, there was a loss of 19,619 jobs, or a cut of 41 percent. The recent lay-up of our East and Gulf Coast passenger ships meant a loss of over 3,500 berths, which meant unemployment to over 5,000 seamen.

We have used only a number of ships without deadweight tonnage. Until the replacement program of the 1970 Act takes effect, there is little need to indicate much more than trends. The current trends are all *down* for numbers of ships and level of jobs for seamen and longshoremen. Even with the new programs, the trend line for ships and jobs will continue downward because of the increased size of replacement ships with their automated systems as well as automated loading devices and techniques.

Our firm position is that the total authorization of $525,860,000 for fiscal year 1973 should be increased in order to reverse the sharp decline of our U.S. flag merchant marine.

The first item that is inadequate to provide a balanced U.S. flag merchant marine is the operating differential subsidy of $232,000,000. This item is even lower than the $239,150,000 requested for fiscal year 1972. Because we have made our position clear in your passenger ship hearnigs and in follow-up conversations, we shall not repeat the argument for the need to provide adequate subsidies to keep these essential and fine ships under the American flag. This is a sharp blow to maritime employment with the loss of some 5,000 seagoing jobs. It is deterimental to our unfavorable balance of payments and a threat to the position of the U.S. dollar in the world markets. Also, our National Defense posture is definitely weakened by the loss of these ships.

Of course, an important item in the maritime authorization bill is the provision of construction differential subsidies in the amount of $250,000,000. This amount is not adequate to carry out the intent of the Merchant Marine Act of 1970. As you know, this life-giving ship construction program has not produced even the low number of ships under the 1970 Act.

Mr. Andrew Gibson, Assistant Secretary of Commerce for Maritime Affairs, has stated that he intends to accelerate the shipbuilding program so that the Merchant Marine Act of 1970 will really provide the constructive construction program intended by the Administration and Congress. He has stated during these hearings that he anticipates all of the ship construction funds for fiscal year 1972 to be used up soon. He stated that he is so optimistic about the shipbuilding prospects that he may seek a supplemental appropriation of as high as $175,000,000.

Mr. Gibson has announced that up to this time the ship construction subsidy program for fiscal year 1972 has so far provided contracts as follows:

> "Conversion of a cargo ship to containership for American Mail Line at a cost of about $9,500,000 with government participation at 41.5 percent subsidy.
>
> "Three tankers for Margate Shipping Company at a cost of $55,000,000 with a 43 percent subsidy.
>
> "Additional contracts that will be awarded shortly are:
>
> "Two LASH vessels for Central Gulf Steamship Company at a cost of $55.000,000 with gvernment participation at 43 percent.
>
> "Conversion of four cargo ships to semi-containerships for Lykes Bros. SS Company at a cost of $14,000,000 with government participation at about 43 percent.
>
> "Six large tankers for Maritime Dynamics Corp. at a total cost of about $355,000,000 with government participation at 42.9 percent.

Mr. Gibson stated that within the next 3–4 months they expect to let contracts for:

> "Six LNG vessels for El Paso Natural Gas Company at a total cost of around $500,000,000 with government participation at about 25 percent.
>
> "Two roll-on/roll-off vessels for States Steamship Company at a cost of $62,500,000 with government participation in the range of 41 to 43 percent.

Mr. Gibson noted that award of all of the above contracts would require supplemental funding, as stated in the 1973 President's Budget.

In turning his attention to fiscal year 1973, Mr. Gibson stated that the $250,000,000 for ship construction subsidy for fiscal year 1973 is too low. He said that he had requested $310,500,000 but that he was turned down by the Office of Management and Budget. The $250 million is an increase of $20,313,000 over the 1972 *appropriation.* This increase reflects construction cost escalation and the trend toward larger specialized ships.

With all factors considered, including a 41 percent construction subsidy, Mr. Gibson has estimated that new construction may exceed the available funding by as much as $175 million. He has promised to ask for this additional required funding as supplemental appropriations.

We shall not repeat in this statement the AFL–CIO Maritime Committee testimony given to the House Merchant Marine and Fisheries Committee by Mr. Jesse Calhoon on H.R. 12324. This bill, introduced by the Chairman of the House Merchant Marine and Fisheries Committee, Edward A. Garmatz (D-Md.), would amend the Cargo Preference Act of 1954 to require at least 50 percent of all imports into the United States be carried in U.S. flag ships. Mr. Calhoon pointed out that by 1985 our nation would be compelled to import an *additional* 12 to 15 million barrels of petroleum per day above the 1970 needs and would import 4 trillion cubic feet of liquefied natural gas per annum. He pointed out that some 350 *new* U.S. tankers, averaging 250,000 DWT, would need to be constructed and manned in order to carry 50 percent of the imported oil. Also, we would need some 120 LNG's (liquified natural gas carriers), each having an approximate maximum capacity of 790,000 barrels.

The Commission on American Shipbuilding, which has been established under the Merchant Marine Act of 1970, has just reported to President Nixon (Full text in Attachment I.) They have reported the need of at least 100 LNG's to operate throughout the world in the next 10 years. The Commission urges our Government to strongly support the building in America and operating of LNG's under the American flag.

On LNG's, The Shipbuilding Commission's report concludes . . . that "if not supported by the coordinated actions of certain agencies of the U.S. Government, may be irrevocably lost to foreign competition."

The Commission observed that the U.S. building costs of LNG's "will not show anything like the difference vis-a-vis, foreign costs, which exist in the building of other types of ships."

Because of the energy crisis confronting our nation and the importance of our nation to build and operate these ships, the Commission issued the above as an interim report. Their actual full report is due late next year.

Because of the urgency of the energy crisis, we attach the Summary of the AFL–CIO Maritime Committee Testimony given by President Calhoon on March 2, 1972. (See Attachment II.)

We appreciate the Maritime announcement that they will push for the construction of oil tankers and LNG's to be operated under the American flag. We commend the House Merchant Marine and Fisheries Committee for taking a leadership role on this matter with the Administration.

We are hopeful that you, in cooperation with the Administration, provide ship construction subsidy and operating subsidy funding which will reverse the deadly downward current trend of our merchant marine. This turnaround would provide our industry's salvation by creating some 15,000 seagoing jobs on tankers by 1985. It will greatly close the unfavorable balance of payments, and it will enable our nation to transport enough of our energy imports so that we are not at the mercy of third flag carriers.

We note that the House Merchant Marine and Fisheries Committee had added $30 million for the purchase of modern break-bulk U.S. flag ships for lay-up in the National Defense Reserve Fleet. They added this to the $250 million shipbuilding request to show this shipbuilding item as $280 million. *Our* suggestion is to even *double* the $250 million ship construction item at this time so that we get a true toe hold as a world marine power. With shipbuilding costs increasing with inflationary trends, any shipbuilding contracted for at earlier than planned dates should result in a savings to our Government.

We support strongly H.R. 13832, a bill introduced by Congressman William Anderson of Tennessee, which would provide for construction of 40 LNG's. His introductory remarks on the floor of the House is Attachment III.

If carried out with foresight, your maritime authorization, followed by appropriations, for fiscal year 1973 should provide the beginning of the stimulus to guide our nation back into position as a great maritime nation which means a first class nation.

Thank you for the opportunity to present to you our summary views on maritime authorization.

ATTACHMENT I

COMMISSION ON AMERICAN SHIPBUILDING,
Washington, D.C.

For release at 9:00 a.m. on March 14, 1972:

The attached copy of a letter of March 9, 1972, from the Commission on American Shipbuilding to the President, is released at this time for public information.

In particular, it points out the unique opportunity for U.S. shipbuilders to participate in the building of LNG ships.

JOHN H. LANCASTER,
Executive Director.

Attachment.

COMMISSION ON AMERICAN SHIPBUILDING,
Washington, D.C., March 9, 1972.

The PRESIDENT,
The White House,
Washington, D.C.

DEAR MR. PRESIDENT: In accordance with the mission of the Commission on American Shipbuilding, defined in Public Law 91–469, the undersigned members of the Commission, since their appointment by you in January 1971, have been actively "reviewing the status of the American Shipbuilding industry, its problems and its progress toward increasing its productivity and reducing production costs."

The Commission's activities have included visits to shipyards in the United States, Europe, and Japan as well as inspections of specialized operations related to shipbuilding activities. In addition, both collectively and individually, we have consulted with a substantial number of national and international shipbuilding experts.

The Commission plans to submit a final detailed report of its findings and recommendations, as directed, prior to October 21, 1973. However, certain developments, which are currently accelerating, appear to make an interim report a matter of some urgency. These developments relate to a unique opportunity now available to the U.S. shipbuilding industry which, if not promptly supported by the coordinated actions of certain agencies of the U.S. government, may be irrevocable lost to foreign competition. A potential multi-billion dollar U.S. market over ten years is involved. The immediate, favorable impact on U.S. employment and trade balances would substantially support the goals established by your Administration. This Commission feels, as a result of its assessments to date, that this market can be developed by U.S. shipbuilders if, but only if, the Administration takes the initiative in coordinating and supporting this program.

Before specifically discussing this emerging multi-billion dollar market for U.S. manpower and materials, it may be appropriate to summarize certain interim findings of the Commission which relate to the foregoing.

First, we find it has been clearly demonstrated that, with the enactment of the Merchant Marine Act of 1970 under your sponsorship, many United States shipyards, with the market opportunities implicit in that statute, have already undertaken considerable investment in capital improvements and new facilities.

Second, we find that, even though the volume of construction of a series of standard ships under multiple-ship contracts has been only partially started, the United States shipyards are definitely prepared to make significantly larger modernization investments when the shipbuilding volume so warrants.

Third, we are encouraged that to date the shipbuilding industry is meeting the required milestones for declining subsidy support; in fact, in several recently awarded contracts, the construction differential subsidy goals have been exceeded.

We should now like to refer to the specific market opportunity mentioned earlier. This is the market for liquefied natural gas (LNG) tankers. To meet the energy shortages which will occur around the world, and particularly in this country, in increasing degrees of severity, and to meet the environmental criteria for providing this energy, we believe it will be necessary to move vast tonnages

of LNG from the gas fields of the world to the United States, northern Europe, and Japan. Much of this gas is now being wasted and strong political pressures are being brought to bear on United States interests in all gas and oil producing areas. The technological problems of gas liquefication, tanker transport, and distribution, as gas, to consumers have been resolved. The only open question is whether or not the United States shipbuilding industry will participate in this market.

The LNG tankers now being designed, with a typical capacity of 125,000 cubic meters of containment space, will be in the approximate price range of eighty to ninety million dollars. At least one hundred tankers of this capacity will be needed within ten years.

The technology of these tankers, insofar as the fabrication of their cryogenic tankage and handling systems is concerned, owes its origins in large degree to the United States aerospace industry. It is believed that, as in the case of many other highly sophisticated similar systems, United States production costs will not show anything like the degree of difference, vis-a-vis foreign costs, which exists in the building of other types of ships. Therefore, a lesser degree of support, well below the goals established in your program, appears to be enough to win our rightful share of this market.

It should be pointed out that virtually all major foreign maritime nations receive some form of government support to encourage shipbuilding. For example, the Japanese shipbuilding industry today, through the effective force of industry/government cooperation, coordination, and imaginative adaptation and improvement of techniques developed in the United States during World War II, enjoys over half of the total, world-shipbuilding export market. Japanese flag owners also receive special price considerations.

Japan has moved to a position of shipbuilding prominence by the creation of an environment which has made this tremendous achievement possible. This environment has been shaped by governmental encouragement, careful monitoring, and support, mostly in the form of financing, credit, and tax devices designed to attract domestic as well as export ship construction contracts. These devices have generated a continuity of workload which, in turn, has (1) insured a stable level of shipyard operations, (2) enabled an expansion of national capacity, and (3) produced a favorable economic climate for shipbuilding.

Shipbuilding has thus become a substantial factor in Japan's national economy and balance of trade. It is regarded as a prestige industry essential to the national good, and the marketing of shipbuilding capabilities has been effectively cultivated with considerable stimulus and input on the part of the Japanese Government. As a matter of interest, the Commission has observed positive steps by the Japanese shipbuilders to insure a substantial position in the LNG market.

Until the enactment of the Merchant Marine Act of 1970, the United States private shipbuilding industry had been plagued by an environment, in terms of limited, spasmodic markets and stifling procedures, beyond the industry's control. The situation is now changing. From our studies, inspections, and assessments thus far, there are substantial indications that most of the major problems within the private shipbuilding industry of the United States can be solved by an expanding and steady volume of contracts, stable employment for the labor force, and a more favorable total environment, all of which are closely related.

The above, thus, are our interim findings and conclusions and are submitted with the hope that they will be helpful to you and your Administration in the formulation of national policies pertaining to our maritime posture, of which the shipbuilding industry is an integral ingredient. We believe, as is obvious from the foregoing, that the LNG tanker market presents the greatest, foreseeable opportunity to further our national shipbuilding goals, as well as improve our national maritime posture.

Respectfully yours,

ALBERT G. MUMMA,
Chairman.
ARTHUR M. BECKER,
CHARLES A. BLACK,
W. K. KROME GEORGE,
ANDREW E. GIBSON,
JOHN T. GILBRIDE,
STANLEY POWELL, Jr.

78-255 O - 72 - 25

ATTACHMENT II

STATEMENT OF JESSE M. CALHOON, PRESIDENT, NATIONAL MARINE ENGINEERS' BENEFICIAL ASSOCIATION ON BEHALF OF AFL–CIO MARITIME COMMITTEE, ON CARGO PREFERENCE ACT, H.R. 12324, BEFORE THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE, MARCH 2, 1972

SUMMARY—USE OF AMERICAN TANKERS FOR OIL IMPORTS

Mr. Chairman and members of the Committee, I would like to express the appreciation of the AFL–CIO Maritime Committee composed of the International Longshoremen's Association (ILA), the National Maritime Union of America (NMU), the American Radio Association (ARA), the National Marine Engineers' Beneficial Association (MEBA), and the United Steelworkers of America (USA), for this opportunity to appear before you in support of H.R. 12324—the extension of the Cargo Preference Act of 1954 to oil imports subject to quota.

Among our energy resources—coal, oil, natural gas, hydroelectric, nuclear, etc.—oil will undoubtedly be the most important, at least for the remainder of the century.

However, our domestic capacity to supply petroleum falls far short of meeting our needs now and will fall further behind over the next decade and a half. This means that dependence on imported foreign oil will expand greatly. In turn, this poses crucial economic, national security and environmental problems for this nation.

The proposed legislation being considered by this Committee to extend the Cargo Preference Act of 1954 to waterborne oil imports covered by quota represents a positive response to these critical issues.

THE ECONOMIC ISSUE

A careful examination of the economic implications of a rapidly expanding oil import program suggests that by 1985, if the U.S. continues to ship imported oil in foreign tankers, over $2½ billion could be added annually to an already serious balance of payments deficit.

In 1971, on a "net liquidity" basis this Nation suffered a record deficit in its balance of payments of $22.2 billion. This compares with a $3.8 billion deficit in 1970. The extension of the Cargo Preference Act of 1954 to require that 50 percent of waterborne oil imports be carried in American ships will significantly restrain this outflow of U.S. dollars.

Projections by the Office of Oil and Gas, U.S. Department of Interior, indicate that imports of oil via tankers will leap from 2.7 million barrels per day in 1970 to 9.7 or 12.7 million barrels per day in 1985 depending on the availability of Alaskan North Slope oil. If current practices are allowed to continue this fourfold increase in seaborne oil imports will produce a corresponding increase in the outflow of American dollars and thereby aggravate this country's already serious balance of payments deficit. American dollars will be paid out to foreign ship owners to cover shipping costs. If, on the other hand, the ships used are U.S. owned the American dollars would be paid to U.S. companies and U.S. workers and thereby reduce the outflow of dollars. Instead, American dollars will be held by U.S. companies and American workers will have needed jobs.

Not only will there be a tremendous growth in the amount of oil imported from overseas but the origin of the oil will shift so that the average distance and therefore the average transportation cost per barrel will be higher. Currently our principal sources of imported oil are Canada and Venezuela. In the future, we will rely to a much greater extent on Eastern Hemisphere countries, particularly those countries in the Persian Gulf. This shift in the source of U.S. imported oil will have a direct and substantial impact on the transportation cost of imported oil because the average distance traveled will rise significantly.

An indication of the effect distance has on foreign tanker rates can be seen from a review of current rates. For example, the spot rates for transporting a barrell of oil to the East Coast in September 1971 were $0.61 from the Persian Gulf, $0.30 and $0.37 from the North African countries of Libya and Nigeria, and $0.17 from Venezuela.

Using very conservative estimating procedures which recognize both the increase in the level of oil imports and the greater average distance travelled, the projected outflow of American dollars connected with the transportation of imported oil would range from $1.2 billion to $2.6 billion. Thus, if the Cargo Pref-

erence Act of 1954 were amended to require that 50 percent of waterborne oil imports must be carried in U.S. tankers, by 1985 it would produce a savings to the U.S. balance of payments of from $600 million to $1.3 billion per year.

This does not represent the full economic benefit to be derived from extending the Cargo Preference Act of 1954 to waterborne oil imports.

The U.S. tanker fleet is in very bad shape—perhaps the worst condition of all the countries which possess tanker fleets. The U.S. fleet is the oldest fleet among the major flags with an average age of 16 years 5 months—more than twice the world average of 7 years 3 months. The number of U.S. tankers is declining sharply while the world tanker fleet is growing rapidly. In terms of T–2 equivalents the U.S. capacity has declined from 14.7 percent of the world total in 1959 to 5.5 percent in 1970. This downward trend will continue unchecked according to available data.

The extension of the Cargo Preference Act of 1954 to waterborne oil imports would dramatically improve the U.S. tanker fleet. This, in turn, would yield substantial economic benefits as well as strengthen our national security.

Some 350 new U.S. oil tankers would need to be constructed and manned in order to carry 50% of the imported oil. Although the actual number of jobs created in the U.S. shipbuilding industry as a result of the demand for American tankers is difficult to estimate you can be sure that it will be substantial. In addition, it will open up about 15,000 jobs for crew men on board the new tankers.

The expanded U.S. construction of tankers would have a multiplier effect on the U.S. economy. American companies would supply materials and products putting other Americans to work to produce them. American crews will also purchase more goods in this country than foreign crews.

The U.S. balance of payments would also benefit from the construction of tankers in this country. If as many as 350 tankers were built at an average cost of $50 million each, at least 17 billion fewer American dollars would leave this country over the next 15 years.

EFFECT ON U.S. OIL PRICES

Because of the pricing structure in the oil industry, the higher profit margin per barrel of imported oil, the enormous gross profits oil companies reap from imports, the benefits of the Merchant Marine Act of 1970, and the economic stimulus generated by the use of U.S. tankers, there should be no increase in oil prices attributable to the extension of the Cargo Preference Act of 1954 to oil imports.

The subsidies under the Merchant Marine Act of 1970 will permit U.S. flag tanker operators to operate at lower costs and as a result charge lower freight rates which should more nearly approach those of foreign-flag owners. In addition greater capacity utilization of U.S. shipyards combined with vastly improved methods of shipbuilding could yield lower construction costs and reduce subsidies. The added tax burden required for U.S. tanker subsidies would be offset by broadening the U.S. tax base. More employed workers, increased U.S. shipbuilding and shipping profits, and the expanded profits of companies serving our shipbuilding industry and tanker fleet all would provide greater tax revenues.

Even if U.S. tanker rates remain a little higher than foreign rates, it should have no upward influence on the price of oil.

Although the cost of imported oil is cheaper than the cost of domestic oil, it appears to have no impact on the price of oil sold to refineries. For example, in spite of several increases in the quota of imported oil in the past two years the average price of a barrel of oil has risen. Thus American oil companies enjoy a much wider profit margin with their imported oil than with the oil they produce domestically.

Admittedly if U.S. per barrel freight rates were higher it would narrow the differential between imported and domestic costs and reduce the profit margin per barrel of imported oil assuming no price increases. However, since the volume of imports is going to grow four-times or more over current levels, American oil companies aggregate profit will climb steeply even if the profit margin per barrel of imported oil is reduced somewhat.

According to one report the actual realized annual profits of American oil companies operating in five Middle East countries has more than doubled from $657 million in 1963 to $1.43 billion in 1968. Over the next decade and a half the volume of oil imports from these countries will grow 12 to 15 times over

the 1968 level and the profits of American oil companies can be expected to grow similarly.

In summary then, the extension of the Cargo Preference Act of 1954 to oil imports would assist the U.S. balance of payments problem by reducing the outflow of dollars to foreign tanker companies; it would provide much *needed employment to American workers in shipyards and as crews on tankers; it would stimulate other sectors of the U.S. economy; and it would improve the badly deteriorated U.S. tanker fleet. All of this could be accomplished with the assistance provided in the Merchant Marine Act of 1970 without affecting the price of oil or jeopardizing the profits of American oil companies.*

NATIONAL SECURITY

In the past when crises in the Middle East interrupted the flow of imported oil we were able to make adjustments with our own oil reserves and domestic tanker capacity. We simply increased the movement of crude oil from the Gulf to the East Coast. Even today we could make adjustments—relaxing pollution standards, utilizing marginal and uneconomical production capability, etc.—to meet our oil requirements.

But we must look to the future. By 1985 our domestic production will meet only one-half of our needs not three-fourths as is currently the case. Conversely, at the present time less than a tenth of our oil supply is imported on tankers; by 1985 this ratio will increase to between one-third and one-half. Obviously. where a small U.S. tanker fleet may be able to respond to an emergency now, it will not nearly be equal to the task in the future.

There seems to be little choice whether we become dependent on foreign sources of oil in the future. But should we also become dependent on third party foreign governments for the transportation of a critical energy source? Plainly, the risks involved in depending on foreign oil will increase geometrically if we shortsightedly also permit this country to depend on foreign tankers as well. Our oil import requirements would be dependent upon the goodwill of one set of foreign producing nations and another completely different set of foreign transportation "service" nations.

We need a strong dependable U.S. flag fleet which will be constantly available to satisfy our Nation's oil import requirements and to quickly respond to an interruption in the steady flow of waterborne oil should a crisis arise. However, as I pointed out earlier, the U.S. tanker fleet is deteriorating rapidly.

Our national security depends on sufficient energy which, in turn, depends on a sufficient supply of imported oil. Only with a strong U.S. tanker fleet can this country be reasonably assured that the flow of imported oil will not be interrupted by a transportation breakdown. The extension of the Cargo Preference Act of 1954 to oil imports will permit strengthening the U.S. tanker fleet to the level required to protect our national interest.

ENVIRONMENTAL PROBLEMS

All of us have seen pictures of oil washed up on sandy beaches and seagulls struggling mightily to free themselves from the sticky substance. It is a sight which incenses the average American citizen.

While recalling that scene, consider again that only about 8% of the U.S. oil supply is imported on tankers now but that this percentage will rise to 36% or more by 1985. Readily one can see that the odds for oil spillage as the result of tanker movement will increase more than fourfold. Yet, if waterborne imported oil is carried almost exclusively in foreign tankers, as is presently the case, the United States will be practically powerless to exercise controls which will minimize the prospects for oil pollution.

If U.S. flag vessels are used, the U.S. Coast Guard would have primary responsibility and be able to enforce control over construction, loading and off loading, ship manning levels and crew proficiency standards. Furthermore, the Coast Guard can take direct action against any U.S. merchant ship officer who creates an oil pollution incident.

This control cannot be exercised over foreign flag vessels, including those of the so-called "flags of necessity" fleet, which maintain ship construction, maintenance and inspection standards well below the requirements applied to U.S. flag vessels.

The extension of the Cargo Preference Act of 1954 to oil imports by requiring the use of U.S. flag tankers for 50% of our seaborne imported oil would assure

the American public that the safest anti-pollution standards would be maintained and that the threat of oil spillage would be minimized. If we, as a Nation, are sincerely interested in maintaining high standards against oil pollution we must guarantee that half of the vessels carrying oil to this country are U.S. tankers. Only in this way can we secure enough leverage to force foreign flag tankers to meet our criteria for a safe, healthy marine environment. *If the Congress permits foreign ships to carry all the oil imported into this country, the Congress may be subsequently forced to deal with a pollution problem after it is too late.*

CONCLUSION

In conclusion, by applying the Cargo Prefrence Act of 1954 to oil imports covered by quota, we will strengthen our country economically by improving our balance of payments position, expanding employment opportunities, and stimulating our shipbuilding and other industries; we will help maintain our national security by assuring an adequate tanker supply during a period when we will experence a growing dependence on foreign oil; and we will be able to minimize the potential environmental danger to marine life and beauty associated with expanding tanker movement of oil.

I exhort the members of this Committee to see the wisdom and merit of the legislation before you. The future well-being of this Nation may well depend on it.

ATTACHMENT III

MARCH 28, 1972.

H.R. 13832, LIQUEFIED NATURAL GAS SHIPS AND FACILITIES—A MATTER OF HIGH NATIONAL PRIORITY

Mr. ANDERSON (Tenn.). Mr. Speaker, on March 15, I introduced legislation which would authorize the United States Government to negotiate the construction, outfitting and equipping of 40 ships for the purpose of transporting liquefied natural gas. The delivery date for these ships would be no later than January 1, 1980.

The purpose of this bill is to meet an impending energy crisis which, from all indications, the Unitied States will experience by the year 1985.

Another aim of this legislation is to establish a new National Energy Policy which would insure adequate energy to meet the projected needs of our domestic and industrial economy during the next decade.

There are several additional goals. One relates to atmospheric pollution. Natural gas burns almost pollution free. Then, conservation. Vast quantities of natural gas are still being flared to the atmosphere at wellheads throughout the world. This is a shameful waste, particularly when we consider the well-being of future generations.

I am fully aware of the complexities and difficulties of trying to look and plan ahead on matters of public needs. However, we must begin planning for the next decade before a growing energy crisis becomes a national catastrophe.

Authorities estimate that at the present rate of energy consumption in the United States, combined with a continuing decrease in domestic supply of energy sources, by 1985, we will be required to import over 40 percent of all forms of energy consumed. This will include the importation of approximately 15 million barrels of oil per day and 12 trillion cubic feet of natural gas per year. We are currently importing 3.4 million barrels of oil per day and it is anticipated that the growth rate of oil imports will be 300 percent to 400 percent during the next 15 years.

A massive cutback in the anticipated growth rate of energy consumption is not the solution if we are to survive and compete effectively as an industrial nation and support a relatively high standard of living, though certainly we must pay strong attention to conservation of energy resources.

The primary sources of energy in the foreseeable future will continue to be oil and gas. Coal and nuclear power will continue to provide substantial inputs, but even with the coal industry doubling its output and nuclear plants increasing their megawatt yield 80 times, these sources will provide only 37 percent of our national needs in 1985.

In addition, all the non-conventional sources combined, such as hydroelectric, geothermal, tidal and solar power will provide less than three percent of our total energy needs in 1985.

The remainder of our energy needs, estimated to be 60 percent of the total, will be supplied from petroleum and natural gas.

If oil imports grow at the currently projected rates, in 1985 our oil needs will require between 300 and 350 oil tankers of 250,000 dead weight tons in service. The United States has no harbor capable of accommodating this size tanker.

Should an energy crisis come to the United States today, it is anticipated that we could meet and accommodate our energy needs for about one year at the most.

To meet such a crisis would mean relaxing air pollution standards so that high sulphur fuels could be consumed along the East Coast and particularly in the energy deprived northeastern sector of the country. It would mean increasing domestic oil production, depleting on-hand reserve stocks and production from uneconomical wells. Even with these "emergency" measures we may be able to stand off the crisis for only about 17 months.

Mr. Speaker, we must direct our efforts toward a new National Energy Policy and we must look for new sources of energy which will most effectively meet the impending crisis.

I believe liquefied natural gas is that source. The ships and facilities will be costly. I estimate we are talking about a public commitment of at least $3 billion and a private commitment of $12 billion for a total of $15 billion. But these ships must be built in United States yards and they must be manned by U.S. crews. The potential is for at least 75,000 new jobs. To let the ships be built abroad, the LNG market commandeered by other nations, will not only wipe out that job potential, but place us as captives in the LNG market place. Other countries can charge whatever they want and cut off our supply at the slightest whim.

The use of LNG is not a new theory since we are already importing quantities of it to meet peak winter demands in the cold Northeast. But, if we are already using this form of energy producing fuel, and we know how to produce it, why do we face an energy crisis? The problem is in transporting the gas. The U.S. currently has no ships capable of carrying LNG and the future will determine that the country with the transporting capability will control the market of this vital energy form.

Ten points can be made which give credence to the need for more U.S. participation in the LNG field:

1. Presently, the public and industrial demand for LNG is growing at the rate of 3.4 percent per year while discoveries of new domestic gas reserves are declining.

2. If the present trend continues, the United States will face a shortage of 20 trillion cubic feet of gas per year by 1985. And, if automobiles were to convert to LNG, which can be easily accomplished, the LNG requirement in this country would increase by 35 percent.

3. At the same time the role of LNG on the world energy market is rapidly expanding with the United States being the largest user, consuming more than two-thirds of the world's supply.

4. By contrast, the Soviet Union currently consumes 20 percent of the world's total supply of LNG and Western Europe about five percent. But Western Europe may soon increase their gas usage to approximately 10 percent as pipeline networks from the USSR and The Netherlands are completed.

5. Those countries now planning to increase LNG imports include France, Italy, Spain, Japan as well as the United States.

6. Thus far, the United States' LNG efforts have been directed principally toward storage sites and highway based semitrailers, 50 of which have been built and are operating mostly in New England and California.

7. U.S. consumers along the East Coast have been importing LNG from overseas via foreign flag ships to meet the needs of the winter months. Our role in the transportation of this gas is virtually nil.

8. Six Western European nations and Japan are leading the international field in LNG ship interest and construction. Today there are 13 LNG ships in service and 20 more on order.

9. The closest the United States has come to operating a liquid natural gas carrier is the "Marine Eagle," a converted T–2 which is being used as an ammonia carrier along the East Coast.

10. The United States, with its highly developed space technology is fully capable, more so than any other country, of leading the world in the construction of LNG ships and facilities.

All of our space flights have utilized liquefied gasses. Various kinds of metals have been proven; pumps, compressors, insulation and refrigeration techniques have been tested and used in orbital and lunar missions.

We have the experience, capability and knowledge to move ahead in this field if we put our space and ship technology to work together.

Since the famous New York blackout in October 1965, there have been literally hundreds of other power shortages and failures across the United States. In my own Tennessee Valley country we have seen the reserve coal supply dwindle from 60 days to as few as one and a half days. We are being warned and altered that new directions must be taken to insure ample energy in the future.

The bill which I have introduced is but the first step in assuring that our future energy needs will be met. At a later date I plan to offer legislation for the construction of additional shore-based and off-shore LNG facilities. Meanwhile, it is important that we not delay the ship construction program which would mean a great deal to our country in terms of meeting the energy crisis, the unemployment problem, and providing a much needed stimulant to the entire maritime industry.

U.S. owned and operated LNG ships are obviously in the national interest. The country which owns and operates these ships will have a profitable business and obviously will exercise control over the world's supply of LNG reserves.

We need these ships. Vast amounts of proven and unproven reserves are constantly being discovered in Alaska and in several nations overseas. To allow another nation to take the lead and monopolize the LNG transporting market would be detrimental not only to our economic interests but could lead to international politics depriving us of vital energy sources during some future international crisis.

Regulations and policies of the past will no longer suffice.

We cannot afford to follow our present shortsighted policy with respect to energy development and consumption. If we do, we will have the sorry task of telling the nation, "Sorry, out of gas." It is imperative that we move aggressively and immediately into the LNG shipbuilding field. From time to time I will have additional comments regarding the ships and other parts of the system.

Mr. Speaker, in conclusion, I include in the record a copy of a letter sent to the President by the Commission on American Shipbuilding urging a program af mass production of LNG carriers:

Dear Mr. President:

"In accordance with the mission of the Commission on American Shipbuilding, defined in Public Law 91–469, the undersigned members of the Commission, since their appointment by you in January 1971, have been actively 'reviewing the status of the American Shipbuilding industry, its problems and its progress toward increasing its productivity and reducing production costs.'

"The Commission's activities have included visits to shipyards in the United States, Europe, and Japan as well as inspections of specialized operations related to shipbuilding activities. In addition, both collectively and individually, we have consulted with a substantial number of national and international shipbuilding experts.

"The Commission plans to submit a final detailed report of its findings and recommendations, as directed, prior to October 21, 1973. However, certain developments, which are currently accelerating, appear to make an interim report a matter of some urgency. These developments relate to a unique opportunity now available to the U.S. shipbuilding industry which, if not promptly supported by the coordinated actions of certain agencies of the U.S. Government, may be irrevocably lost to foreign competition. A potential multi-billion dollar U.S. market over ten years is involved. The immediate, favorable impact on U.S. employment and trade balances would substantially support the goals established by your Administration. This Commission feels, as a result of its assessments to date, that this market can be developed by U.S. shipbuilders if, but only if, the Administration takes the initiative in coordinating and supporting this program.

"Before specifically discussing this emerging multi-billion dollar market for U.S. manpower and materials, it may be appropriate to summarize certain interim findings of the Commission which relate to the foregoing.

"First, we find it has been clearly demonstrated that, with the enactment of the Merchant Marine Act of 1970 under your sponsorship, many United States shipyards, with the market opportunities implicit in that statute, have already undertaken considerable investment in capital improvements and new facilities.

"Second, we find that, even though the volume of construction of a series of standard ships under multiple-ship contracts has been only partially started, the United States shipyards are definitely prepared to make significantly larger modernization investments when the shipbuilding volume so warrants.

"Third, we are encouraged that to date the shipbuilding industry is meeting the required milestones for declining subsidy support; in fact, in several recently awarded contracts, the construction differential subsidy goals have been exceeded.

"We should now like to refer to the specific market opportunity mentioned earlier. This is the market for liquefied natural gas (LNG) tankers. To meet the energy shortages which will occur around the world, and particularly in this country, in increasing degrees of severity, and to meet the environmental criteria for providing this energy, we believe it will be necessary to move vast tonnages of LNG from the gas fields of the world to the United States, northern Europe, and Japan. Much of this gas is now being wasted and strong political pressures are being brought to bear on United States' interests in all gas and oil producing areas. The technological problems of consumers have been resolved. The only open question is whether or not the United States' shipbuilding industry will participate in this market.

"The LNG tankers now being designed, with a typical capacity of 125,000 cubic meters of containment space, will be in the approximate price range of 80 to 90 million dollars. At least 100 tankers of this capacity will be needed within ten years.

"The technology of these tankers, insofar as the fabrication of their cryogenic tankage and handling systems is concerned, owes its origins in large degree to the United States aerospace industry. It is believed that, as in the case of many other highly sophisticated similar systems, United States production costs will not show anything like the degree of difference, vis-a-vis foreign costs, which exists in the building of other types of ships. Therefore, a lesser degree of support, well below the goals established in your program, appears to be enough to win our rightful share of this market.

"It should be pointed out that virtually all major foreign maritime nations receive some form of government support to encourage shipbuilding. For example, the Japanese shipbuilding industry today, through the effective force of industry/government cooperation, coordination, and imaginative adaptation and improvement of techniques developed in the United States during World War II, enjoys over half of the total, world-shipbuilding export market. Japanese flag owners also receive special price considerations.

"Japan has moved to a position of shipbuilding prominence by the creation of an environment which has made this tremendous achievement possible. This environment has been shaped by governmental encouragement, careful monitoring, and support, mostly in the form of financing, credit, and tax devices designed to attract domestic as well as export ship construction contracts. These devices have generated a continuity of workload which, in turn, has (1) insured a stable level of shipyard operations, (2) enabled an expansion of national capacity, and (3) produced a favorable economic climate for shipbuilding.

"Shipbuilding has thus become a substantial factor in Japan's national economy and balance of trade. It is regarded as a prestige industry essential to the national good, and the marketing of shipbuilding capabilities has been effectively cultivated with considerable stimulus and input on the part of the Japanese Government. As a matter of interest, the Commission has observed positive steps by the Japanese shipbuilders to insure a substantial position in the LNG market.

"Until the enactment of the Merchant Marine Act of 1970, the United States private shipbuilding industry had been plagued by an environment in terms of limited, spasmodic markets and stifling procedures, beyond the industry's control. The situation is now changing. From our studies, inspections, and assessments thus far, there are substantial indications that most of the major problems within the private shipbuilding industry of the United States can be solved by an expanding and steady volume of contracts, stable employment for the labor force, and a more favorable total environment, all of which are closely related. The above, thus, are our interim findings and conclusions and are submitted with the hope that they will be helpful to you and your Administration in the formulation of national policies pertaining to our maritime posture, of which the shipbuilding industry is an integral ingredient. We believe, as is obvious from the foregoing, that the LNG tanker market presents the greatest, foreseeable opportunity to further our national shipbuilding goals, as well as improve our national maritime posture."

STATEMENT OF JAMES M. WAGONSELLER, CHAIRMAN, MERCHANT MARINE COMMITTEE, THE AMERICAN LEGION

Mr. Chairman, and members of the subcommittee: I appreciate this opportunity to present the views of The American Legion on authorization for the American merchant marine. We shared the hope of the 91st Congress for a revitalization of America's merchant fleet, and gave our strongest support for the Merchant Marine Act of 1970.

Today, we are asking for full funding for effective implementation of this notable act to insure that our mutual hopes are fulfilled. Appended to our statement are the two resolutions, unanimously adopted by our 53d National Convention, which pertain to the American merchant marine. While the vast majority of our more than 2½ million members are not experts regarding the extensive needs of our obsolescing merchant fleet, we are generalists who fully appreciate the essential role of our "fourth arm of defense."

This appreciation spans a half century, as reflected in this excerpt from the 1921 National Convention: "The preamble to our Constitution pledges us to God and Country, and an adequate merchant marine as a national asset in peace and a necessary weapon in war."

Regretfully, our merchnt fleet is not adequate today. Its traditional role in national defense, we feel, could not be successfully fulfilled should the specter of war arise. The ignominious decline of our merchant fleet in the past quarter century is regretfully a matter of national indifference. From a 2300 ship level in 1946, the U.S. maritime fleet dropped to 633 active ships of approximately 11-million DWT as of February 1, 1972.

This quartering of the American fleet is even more significant in terms of the vast Soviet maritime expansion. The Hammer and Sickle merchant fleet of a 16-million DWT capacity boasts that 80% of its fleet is less than 10 years old. Even more awesome is their current 5-year program to build 550 ships of 5.3 million DWT and their goal to have a 25-million DWT Soviet maritime fleet by 1980. . . . *Most Soviet merchant marine experts think they'll make it!!*

In the decade of the Sixties, the shipbuilders of the world built 7400 ships; of these, United States builders constructed only 200 or 2.7 per cent.

As you will note, our appended resolutions call for (1) immediate action to fully implement the Merchant Marine Act of 1970 as a minimum basis for rebuilding and revitalizing the U.S. flag fleet to a position second to none in the world; and (2) appropriate funds for the building of a new fleet of fast, modern containerized merchant vessels.

The American Legion feels that a day of reckoning is fast approaching for our world maritime status. Unless our Nation takes immediate and significant action to rebuild this country's vital but oft neglected fourth arm of defense, we will surely face a situation not unlike the one we faced at the beginning of World War II. We must not again be dependent on the merchant fleets of other nations or be forced to hastily and expensively build a maritime fleet.

Thank you for affording The American Legion this opportunity to express its support for a strong American owned and operated Merchant Marine and shipbuilding industry.

53D NATIONAL CONVENTION OF THE AMERICAN LEGION HELD IN HOUSTON, TEX., AUGUST 31–SEPTEMBER 2, 1971

RESOLUTION NO. 257

Committee: National Security
Subject: Implement the Merchant Marine Act of 1970

Whereas, The American Legion has long been aware of the deteriorating condition of our merchant marine fleet, which now numbers less than 1,000 vessels, 80% of which are more than 25 years old, and the normal life of such ships is 20 years; and

Whereas, We recognize the superiority of the Soviet merchant fleet comprised of modern vessels, two-thirds of which are less than 10 years old, and their accelerated new ship construction at an alarming rate to further increase their superiority; and

Whereas, The American Legion deplores our second rate position to the Soviet Union, and feels that this vital Fourth Arm of our national defense should be brought to a position of superiority; and

Whereas, The American Legion has consistently, year after year, urged the Congress and the Administration to take necessary action to revitalize our merchant marine; and

Whereas, The American Legion feels that any delay in this revitalization is disastrous to our national defense; and

Whereas, We commend the Congress for the Merchant Marine Act of 1970 which substantially contributes to the revitalization of our merchant fleet, and urge sufficient funds for its immediate implementation: Now, therefore, be it

Resolved, by The American Legion in National Convention assembled in Houston, Texas, August 31–September 1, 2, 1971, that we urge the President and the Congress to take immediate action to fully implement the Merchant Marine Act of 1970, as a minimum basis for rebuilding and revitalizing the United States flag fleet to a position second to none in the world.

RESOLUTION NO. 496

Committee: National Security

Subject: Asking Congress for funds to build new fleet of modern containerized merchant vessels

Whereas, The Merchant Marine of the United States is presently in a sad and deplorable condition; and

Whereas, The number of American flag vessels has dropped to 963; and

Whereas, The size of the American Merchant Marine has dropped to sixth place among nations of the world; and

Whereas, The American Merchant Marine now ranks below the Soviet Union in number of ships and tonnage; and

Whereas, Thousands of American merchant seamen are presently unemployed; and

Whereas, National security is dependent upon a large and strong merchant fleet: Now, therefore, be it

Resolved, by The American Legion in National Convention assembled in Houston, Texas, August 31–September 1, 2, 1971, that we support President Nixon's recent request that Congress appropriate funds sufficient for the building of a new fleet of fast modern containerized merchant vessels.

•Council of Lake Erie Ports •Great Lakes Commission •International Association of Great Lakes Ports *(U.S. Section)* •International Longshoremen's Association AFL-CIO *(Great Lakes District)*
•Marine Engineers Beneficial Association *(Great Lakes District)* •U.S. Great Lakes Shipping Association •Western Great Lakes Ports Association



GREAT LAKES TASK FORCE
REGIONAL DEVELOPMENT—QUALITY ENVIRONMENT
c/o Great Lakes Commission
I.S.T. Building
2200 N. Campus Blvd.
Ann Arbor, Michigan 48105
313-665-9135

JOHN A. McWILLIAM
Chairman
LEONARD J. GOODSELL
Secretary

March 30, 1972

The Honorable Warren G. Magnuson, Chairman
Senate Commerce Committee
United States Senate
Washington, D. C. 20510

Dear Senator Magnuson:

It has come to the attention of the Great Lakes Task Force that the Maritime Administration budget for fiscal year 1973 requests financial assistance to state marine schools and students, including the State of Michigan Maritime Academy.

At the November 2, 1971 Great Lakes Task Force meeting, a resolution was introduced and adopted by the Task Force calling for the suspension of the Great Lakes Maritime Academy located in the State of Michigan. For your perusal, a copy of the resolution, as adopted by the Great Lakes Task Force, is enclosed.

It was resolved that the Task Force would urge the Congress of the United States to cease appropriating funds for the Michigan State Academy. We, therefore, urge you to delete appropriations for the Michigan State Maritime School from the Maritime Administration's budget for fiscal year 1973.

Sincerely,

Melvin H. Pelfrey

Melvin H. Pelfrey, Vice President
Marine Engineers Beneficial Assn.

Enclosure

RESOLUTION: Suspension of the Great Lakes Maritime Academy

WHEREAS, District 2, M.E.B.A.-A.M.O. represents the overwhelming majority of the officers sailing on American-flag Great Lakes vessels, and contractually is responsible for supplying the manpower needs of the industry; and

WHEREAS, training officers for the lakes fleet is primarily the responsibility of the shipping industry and should not be undertaken with public funds unless the companies cannot afford it or no other means of training officers is reasonably available; and

WHEREAS, the companies obviously can afford to train their officer personnel and joint union-management training programs are successfully operating and are undergoing further development; and

WHEREAS, such training programs permits veterans, high school graduates and others with less formal education to sail unlicensed, permits unlicensed men to advance to the rank of officers and protects the job security of lakes seamen and officers without sacrificing the needs of the industry for enough officers to man the ships; and

WHEREAS, deep-sea officers, graduates of the Federal Maritime Academy and graduates of the other long established, state Maritime Schools are having difficulty in obtaining seagoing employment and should, therefore, have the first opportunity to supplement the industry training program as openings occur on the Great Lakes; and

WHEREAS, the Great Lakes Maritime Academy, created for the purpose of training officers for the Great Lakes shipping industry who will have little opportunity for employment, is unnecessary, a waste of public funds and merely a device for getting the public to pay for recruiting and training licensed officers for the ships operated by the railroads, the steel companies, the oil companies and the other member companies of the Lake Carriers' Association; and

WHEREAS, the Union and management have established a joint training committee which can best determine and regulate the manpower needs of the Great Lakes shipping industry; and

WHEREAS, a report submitted to the House of Representatives Subcommittee on Maritime Education and Training by the Maritime Administration in February 1970 stated that "there have been no ship sailing delays on the Great Lakes because of officer shortages."

NOW, THEREFORE, BE IT RESOLVED that the Great Lakes Task Force call for the immediate suspension of the Great Lakes Maritime Academy; and

BE IT FURTHER RESOLVED that it urges the Congress of the United States and the Michigan Legislature to cease appropriating funds for the Academy.

Submitted by District 2, MEBA-AMO, AFL-CIO

Raymond T. McKay, President

Melvin H. Pelfrey, Vice President

American Maritime Association
SUITE 510 • 1612 K STREET, N. W. • WASHINGTON, D. C. 20006 • (202) 628-5562

April 18, 1972

The Honorable
Warren G. Magnuson, Chairman
Committee on Commerce
127 Old Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman:

On March 20th, in reporting H.R. 13324, the House Merchant Marine Committee authorized $30 million for the purchase of approximately 10 breakbulk vessels, all reportedly less than 10 years old, for lay-up in the reserve fleet, and the authorization was included in the bill passed by the House on April 11th.

The member companies of the American Maritime Association are not opposed to this authorization. We feel, however, that the vessels which the Maritime Administration wishes to obtain will be acquired not only because of the need which MarAd has cited to replenish the reserve fleet, but because the present operators of these vessels consider them to be no longer economically viable in their present state, and do not wish to convert them to some form of non-breakbulk vessel, such as the containership, although they have done so with other of their ships of the same age.

AMA believes that if MarAd acquires these vessels, they should be made available for trade-out to operators who believe their commercial operability can be extended with suitable conversion.

In this connection we might point out that the breakbulk vessels, such as those which MarAd has indicated an interest in obtaining, were all built with construction subsidy; and that since the

containership revolution and the development of other advanced ship types have made these ships to a substantial degree commercially obsolete, the Government has been making further federal aid available to these operators by providing additional construction subsidy to those of them who wished to convert their breakbulk ships to containerships.

Moreover, in the case of the vessels which have not been converted, such as those which MarAd now proposes to acquire for the reserve fleet, Government purchase of the vessels will provide another form of aid by making available to these operators funds for the acquisition of other ships.

Assistant Secretary of Commerce Gibson, in fact, testifying on H.R. 13324 before the House committee, stated that his justification for seeking a budget allocation for this purpose "was to purchase some of the newer ships and place them in the reserve fleet and then in turn those companies would take these funds for new construction of more productive ships."

It should be recalled at this point that the containership revolution which gave this nation a significant lead in this form of sea transportation was initiated by unsubsidized American-flag companies through the conversion of older vessels such as T-2 tankers and C-type dry cargo ships.

Of the 55 containerships presently operated by AMA companies, in fact, all but two were obtained through the conversion of older vessels including many obtained from the reserve fleet under trade-out provisions, and converted without subsidy.

Now, however, the supply of vessels in the reserve fleet suitable for this purpose has been drained. Moreover, because they have not been the recipients of construction subsidy, the unsubsidized operators have not been able to build new vessels, and thus, unlike the subsidized operators, do not have comparatively new tonnage to convert to containerships, with additional subsidy, or to sell to the Government in return for funds which can be used to acquire more productive vessels.

Thus, to make the vessels which MarAd now proposes to acquire available to these operators for conversion and continued commercial operation would be not only a matter of equity but an action, we believe, which would be in the national interest, since it would make possible the further upgrading of the American merchant marine without subsidy, complement the subsidy provisions of the Merchant Marine Act of 1970, and help to achieve the revitalized American-flag fleet which the Merchant Marine Act of 1970 envisions.

We realize, of course, that the House committee, in authorizing the additional $30 million, indicated that its aim is to replenish the breakbulk capacity of the reserve fleet.

We might note, however, that many of the older vessels which MarAd has been permitting to transfer foreign still have operational value.

Of the 173 privately-owned vessels -- including 116 dry cargo vessels -- which MarAd permitted to transfer foreign during F.Y. '71, for example, 55% were deemed still suitable for operation.

Moreover, we believe that many of the breakbulk vessels older than 10 years of age but still active in the American merchant fleet still have sufficient operational utility to warrant their consideration as reserve fleet replacements, and that if these vessels could be put into reserve, we could refrain from placing newer ships, built at great government and private expense, and with a potential for continued commercial viability, into mothballs.

Before concluding, I would note that we assume that under existing law the breakbulk vessels to be acquired would not be used as part of the Military Sealift Command's dry cargo nucleus fleet.

As you undoubtedly know, the volume of military cargoes carried by privately-owned U.S. dry cargo ships has decreased substantially since the peak of the Vietnam war in 1967, and were MSC to be permitted to use the newly-acquired break-bulk ships as part of its nucleus fleet, employment opportunities for privately-operated dry cargo vessels would further be reduced.

The single exception to the mandatory lay-up requirement should be the one we have suggested -- trade-out for the purpose of conversion and continued private operation.

I request that this letter be made a part of the record of hearings on S. 3335, and trust that the views expressed herein will be given consideration by the Committee.

Sincerely yours,

Alfred Maskin

Alfred Maskin
Executive Director

Seatrain Lines, Inc.

1 Chase Manhattan Plaza
New York, New York 10005

Phone: (212) 964-3400
Telex: 222740
Cable: Shiptramp New York

April 19, 1972

APR 19 1972

The Honorable
Ernest F. Hollings
United States Senate
Washington, D. C. 20510

My dear Senator Hollings:

The Bill (H.R. 13324) to authorize appropriations for the fiscal year 1973 for certain maritime programs of the Department of Commerce provides as follows:

> "(a) acquisition, construction, or reconstruction of vessels and construction-differential subsidy and cost of national defense features incident to the construction, reconstruction, or reconditioning of ships, $280,000,000, of which $30,000,000 is for the purchase of modern break-bulk United States-flag vessels for lay-up in the National Defense Reserve Fleet;"

The underlined provision was added by the House Committee on Merchant Marine and Fisheries as an amendment to the Bill as originally presented. It is part of a five year program which would permit the purchase of approximately ten ships each year to build up the Reserve Fleet. With the aging and scrapping of the warbuilt ships presently held in reserve, the Administration feels it is advisable to purchase and maintain older vessels for emergency purposes. This is a new procedure and would apparently supplement, and hopefully not supplant, the long standing procedure whereby older vessels could be acquired only as a trade-in for an allowance of credit for new ship construction.

We do not oppose the Bill. However, we are of the opinion that it is far too limited in that it includes only "breakbulk vessels." This limitation would provide that only one type of vessel (ie, break-bulk) could be acquired. But there are numerous other equally suitable types of vessels which are needed for emergency reserve purposes. For example, our company has recently

reconstructed coated tankers (of which there is an exceedingly short reserve supply), containerships, and vessels specially designed and reconstructed for the carriage of military cargoes such as tanks, planes, helicopters, etc. These ships have been reconstructed at the cost of millions of dollars each and would be exceedingly valuable to the military in the event of national emergency. Accordingly, we respectfully suggest that the Bill as reported by the House be amended by striking out the word "breakbulk" and inserting in its place the words "and reconstructed."

As reported by the House, only breakbulk vessels could be traded in under their authorization. Vessels which would be equally or more necessary for national defense purposes in that they are specially suitable to carry military vehicles, planes, containers, and petroleum would not qualify. Our amendment would cure this and permit the acquisition of vessels of any type which are modern or substantially reconstructed and which are desirable for reserve fleet purposes. Of course what vessels would be actually acquired would be in the discretion of the Maritime Administrator in consultation with the Navy.

Should there be any further information which you may wish, we shall be most pleased to furnish it to you.

Thank you for your help.

Very truly yours,

Howard M. Pack
President

THE AMERICAN SHIP BUILDING COMPANY
THE INVESTMENT PLAZA • CLEVELAND, OHIO 44114

EXECUTIVE OFFICES

April 26, 1972

Honorable Warren G. Magnuson
Chairman of the Senate Committee on Commerce
United States Senate
Room 127
Old Senate Office Building
Washington, D. C. 20510

Dear Mr. Chairman:

On behalf of the American Ship Building Company I respectfully ask your favorable consideration of an amendment to S. 3335, the Maritime Authorization Bill presently before your committee. The suggested amendment, as will be explained more fully, is intended to increase authorizations for Research and Development to cover certain ship building expense in the construction of oceanographic vessels for the account of the United States under contracts administered by the Maritime Administration, Department of Commerce.

First, may I express my regret for not making such requests to you sooner. Perhaps an account of how we have reached the point where legislative action is required to achieve equity will explain both the need for legislation and why we waited until now to seek such legislative relief.

A long story is sometimes better started with the last chapter.

With the permission of Senator Daniel K. Inouye, I enclose a copy of a letter dated April 10, 1972, to the Senator from the Secretary of Commerce. No purpose would be served to gloss over the Secretary's opinion or the force with which he wrote it. It is tough. The secretary turned us down in our petition for special equitable relief for overrun costs in building the oceanographic vessel RESEARCHER because our very substantial losses were due to "errors of business judgment" and "faulty performance" and "certain other circumstances" for which the Government was not responsible. Also, the Secretary refuses to accept what he calls our suggestion that there was a "common thread of federal culpability" for the substantial losses which each and every ship builder experienced in building oceanographic vessels for the account of the United States. Instead, the Secretary finds there were "unique factual circumstances" in each case causing such losses and that the Government "was in no way responsible" for such unique circumstances.

. . .

Finally, responding to the obvious concern by Sen. Inouye that substantial losses by each and every ship builder of oceanographic vessels might dissuade such ship builders from bidding on future contracts for these special ships, the Secretary concludes that the Senator's concern "simply does not withstand objective analysis".

As I said, it is a tough letter.

I cannot account for the Secretary's forceful, perhaps strident, denial of our petition. Long ago, I learned it is not wise to argue with the Judge. But we did not approach the Secretary as though he were the Judge in an adversary proceeding where opposing views on rights and duties under contract can be aggressively pursued. We approached the Secretary as a petitioner. We approached him as a petitioner for equitable relief under special powers which he has to view the total problem without having to regard point and counterpoint. If, upon overall assessment of the problem, he concludes that the interests of the United States will be protected or advanced, the Secretary may grant appropriate relief.

Thus, it was the objective of The American Ship Building Company to persuade the Secretary that equitable relief was justified; not because a particular provision of the contract required such relief, or that our performance was without fault, but because larger policy considerations made it equitable to the Secretary to grant relief. In particular it was our major premise that the fixed price contract under which we built the complex, advanced design oceanographic research vessel RESEARCHER was inequitable to begin with, because the Government uniquely knew, or should have known during the bid process, that the bid price was a sure loser -- a substantial sure loser -- because the Government already knew that each and every other ship builder of oceanographic vessels for the account of the United States had lost his proverbial shirt. Since in our view the contract was inequitable at its inception, it followed that the results were bound to be -- and were -- inequitable whatever our performance.

This, in essence, was the basic theme of our request for equitable relief.

Since our petition was in equity, not under law, permitting thereby -- perhaps requiring -- other opinions in the formulation of a decision, we thought the Secretary would be aided in making that decision if he had the views of other Government officials who also had an interest and responsibility for our maritime policies. Thus, we were gratified that a number of leading senators and congressmen understood, not only the dilemma we were in, but the adverse national maritime policy implications involved, and indicated these views to the Secretary.

. . .

Hopefully, the Secretary was not offended by this legislative interest in a national question.

Whatever his mood, the Secretary seems to have misunderstood our petition and to have overstated the case against us.

Intending no disrespect by the comparison, we feel like the young girl who becomes pregnant after having been raped in view of various observers, each of whom argue at length whether the attacker was tall or short, fat or thin, young or old, dark or light skinned. The intensity of the debate on the detail obscures regard for the central problem -- care for the girl.

Thus, the Secretary's observations in his letter to Sen. Inouye about our business judgment and performance, is argumentative about detail. If he does not accept our premise that the contract was inequitable from the beginning, there is no need to argue our judgment or performance, because these are not the central problem. If he does accept our premise, then it makes little difference if our business judgment was bad or our performance was faulty, because this might be expected under the premise -- much like the inevitable criticism from one source or other if the girl keeps, gives up or aborts the baby. The central problem remains, how she -- or we -- got in the predicament.

The Secretary's thoughts that there is no common thread of federal culpability on contract losses because each ship builder of oceanographic vessels lost substantial money due to unique factual circumstances, is puzzling. Certainly there is a common thread in that each and every ship builder lost substantial money building the same kind of ship, under the same kind of contract, with the same agency of government. It is a bit much in this equitable proceeding, therefore, for the Secretary to insist that "the Government was in no way responsible" for such losses. A number of congressional leaders commenting on this point acted on the homespun, but quite logical reasoning that there is fire where there is smoke, or more particularly, that the Maritime Administration which administered each and every one of these contracts did not "level" with the contractors during the bid process.

It may also be hoped, in the national interest, that the Secretary is right that "responsible" ship building concerns will not lose interest in bidding on future contracts to build oceanographic vessels for the United States despite the bad experience of each and every other ship builder of such vessels. However, we are mystified how he concludes this by "objective analysis."

. . .

It is quite normal for ship builders to bid on follow on orders of the same or similar ships. This did not happen with respect to oceanographic vessels. In each case the previous builder declined to bid on a subsequent contract offer. It is a fair inference, therefore, that subjectively U. S. ship builders of oceanographic vessels are not interested in more money-losing contracts with the Government.

One leading congressman commented to the Secretary on the effect of such waning interest in U. S. ship builders thus: "This is an intolerable situation. It is intolerable certainly for The American Ship Building Company and other ship builders similarly situated because of the losses involved. It is also intolerable for the Government which, as you know so well, has embarked on a very substantial long-range ship building program in the United States. The precarious ability of ship yards to build the ships we need with the constraints we have put on them under the Merchant Marine Act 1970 will be further jeopardized if the yards cannot make satisfactory contracts with the Maritime Administration".

In short, Mr. Chairman, The American Ship Building Company lost well over $5 million on a fixed-price contract of a little over $8 million to build the RESEARCHER. We are informed that the National Steel and Ship Building Company lost almost $2.5 million on a contract price of less than $6 million. In the case of the OCEANOGRAPHER and DISCOVERER, built under option, constructed by Aerojet General, the loss was almost $7.5 million on a contract price of $12.5 million.

The other companies elected other means to seek redress for what they considered to be inequitable results. We elected to petition the Secretary of Commerce for equitable relief under special powers. The Secretary has turned us down under those special powers (largely designed to preserve our defense mobilization base by adjusting contract price to sustain a contractor who otherwise would go out of business).

Whether the Secretary turned us down because the reach of his special powers did not cover us, or otherwise, we have run the course in our petition to the Secretary for equitable relief under those standards.

Accordingly, we seek legislative relief for all ship builders similarly situated, as suggested in the accompanying report. Our hope is that if the legislation is passed with new standards by which to consider ship building costs for complex oceanographic vessels for the account of the United States, the Secretary will take a fresh look at the problem and make the adjustments which circumstances require.

. . .

In the further hope that the Secretary harbors us no ill will for our efforts to cover our losses, I enclose a copy of this letter to him so that he may know our intention and -- though it may be a dream -- will support the suggested amendment to S.3335.

I thank you most sincerely for whatever consideration you may give this request and stand ready to provide further information as may be required.

Sincerely yours,

George M. Steinbrenner III

George M. Steinbrenner III
Chairman and Chief Executive Officer

Enclosures

TEXT

Suggested Committee Amendment:

Amend S. 3335 by adding the sum of $15,000,000 under Section (c) of the Bill concerning expenses necessary for research and development activities.

Purpose of Amendment:

This legislation is needed to empower the Secretary of Commerce to pay unusual shipbuilding costs in constructing oceanographic vessels for the account of the United States under contracts administered by the Maritime Administration.

The House, which has already passed counterpart legislation, H.R. 13324, advised in House Report No. 92–934 that expenses necessary for research and development activities are needed to continue a program "designed to serve the needs of the entire maritime complex including Government, shipbuilders, ship owners and labor". In particular, more than $6,000,000 would be authorized for research "to raise the level of maritime scientific knowledge in order to advance the technological base upon which ships are designed, built and operated". In addition, almost $10,000,000 would be authorized in the area of advanced ship engineering and development for research concerned with the development of advanced ship concepts and their design as well as construction methods.

One of the greatest breakthroughs in the scientific efforts of government in modern times is Congressional awareness and support of the need to explore the riches of the seas, much as we have begun to explore space. Establishment of the National Oceanic and Atmospheric Administration during the last Congress and support by our Oceanography Committees of the need to study marine life in all its aspects indicate the growing awareness of the Congress in the need for such exploration. To explore the seas, much in the way we have set out to explore space, requires ships. To explore the seas with its many mysteries and hidden treasures in the seabed, we need modern, complex and sophisticated ships of advanced design. Technical and scientific innovation is required beyond the existing shipbuilding state of the art so that the ships will do the job which national objectives in marine science require.

Fortunately, the Congress has already supported the building of several oceanographic vessels that can do this job. No doubt, more of such vessels will be required in years ahead as we accelerate our study of the oceans.

In recent years under contract with the Maritime Administration, several shipyards in the United States have constructed the oceanographic vessels "Surveyor," "Oceanographer," "Discoverer," and the "Researcher." These ships currently are performing their assigned mission to explore the seas and from reports these ships are doing a fine job. I have been distressed to learn, however, that in each case these complex, newly designed ships built under fixed contract price with the United States government have cost the shipbuilder very much more than the contract price. I am informed, for instance, that the oceanographic vessel "Surveyor," built by the National Steel and Shipbuilding Company, resulted in a loss to the shipbuilder of almost $2.5 million dollars on a contract price of less than $6,000,000. In the case of the "Oceanographer," constructed by Aerojet General, the loss was almost $7.5 million dollars on a contract price of about $12.5 million dollars. And the "Researcher," built by The American Ship Building Company, resulted in a loss to the company of well over $5,000,000 on a fixed contract price of a little over $8,000,000.

The amendment to S. 3335 to increase R & D funds by $15,000,000 is needed to empower the Secretary of Commerce to pay audited overrun costs attributable to building these oceanographic vessels and to preserve in the United States shipbuilding capability and interest in building modern, experimental and complex oceanographic vessels to serve national interests in exploration and scientific development of the resources of the seas.

While the Secretary of Commerce would retain discretion, under Congressional guidelines, how to pay to these shipbuilders the overrun costs for building these oceanographic vessels, it is the intention of this amendment to S. 3335 to encourage payment of such excess costs for these oceanographic vessels to preserve shipbuilding capability in the United States of these vessels and to recognize and advance research and development efforts in the shipbuilding sciences which were initiated in the building of these novel and complex oceanographic vessels. The Secretary, therefore, may, in addition to authorizing payment of such costs with respect to new oceanographic vessels, pay to shipbuilders of named oceanographic vessels, under this authorization for research and development such actual costs as exceed the fixed price contract in construction of each of such four oceanographic vessels for the account of the United States.

I urge my colleagues to support this amendment to increase by $15 million the maritime authorization for research and development.

Matson
Navigation Company

1629 K Street, N.W.
Washington, D.C. 20006
(202) 833-3555

May 16, 1972

Senator Warren G. Magnuson
Chairman - Committee on Commerce
U. S. Senate
Washington, D. C.

Dear Mr. Chairman:

H.R. 13324, the Maritime Administration's budget authorization bill for fiscal year 1973, as passed by the House, includes authorization to expend $30,000,000 for the purchase of "modern break-bulk United States-flag vessels for lay-up in the National Defense Reserve Fleet". The announced purpose of this authority is to upgrade the capability of the Reserve Fleet and thus enhance its value as a source of immediately available emergency sea-lift.

In addition to being concerned with the ready availability of break-bulk cargo capacity during national emergencies, the Department of Defense is concerned about the ability of commercial carriers to provide self-sustaining container service during such emergencies, i.e., to provide vessels with on-board container cranes designed and suitable for systematic discharging of marine containers at those overseas locations where shore-based cranes of suitable capability are not in place.

Matson Navigation Company has two self-sustaining container vessels, presently surplus to its needs, which would constitute valuable additions to the N.D.R.F. In order that the Maritime Administration and Department of Defense might have a means, other than the procedures provided in Section 510 of the 1936 Act, of acquiring these vessels for the Reserve Fleet, we respectfully request that H.R. 13324 be amended or as a minimum, your Committee's report in connection therewith be written, to include language that would authorize the Maritime Administration to acquire container vessels with self-sustaining capability for lay-up assignment to the N.D.R.F.

Yours truly,

J. R. Kuykendall
Vice President-Government Relations

THE AMERICAN SHIP BUILDING COMPANY
THE INVESTMENT PLAZA • CLEVELAND, OHIO 44114

EXECUTIVE OFFICES

May 17, 1972

Honorable Warren G. Magnuson
Chairman, Senate Committee on Commerce
United States Senate
Washington, D. C. 20510

Re: Proposed Amendment to Section (c) of S.3335 to Increase Authorization for Research and Development Activities Concerning Construction of Oceanographic Vessels

Dear Mr. Chairman:

Like the old saw, the operation was a success, but...

Although couched as a legislative report on proposed new law, concerning which you asked for comment, the Secretary of Commerce in his letter to you of May 12, through the General Counsel, continues to argue the old case against each and every shipbuilder who has lost very substantial monies while constructing oceanographic vessels for the account of the United States, under contracts administered by the Maritime Administration.

Further detailed rebuttal may be unrewarding in view of this long and exasperating contest with the Secretary, but we respectfully ask your consideration of these final thoughts before the Committee acts on our suggested amendment to S.3335.

The Secretary adds one new thought in his last letter. He finds it difficult to justify the proposed amendment to "serve the oceanographic program" because no more oceanographic vessels "are presently required".

If the Secretary's predictions on vessel needs to meet oceanographic interests of the United States are as off the mark

. . .

as his predictions on merchant ship building during his testimony leading to the Merchant Marine Act, 1970, our nation's Ocean Science Programs are in deep trouble.

Instead of building 300 relatively small, standard, series production vessels at the rate of 30 a year for 10 years, which the Secretary favored in support of the new Act, we are now informed in the latest Congressional testimony, a little more than a year later, that to compete successfully, American flag operators must build "very large" and therefore much fewer "specialized vessels". LNG carriers, for instance, which are now the thing, were not even mentioned in the Secretary's new merchant shipbuilding program. As he estimated so badly on the kind, number, type and size of vessels required in our merchant ship inventory, it may be wondered how can we rely on his estimate of required oceanographic vessels. Perhaps the Congress will spare the Secretary the burden of estimating the need for such vessels and will lead the way to advancing our study of the seas, much as we are studying space.

Also, we fail to see why the Secretary makes a point of telling you why each of the shipbuilders who built these oceanographic vessels is no longer in that business. We should think he would start worrying about that fact.

To the Secretary's reliance on the Navy report on our contract to build the RESEARCHER as reason to deny our petition for equitable relief, we ask: How come the Secretary took so little note of the Navy report which concluded that the bid by The American Ship Building Company was a "gross underestimate"? Or, that "the complexity of the RESEARCHER was above AmShip's experience"? Or, that MarAd did not advise the contractor, as it was required to do, that an important subcontractor was incompetent? Or, that AmShip could not have built the RESEARCHER in 900 days, as stipulated by the Government, without suffering a loss? Or, any number of similar findings by the Navy which seriously raise questions about MarAd's fair intentions in the administration of this shipbuilding procurement?

. . .

The Secretary disregarded these Navy findings, we suspect, because he did not want to pass on the Government's failure in this procurement. This is what shipbuilders losses are all about. The Government had reason to know at the time of bid, that each and every shipbuilder of these complex, oceanographic vessels was going to lose a lot of money. We think the Government with its superior knowledge of what was involved should have shared this information with the contractors.

In view of the fact that every shipyard involved in building these vessels suffered heavy losses, it certainly is clear that the Government was unduly enriched at the expense of the domestic shipyards.

The Secretary also maintains his vigorously held position that the Government was "in no way" responsible for the substantial losses which every one of these contractors experienced. However, he now effectively abandons this outrageous position. Now, the Secretary acknowledges that his Department "reached an agreement" with the first contractor on his claim for overrun costs. In simple words, the Secretary settled the case. Clearly, the Secretary did not settle a contractor's claim if the Government was in no way responsible.

The Secretary also takes comfort in the fact that the next contractor, who lost $7.5 million on a $12 million contract, lost before a Commissioner in the Court of Claims. The Commissioner's opinion was not a decision. This power is reserved to the Court itself, which recently heard argument on this particular case. There is good reason to believe the Court will view the rights of the parties more favorable to the Contractor.

Aside from the fact that not all races are won at the first turn, the Secretary continues to miss the point in his responsibilities. Whether the Commissioner was right or wrong (and the Court itself will actually decide this question), he was deciding a <u>contract</u> dispute. In other words, he construed the contract made by the parties. He had no equitable or policy responsibilities, as does the Secretary, or the Congress. Nevertheless, the Commissioner apparently could not contain himself

. . .

about the way things should be in bidding for shipbuilding contracts with the Maritime Administration. He volunteered the following thoughts in the same opinion which so pleases the Secretary:

> "While the confidentiality of such data [bid breakdowns] is understandable, nevertheless one wonders as to the cause-and-effect relationship between the consistent cost overrun phenomenon in Government shipbuilding contracts and the sparseness of information provided for bid purposes in the typical invitation for bids. Whereas, for comparison, in a Government construction contract the bidders are given not only detailed plans, estimates as to excavation and fill, and unit price provisions for over-and-under departures therefrom, in a typical ship construction contract (at least the one in suit) the bidders are merely given gross information as to weights, size, configuration, mission, propulsion means, and arrangment, with no Government estimates as to material quantities, labor and engineering hours, etc. To the extent these factors are present in the Government's prebid estimates, perhaps communication of such data in invitations to bidders might place them all on a more intelligent bidding basis and provide a criteria for subsequent cost adjustments where material and labor requirements exceed estimates by a substantial margin. On the surace there seems to be a great disparity between information imparted to bidders in Government construction contracts and that given in ship construction contracts. There may be reasons for this disparity of which the writer is unaware." (Emphasis added).

. . .

Why doesn't the Secretary hear the Commissioner? Why doesn't the Secretary hear the Shipbuilding Contractors? Why doesn't the Secretary hear leading Senators and Congressmen?

They are saying to him that the Maritime Administration's bidding procedure is archaic, that it is unfair to shipbuilders and that it should be changed.

If the Secretary would take off the narrow, legalistic lenses with which he has viewed this problem he would recognize the need for change, and the need for equity, and the need to help the shipbuilders of the United States.

If the Secretary will not see, hopefully the Congress will.

We earnestly ask you and the Committee to regard these shipbuilder interests, at least to recover construction costs, and pass the proposed amendment to S.3335.

It would be tragic if the Secretary's view prevailed... But the patient died.

Very truly yours,

George M. Steinbrenner III

George M. Steinbrenner III
Chairman of the Board
Chief Executive Officer

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS ON S. 3404

STATEMENT OF PAGE GROTON, ASSISTANT TO THE INTERNATIONAL PRESIDENT, INTERNATIONAL BROTHERHOOD OF BOILERMAKERS, IRON SHIP BUILDERS, BLACKSMITHS, FORGERS AND HELPERS

Mr. Chairman and members of the Committee. My name is Page Groton. I am Assistant to the President of the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers.

As the name of our union implies, we represent thousands of workers in the shipbuilding and allied industries.

The rapid and steady erosion of the shipbuilding industry in recent years has had a major impact upon the workers we represent. Jobs have been lost by the thousands as our nation has slipped to thirteenth position among the world's shipbuilding nations. Even such nations as Spain, Italy and Yugoslavia have surpassed the United States in shipbuilding.

In the two-year period between 1969 and 1971, employment in American shipyards dropped from 143,000 to 126,000.

Employment in private shipyards is unstable. And even as some yards make heavy investments in modernization and expansion programs, considerable production capacity remains idle.

Mr. Chairman, we had looked toward the Merchant Marine Act of 1970 to provide the mechanism for revitalizing our nation's shipbuilding industry.

We did not expect that passage of the Act would bring an immediate end to the famine that has forced our industry to fight for its survival during the past two decades. We knew that time would be required to plan the vessels and prepare the yards for the construction with Federal subsidies of an average of 30 new merchant ships each year.

And yet here we are, well into the second year of the Act, and we are confronted with the fact that only 12 ships are being built under the provisions of that legislation.

Mr. Chairman, the Merchant Marine Act of 1970 is a superb piece of legislation.

Until its enactment, the United States private shipbuilding industry had been plagued by an environment, in terms of limited, spasmodic markets and stifling procedures, beyond the industry's control. The situation must be changed. From our studies, and assessments thus far, there are substantial indications that most of the major problems within the private shipbuilding industry of the United States can be solved by an expanding and steady volume of contracts, stable employment for the labor force, and a more favorable total environment, all of which are closely related.

But for the intent of that Act to be fulfilled, we must now formulate programs that will guarantee that fast, efficient American-flag vessels will have available to carry the cargo that is required for profitable operations.

The legislation before us, S. 3404 would give us the means to make whole the hopes and promises—as well as the intent of the Congress—encompassed in the Merchant Marine Act of 1970.

Our nation's energy demands are growing at a rate that demands immediate action to guarantee that we have both a dependable supply and a dependable mode of transporting that supply from overseas sources.

The U.S. Navy has recently released an updated version of a publication entitled "U.S. Life Lines" detailing imports of essential materials for 1966–1969 period. Seventy-one minerals and metals are identified as critical to maintenance of American industrial structure and military force. Of these 71 materials, 69 came from foreign sources in 1971, according to late Commerce Department reports, and only 4.72% by total volume was imported aboard U.S. flag shipping. This situation, it seems clear, poses a potential problem of political leverage inimical to U.S. national security interests.

We feel that it is incumbent upon Congress to insure our nation against any interruption of the flow of energy fuels to our shores. Our national security is at stake.

S. 3404 provides that insurance by making it mandatory that a minimum of 50 percent of all of our oil imports be carried aboard American-built, American-owned, American-manned and American-operated ships.

We estimate that 350 tankers in the 150,000-deadweight-ton class will be required by 1985 to transport only half of the oil that our country will be consuming.

Mr. Chairman, there is within that statistic the answer to providing for our nation a viable, vigorous shipbuilding industry.

Building those ships in American yards would produce 364,000 man-years of work for skilled and semi-skilled workers. It would open the way to new opportunities for the unemployed where help is needed most—in our urban areas where most shipyards are located.

In addition, and of equal importance to our economy, this construction would result in nearly a million man-years of productive work in related industries which make the steel plates, the boilers, the engines, the electric gear and fixtures for a modern tanker.

The corporations and the workers who would construct and operate this fleet would pay Federal, state and local taxes on their earnings, giving a sizeable boost to governmental treasuries, particularly in the urban areas.

These are but a few of the wide range of benefits that would be derived from the passage of S. 3404.

Mr. Chairman, we are discussing the construction of only half of the fleet of tankers that will be required to provide our country with the imported petroleum that will be demanded.

These ships will have to be built. And they will have to be constructed soon. Through adoption of S. 3404 we have the opportunity to build for our nation a tanker fleet that would strengthen our nation economimally and make her secure through a time of crisis.

STATEMENT OF SOUTHERN CALIFORNIA EDISON

Southern California Edison Company is pleased to present its comments concerning the proposed amendment to Section 901(b)(1) of the Merchant Marine Act 1936, as amended [46 U.S.C. 1241(b)(1)].

Edison is a public utility incorporated in the State of California and engaged in the business of generating, transmitting and distributing electric energy throughout portions of fifteen counties in Central and Southern California with a service area comprising a population in excess of seven million persons. All of Edison's major gas and oil fueled generating plants are located in Southern California and in an area designated as the Metropolitan Los Angeles Air Quality Control Region by the National Air Pollution Control Administration and as the South Coast Basin by the California Air Resources Board.

Edison's total effective operating capacity is approximately 12,400,000 kilowatts, of which approximately 8,700,000 kilowatts are from gas and oil fueled steam electric generating plants. These plants, combined with the gas and oil fueled plants under construction, will require the equivalent of approximately one billion barrels of fuel oil during their remaining operating lives.

The operation of all of Edison's gas and oil fueled electric generating plants is subject to stringent air pollution control regulations which require them to burn either natural gas or low sulfur liquid fuels containing not more than 0.5 percent sulfur by weight. These requirements cannot be met by California residual fuel oil because of its higher sulfur content.

In spite of strenuous efforts over a period of more than 15 years, Edison has been only partially successful in obtaining independent gas supplies and is, therefore, almost wholly dependent upon the local gas distributing utilities for its gas fuel supplies. These gas supplies are served to Edison on an interruptible basis at lowest priority. Edison utilizes all the gas fuel made available to it and uses fuel oil only as required to supplement gas supplies.

The supply of gas fuel available to Edison is decreasing and based on advice by gas suppliers, is projected to continue to deteriorate progressively through the first half of this decade. It is presently estimated that the supply of gas available to Edison in 1975, assuming no future curtailment by the out-of-state

gas suppliers, will be sufficient to satisfy only about 25 percent of requirements and that Edison will, therefore, be required to use about 60 million barrels of supplementary oil fuel—five times as much oil as was used in 1970.

The outlook for gas supply during the second half of this decade is very uncertain. If Edison's gas suppliers' most optimistic plans for securing new increments of gas supply are realized, Edison will still be required to use between 60 and 70 million barrels per year of supplementary oil fuel during the period 1976 through 1981. If, on the other hand, no new increments of gas supply are obtained by Edison's suppliers or if what increments are obtained are needed for higher priority uses, Edison will be required to use an average of over 90 million barrels per year during the period.

The principal supplies of low sulfur oil of the quality required to comply with the air pollution control regulations, which are available to Edison in the quantities and delivery schedules required for its use, are manufactured from crude oils imported from 8,000 to 11,000 miles distant. Limited quantities of low sulfur oil also are available from Alaskan crude oil.

It is estimated that a requirement on Edison's oil suppliers to import at least 50% of their foreign oil quotas in privately-owned U.S. Flag tankships in 1975, 1976 and 1977, from points 10,000 miles distant would, in the absence of offsetting subsidies, result in additional costs to Edison's customers in the amount of at least 12 million dollars per year.

Edison has the obligation to provide at the lowest reasonable cost, indispensable and reliable electric service to meet the requirements of its customers. In order to fulfill this responsibility, it must be able to procure suitable fuels at reasonable prices which will meet stringent air pollution control requirements. If S. 3404 were passed in its present form, the net effect would be a significant increase to Edison's customers in the costs reflected in the rates they would have to pay for electricity. A similar effect can be anticipated for customers of other utilities with fuel problems similar to Edison's.

To prevent this adverse cost impact, it is suggested that S. 3404 be amended as follows:

Change the period to a colon at the end of the first sentence of section 901(b)(1) of the Merchant Marine Act of 1936, as amended [46 U.S.C. 1241(b)(1)] and insert:

"*And provided further*, That the provisions of this subsection shall not apply to fuel imported to meet the requirements of a public utility to comply with governmental regulations on air pollution."

Thank you for the opportunity to present this statement.

STATEMENT OF COMMITTEE OF EUROPEAN NATIONAL SHIPOWNERS' ASSOCIATIONS

1. The Committee of European National Shipowners' Associations (CENSA) is an international organization, the membership of which comprises the National Shipowners' Associations of the following countries: Belgium, Denmark, Finland, France, Germany, Greece, Italy, Japan, The Netherlands, Norway, Sweden, and the United Kingdom.

2. CENSA was established in 1963. Its broad purpose is to provide a medium for consultation and cooperation on common problems affecting European and Japanese shipowners, whether they operate liners, tramps, tankers or bulkcarriers. CENSA has also various objectives of a specific nature, chief among which is the promotion of an international merchant shipping system in the service of world trade, free of Governmental interference and discriminations. It is furtherance of this objective which prompts CENSA to submit this statement to this Subcommittee.

3. CENSA appreciates the opportunity to express its views in connection with the proposed legislation (S. 3404), now receiving your attention, because we feel this legislation holds significant implications not only for the U.S. Merchant Marine, but also for international shipping in general, and for international tanker shipping in partcular, as well as for the transportation cost of oil.

4. CENSA wishes to make it clear that it does not in any sense seek to tell the United States how to run its Merchant Marine. European and Japanese shipowners understand and appreciate the aspiration of the United States to have a strong Merchant Marine. To oppose such aspirations would be contrary to CENSA's expressed goal.

78-255 O - 72 - 27

5. We recognize that United States shipowners are at a competitive disadvantage because of high domestic costs and that some form of Governmental support might be considered necessary to remedy the competitive position of the United States Merchant Marine. However, in our opinion, this goal should not be obtained by discriminatory measures, as these distort the economics of international shipping and increase ocean transportation costs. Such measures should be vigorously opposed by both maritime and trading nations, and it is in this context and spirit that CENSA wishes respectfully to register its opposition to U.S. cargo preference laws in general and to the proposals contained in S. 3404 in particular.

6. CENSA sees the reservation of cargo to a specific flag ship (cargo preference) as a practice which distorts the economics and reduces its efficiency. It increases transportation costs and thereby adversely affects the volume of world trade.

7. And perhaps most important, the existing cargo preference measures of the United States have had, and continue to have, a contagious effect which could, if the present trend continues, seriously damage the international shipping industry, including the U.S. Merchant Marine. Since the United States is not the only nation with cargo preference laws, we would like to elaborate upon the detrimental effects of cargo preference from a somewhat general perspective, before dealing with the impact of preferential measures which S. 3404 seeks to establish in the U.S. oil import trade.

8. In the first instance, cargo preference systems create unnecessary shipping capacity. If cargo is required to await ships of a specific flag despite adequate existing sources of other flags, this necessarily results in an uneconomic use of existing tonnage and the creation of an excess volume of tonnage. The degree of efficiency in international maritime transport and the level of competitive rates depend upon a market for freight sources organized so as to facilitate the most efficient utilization of the existing fleet and the avoidance of more space than is necessary to cover the normal fluctuations or requirements. This economic rule applies equally to the tanker trade as to liner shipping and tramp shipping. Tramps, and particularly those which are suitable to carry dry as well as liquid cargoes, attain maximum efficiency only when they have the liberty to move from trade to trade as opportunity offers. A discriminatory system reserving a large percentage of any commodity to national flag ships would often prevent any vessel, after discharge, from loading cargo ready for shipment in a particular port of range.

Ships of the preferred flag, which might have to make relatively long ballast voyages, might have to be chartered instead. All this tends to produce a world merchant fleet larger than would otherwise be required to carry world trade. It would also increase the operating costs per ton/mile of shipping services, and, consequently increase the level of freight rates not only for cargoes subject to cargo preference, but also the remainder of world seaborne trade.

9. There are other ways in which cargo preference measures increase ocean transportation costs. These measures are usually imposed by Governments in an effort to increase the amount or to insure a minimum amount, of cargo for the national fleet. Almost invariably such a nation's flag vessels are unable to attract that cargo in the free competitive market because their costs are too high. Thus, by establishing a separate protected market for national flag vessels, cargo preference measures increase transportation costs by diverting cargo from lower cost to higher cost vessels.

10. This brings us to the second major adverse effect of cargo preference systems; by increasing transportation costs cargo preference adversely affects the volume of world trade. Higher transportation costs resulting from cargo preference measures make it unprofitable for exporters as well as importers to move certain commodities and goods from one market to another. In other words, certain export products are made uncompetitive in foreign markets. The obvious result is a reduction in the volume of world trade and, ironically, it is frequently the exporters and importers of the nation with cargo preference measures who suffer.

11. We believe that this latter point is best illustrated by the developments since 1963 in the grain trade from the United States.

In October 1963 the Government of the United States required that Government approval of wheat exported to the USSR would be conditional on 50% of the export being shipped on U.S. flag vessels. During the years following, this policy was strongly opposed by U.S. farm organizations who repeatedly em-

phasized that cargo preference provisions were seriously hampering efforts to promote exports of grain and other agricultural products, and that, in fact, these products were becoming uncompetitive in the world markets due to the higher transportation costs of U.S. shipping. In September of last year the grain trade with the USSR was resumed, but this only happened after the controversial restriction had been revoked by President Nixon.

12. In this connection we may draw attention to statements made by Government and industry witnesses during hearings held in November of last year by the House Committee on Merchant Marine and Fisheries in respect to proposed legislation *H.R. 10694*, *H.R. 10923* and *H. Con. Res. 403*. At that time Mr. Clarence G. Palmby, Assistant Secretary of the United States Department of Agriculture, made the following observation:

"Agricultural export competition is fierce today, and small cost differences are crucial. If use of U.S. shipping were required, the higher freight rates would take many of our commodities completely out of competition with those of other exporters, such as Canada, Australia and the European community, and defeat the very purpose for which the program exists."

On October 28, 1971, Mr. James Good, Vice President of Continental Grain Company, New York testified:

"As an example, a recent comparison of price quotations for U.S. gulf shipment of wheat to Karachi, India in September 1971 between two American and two foreign flag vessels showed the following contrast. The two U.S. vessels were quoted at a rate of $33.50 and $26.50 per ton, while the two foreign flag vessels were quoted at $12.78 per ton . . . this difference between the lower U.S. flag vessel rate and the foreign vessel rate amounts to 35 cents per bushel of wheat. In international markets, where sales can be lost on one cent differential between per-bushel prices, the premium for the U.S. flag vessel simply becomes prohibitive of doing any agricultural export business."

In conclusion of his testimony Mr. Good stated:

". . . all experience and any careful analysis of the economics of agricultural exports under cargo preference requirements demonstrate beyond any doubt that cargo preference requirements do not secure more agricultural shipping business for U.S. flag vessels. All they do is divert agricultural export business to our competitors at a loss to the U.S. of valuable foreign exchange of valuable export outlets for surplus farm production above our domestic needs, of needed export-related jobs and of critical sources of farm income. We have learned these lessons from past experiences which should not be ignored."

13. We believe these witnesses have well stated the adverse effects of cargo preference measures on the U.S. export trade with the Soviet Union and Eastern European countries. We also believe that what they have said has equal application to all U.S. cargo preference laws and any similar flag discriminatory measures of other countries. We know that there are those who argue otherwise—those who argue that the U.S. Merchant Marine would be long extinct except for cargo preference laws, but we believe that the U.S. Merchant Marine can survive through other measures than cargo preference. This has already been proved by U.S. shipowners in the field of international transportation, e.g., containerization, LASH ships and SEABEES.

14. Indeed, we believe that neither the U.S. Merchant Marine nor any other Merchant Marine can long survive as a healthy, viable industry unless something is done, and done soon, to put the brake on the flag discriminatory measures which are burgeoning in many nations of the world. This is by far the most disastrous effect of flag discriminatory measures in general and of U.S. cargo preference laws in particular—that they are seriously frustrating the efforts to expand world trade.

15. The cold hard facts are that certain other nations with maritime aspirations—mainly developing countries—have already imposed or are beginning to impose cargo preference and other flag discriminatory measures as strong as, and frequently stronger than, U.S. cargo preference laws and they defend such action by referring to the precedent set by the United States. To illustrate the point, consider the following statement by an Argentine shipping organization:

"Above all, the way in which the North American shipping policy is conducted will justify any means we might use to protect ourselves against the U.S.A. in our aim that up to 50 percent of the Argentine foreign trade be transported on our own ships wherever we have a regular service."

To the same effect, the Department of State testified before the House Committee on *H.R. 12324* that there is little doubt that application of new U.S. cargo

preference legislation, which for the first time would extend preferences to the area of commercial cargoes, would stimulate cargo reservation measures on the part of other governments.

16. This is an attitude that many maritime nations could not afford to maintain without the example the United States has provided and yet a number of aspiring maritime nations are adopting this attitude. Matters have even gone so far that a number of developing countries have exerted pressure on the United Nations Conference on Trade and Development (UNCTAD) in an endeavor to secure the acceptance of cargo preference measures as a legal means to develop their merchant marine trade.

17. And so it goes on. Every aspiring maritime nation tries to outdo each other. We read in industry journals and know that discriminatory actions are now being considered even by countries with long histories of non-Governmental interference with freedom of competition in shipping.

18. We know that it has been argued in the United States—and it is being argued these days in connection with the current Ship American Campaign—that a strong U.S. Merchant Navy is necessary for the defense capability of the United States, and that therefore U.S. business should increasingly employ U.S. ships as it would thereby strengthen the U.S. defense potential. No friend of the United States would object to government support of U.S. shipping within the framework of defense considerations. It is of decisive importance, however, it should take the form of cost equalizing subsidies as provided for in the Merchant Marine Act of 1970, and not the form of disruptive and contagious preference measures, the aim being to develop a competitive merchant marine.

19. As regards the size of the Merchant Navy under American flag needed for defense reasons, it is not for us to comment upon. We would, however, submit that under existing NATO arrangements the merchant fleets of all NATO countries are to be pooled under a common NATO authority to take care of the ocean transport needs of the alliance in war. We note also that in testimony before the House Committee on *H.R. 12324* in February the Department of the Interior represented that "we do not feel that the national security benefits this bill would achieve justify the conflict with free trade policies, and the unavoidable increase in costs to consumers of imported oil."

20. Turning now to the proposed legislation, S. 3404, which seeks to reserve for U.S. flag vessels fifty percent of the United States oil imports under the quota system it is clear that most, if not all, arguments raised in the preceding paragraphs against cargo preference apply to this specific legislative proposal.

21. Enactment of S. 3404 would mean the establishment of a separate protected market wherein, due to the higher costs of transportation by U.S. flag vessels, cargo would be diverted from lower cost to higher cost operators. The inevitable ultimate result is that the U.S. importer will have to pay more for the imported oil products.

22. Of grave concern must be the precedent the United States could establish through this new legislation for other countries, particularly for oil producing countries which have aspirations for development of their own tanker fleet. We know of at least one instance where legislation such as proposed by the United States has already been drafted and is now pending further considerations.

23. If all oil producing, as well as oil importing countries, were to reserve their oil trade to ships of their own flag, the ultimate result would be the total elimination of flexibility in the movement of tanker tonnage. In other words, the oil industry would be deprived of their great advantage to direct the tankers according to the continuously changing requirements of the trade. We feel certain all industrial nations of the world, including the United States, would find this totally unacceptable.

24. In our opinion the proposed legislation if enacted would have a seriously detrimental effect on the oil industry and the general interest of the United States. The United States, the world's largest industrial nation, obviously requires an insured and continuous supply of petroleum products to meet its energy requirements at the lowest possible costs. At present there is ample tonnage available and the international tanker shipping is highly competitive, offering reliable economic coverage of maritime transportation to efficiently handle U.S. oil imports. We quote Mr. Gammelgard who stated in this connection:

"Efficient, flexible and dependable transportation of high standard is assured by the fact that there are numerous independent international shipowners engaged in free and open competition to supply industry needs for charted tonnage. International tanker shipping is highly competitive and owners react promptly, and

indeed often anticipate changing needs of the oil industry. Reliable economic coverage of marine transportation requirements for U.S. oil imports and other international oil trades is more than adequately assured by the U.S. oil industry present arrangements".

25. As to the future U.S. requirement for oil, we understand from statements made by the U.S. Government agencies and representatives of the U.S. oil industry that the oil consumption in the United States is expected to increase from last year's figure of 15 million barrels per day to about 25 million barrels per day in 1980 and that if oil imports keep on increasing at the projected rate, by 1985 as much tanker tonnage as existed in the entire world trade toward the end of last year—about 153 million deadweight ton—will be required to supply U.S. energy imports needs alone. It will be of vital importance to the U.S. economy that such enormous quantities of oil can flow at the lowest possible cost across the oceans of the American ports. This can only be assured if the world's tanker fleets are being utilized with maximum efficiency without any further consideration than sound economic criteria. Reservation of portions of the oil for vessels flying a certain flag would totally defeat the purpose and, therefore, be most harmful to the U.S. economy.

26. When *H.R. 12324* was introduced in the House of Representatives, it was stated that two CENSA countries, namely France and Japan, reserved a proportion of their oil imports for national flag vessels. Similar allegations were made on February 24th by Representative Dingell who, when testifying during hearings in respect of the bill, also referred to such practices in Sweden and Great Britain. It is accordingly appropriate that the position of these countries be further explained. There is, in fact, in France no legislation but there does exist a ministerial decree dating back to 1937. This has required that a percentage, varied from time to time, of oil imports into France should be carried either by French flag vessels or in chartered vessels, the respective charter of which have been approved. If carriage is not possible under either of these conditions, oil imports to France may also be carried by ships of other flags. The intention of this requirement has been to ensure that unreasonable changes in prices and/or the quality of the oil carried does not occur; in other words the French requirement has been directed towards that end and cannot be termed a carge preference measure in circumstances when the requisite percentage (at present 66⅔ percent) can, subject to the non-availability of tonnage under the two heads mentioned above, be carried in non-French flag vessels. In actual practice, in 1970 the French tanker fleet carried 42.6 percent of French oil imports compared with 45 percent in 1969.

27. There are no legislative or administrative measures in force in Japan, Sweden or Great Britain which reserve oil imports for these countries' flag vessels. It would appear that there has been some misunderstanding as to the position in Japan. The fact that a fairly large percentage of oil imports is carried in Japanese vessels stems not from any legislative or administrative requirement but from commercial negotiation.

28. In conclusion, CENSA wishes to underline that it supports the development of a strong U.S. Merchant Marine because it believes in a free and competitive world shipping market based on the realities of world trade and commerce. It follows that CENSA is opposed to cargo preference as a method of achieving that aim. Such a development would inhibit the possibility of world shipping being able to meet the transportation needs and requirements of the 1970's and 1980's; flexibility is essential. This, in CENSA's view, cannot be achieved by Governmental decree. Where freedom of choice exists international shipping will develop the most efficient and modern tonnage to meet the world trading requirements in the most economic and rational way. It is through adherence to this principle that it will be possible to create the economic foundation for the rapid expansion of world trade, which is necessary to bridge the gap between the developed and developing countries of the world.

STATEMENT OF MOBIL OIL CORP.

Mobil Oil Corporation is opposed to any measure which would mandate the employment of U.S. flag tankers in the transport of petroleum imported into the United States. Thus, Mobil opposes S. 3404 which would reserve 50% of the ocean transport of the national petroleum imports for U.S. tankers by including oil imported under the Cargo Preference Act of 1954. However, Mobile recognizes

that it is in the best interests of the United States to foster the development of a substantial U.S. flag fleet, particularly for the transportation of crude oil.

In Mobil's view the enactment of a mandatory percentage is subject to three basic shortcomings. First, under a mandatory program the cost differential associated with U.S. flag ships will be distributed to the consumer in a manner which is difficult to control. There is no magic way in which these costs can be absorbed and not passed on. Second, a U.S. flag tanker built subject to a mandatory program will, under present conditions, be non-competitive in world trade and in all probability will be employed in the limited trade where use is mandated. Under the circumstances, the program will never have more ships than are required by law. Additionally, during supply disruptions (for example, a limited war in the Middle East or a domestic refinery shutdown), the consumer will be denied the flexibility which the international oil companies are able to utilize by pooling all of their foreign flag ships into a single operating fleet.

When such disruptions occur, a fleet can be reassigned in a manner which provides optimum cost to consumers. Moreover, Mobil is convinced of the need to construct facilities in the U.S. to receive the largest tankers regularly trading in world commerce. These large vessels are by their nature difficult to schedule, and the international oil companies want to be able to utilize giant U.S. flag carriers flexibly in the world fleet for transportation to other destinations. Third, the adoption of a flag quota arrangement would be contrary to the best interests of the U.S. from the standpoint of our political and trade relations with the other nations of the free world. The scope of the possible repercussions of adoption by the U.S. of a policy of flag preference in foreign trade is worldwide, particularly among the oil producing countries of the Middle East who have made repeated representations as to the desirability of national tanker fleets sufficient to transport a significant amount of their petroleum exports. Venezuela and Nigeria are reportedly again actively investigating the possibilities of establishing national flag fleets and they could well demand that a portion of their exports be carried in these vessels. In this connection, experience has demonstrated that those countries which have been successful in establishing large national flag fleets have done so through the utilization of various incentives to encourage the development of such a fleet rather than through a quantitative mandate.

In order to accomplish the objective of fostering U.S. flag fleet construction and operation, it is Mobil's view that amendments to existing laws providing for a subsidy for the construction and operation of U.S. flag vessels and modifications to related administrative provisions must be made. Attached as part of this statement is a summary of the proposed changes. It is our believe that their adoption would result in a substantial increase in U.S. flag operations.

The development of a large U.S. flag fleet will create a significant increase in jobs available to maritime and shipbuilding labor. Mobil is convinced that labor will recognize it has a stake in insuring the success of the program. With goodwill prevailing on both sides, it should be possible to achieve agreement so that the nation could be given assurance that a labor dispute would not shut down the entire fleet. For example, labor contracts could be signed immediately following the construction of a vessel which would insure against the vessel being struck for a specified period of time. Another alternative would be an overall restriction prohibiting more than a specified percentage of the national fleet being struck at any one time. Mobil has no preference for any particular solution to the settlement of labor disputes, but some solution is essential if the U.S. is to have a strong maritime program.

Mobil is convinced that the granting of preferential treatment to U.S. flag tankers as a means of strengthening the Merchant Marine is not in the best interests of the U.S. A viable alternative to accomplish the objective is through amendments to the Merchant Marine Act of 1970 and changes in administrative practices. Mobil believes that these steps must be taken to assure the development of a strong U.S. flag Merchant Marine which can operate competitively in the world market and be a significant contributor to the stability and growth of the U.S. world trade.

SUGGESTED MODIFICATIONS OF EXISTING LEGISLATION

1. *Construction Differential Subsidy.*—Permits construction of a vessel in a U.S. shipyard at a cost equivalent to a comparable ship in a foreign shipyard subject to a maximum subsidy of 43% of U.S. costs and reducing to 35% in 1976.

a. The maximum level of subsidy presently set at 43% of U.S. costs and reducing to 41% on June 30 should be increased.

With the present level of a maximum subsidy of 43%, it is estimated it would cost $39,500,000 to build a very large crude carrier (VLCC) in a U.S. yard (after subsidy and investment credit) which is $2,500,000 more than present foreign building costs. (This is based on an estimated $76,000,000 U.S. cost to equate to $37,000,000 foreign VLCC's.)

b. The trading restriction which has by regulation been interpreted to mean at least 35% of the vessel's time be spent in the U.S. import or export trade should be eliminated. (It is our understanding that steps have recently been taken to reduce this restriction to 20%.)

Elimination of this provision is necessary if the U.S. flag fleet is to be competitive in world trade. The U.S. flag ships will be generating U.S. balance of payments credits wherever they operate in the world, and there should be no rigid requirement as to the voyage on which they should operate. We believe the provision should be modified by legislation so that it is clear that the U.S. government does not view worldwide trading unfavorably.

2. *Operating Differential Subsidy.*—Permits payments to U.S. flag operator to equate wages, insurance and repairs to those of a comparable foreign flag operator.

a. The "Grandfather" clause prohibiting future ownership and charter of foreign vessels and disposal of present fleet within 20 years must be eliminated.

Considering the international oil companies' worldwide operations, it is obvious they cannot meet this requirement.

The enormous capital requirements associated with the construction of very large crude carriers make it necessary for the companies with financial strength to undertake these commitments. The present clause discriminates against the largest companies in the industry since all of them have extensive foreign fleets. It is neither practical nor desirable for these companies to consider disposing of their foreign fleets, nor is there any conceptual reason for the discriminatory clause.

b. The trading restriction which by regulation has been interpreted to mean that at least 50% of vessel's time to be in U.S. import or export trade should be eliminated.

The elimination of this trade restriction is suggested for the same reason as in 1(b) above.

c. Restriction on ownership or expansion of U.S. coastwise fleet must be eliminated or a permanent waiver granted.

Under this provision the recipient of a subsidy must obtain government approval to own or charter a domestic coastwise vessel or expand its coastwise fleet. While an oil company might be exempted from this provision, this is not clear, and it could possibly limit flexibility in the future with decisions on changes in coastwise or intercoastal movements being subject to government approval.

d. Requirement that "whenever practicable, the Operator shall favor American flag companies in transshipping cargo, in selecting foreign and domestic agents or other representatives, in the rental of terminal and other facilities, and in related matters" must be eliminated.

MARAD interprets this to mean we must use U.S. flag tonnage, if available, over foreign flag when chartering ships. Any U.S. independent owner could raise an objection if he had a vessel available and a foreign ship had been chartered instead. This could mean it would be necessary to canvass the U.S. market before each charter.

e. Clause concerning Preference and Conference Agreements must be eliminated or revised to permit continued mode of operation.

This clause placed limitations on the right to carry proprietary cargo and also could be deemed to prohibit participation in any form of tonnage exchange.

f. Clause allowing only full cargo loads from one shipper or charterer must be eliminated.

This clause would prohibit carry part cargoes or split cargoes for more than one account or owner. Also, if taken literally, it could prohibit two-port loading or discharging.

SUGGESTED MODIFICATIONS IN ADMINISTRATIVE PROCEDURES

1. *Construction Differential Subsidy:*

a. Vessels built with a construction subsidy should be permitted to carry government preference cargoes.

While MARAD have confirmed there is no provision in the law to prevent this, it has been general practice not to allow it in the past.

2. *Operating Differential Subsidy:*

a. The requirement that the recipient of an operating subsidy must agree to replace the subsidized vessels at the end of their useful life should be eliminated.

The subsidy should be related to the operation of the particular vessel and the replacement of the vessel should not be a part of the subsidy consideration. This provision introduces an additional element of inflexibility for the prospective owner. It is understood that MARAD can waive this provision since it is a policy matter, not law.

b. Clause prohibiting carriage of cargoes subject to cargo preference laws should be omitted.

It is understood this is MARAD policy and can be waived.

c. Requirement to pay customs duty of 50% if subsidized vessel is repaired in foreign shipyard should be eliminated.

This is not a provision of this Act, but it restricts our flexibility in worldwide trading if we must return to a U.S. shipyard for all repairs.

STATEMENT OF THE AFL–CIO

Mr. Chairman, the AFL–CIO executive council recently gave its unanimous approval to S. 3404 in the belief that it is absolutely vital that our Nation be prepared to guarantee an uninterrupted flow of energy fuels from overseas sources.

In taking this action, we pledged our total support to the AFL–CIO-affiliated maritime unions which will be directly affected by the program to build and man a tanker fleet capable of giving our Nation an adequate capacity to protect its energy lifeline.

The AFL–CIO is firmly convinced that our Nation would be placed in a position of great jeopardy should we permit ourselves to be dependent upon foreign powers for the transportation of petroleum to our shores.

S. 3404 would alleviate this threat by providing that a minimum of half of all petroleum imported from overseas sources would be carried aboard American-flag ships.

At the present time we have no American-flag tankers engaged in transporting oil from overseas to the United States. Most of the imported oil comes in so-called flag-of-convenience ships. These are tankers owned by American oil companies which are registered under the Liberian and other flags and are crewed by foreign seamen.

We learned to our dismay in both the Middle East crisis and in the Vietnam war that American-owned vessels operating under foreign flags are not to be depended upon to help our Nation in an emergency. Foreign crews have refused to serve, and home-flag foreign nations have refused to permit American-owned vessels to be used in several emergency cases.

Mr. Chairman, the AFL–CIO believes that we dare not permit any such circumstances to stand as a danger toward curtailing the flow of overseas energy fuels that are becoming paramount to the everyday operation of our Nation.

Estimates by experts in Government indicate that our country will be forced to import from overseas fields more than half of our petroleum supplies by 1985. To get those resources to our shores will require a fleet of vessels approximately equal to the entire fleet of the world today.

Our contention is that a minimum of half of that tanker capacity should be under the direct control of the American Government and operated by privately owned American-flag shipping companies.

In addition to securing our Nation against the threat of foreign interruption of our oil supply, we would be accomplishing far more.

The construction of the several hundred ships that would be required by passage of S. 3404 would revitalize our shipbuilding industry, providing jobs for tens of thousands of skilled men and women at a time when unemployment is a major problem.

The operation of these vessels by American corporations would result in uncounted additional thousands of jobs at sea and ashore.

By shipping at least half of our petroleum requirements on American-flag vessels, we would be contributing handsomely to the American side of the balance of payments ledger which is in dire need of help.

The treasuries of the Federal, state and local governments would be enhanced through taxes collected on the earning of corporations and the wages of the employed. Since most shipyards and ports are located in urban communities, the additional employment and revenues would contribute strongly to the betterment of the hard-pressed cities.

Mr. Chairman, the AFL–CIO is convinced that passage of S. 3404 would provided massive benefits for the American worker, the American businessman and the American economy. And it would give our nation protection against the interruption of the flow of energy fuels from overseas sources upon which we are depending for survival.

MARITIME TRADES DEPARTMENT

AMERICAN FEDERATION OF LABOR and CONGRESS OF INDUSTRIAL ORGANIZATIONS

815 SIXTEENTH STREET, N.W.

WASHINGTON, D.C. 20006 (202) 638-0262

PAUL HALL, PRESIDENT
JACK McDONALD, VICE-PRESIDENT

PETER M. McGAVIN, EXECUTIVE SECRETARY-TREASURER
O. WILLIAM MOODY, JR., ADMINISTRATOR

AFFILIATES:

American Guild of Variety Artists
The Journeymen Barbers, Hairdressers and Cosmetologists' International Union of America
International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers
International Brotherhood of Bookbinders
Boot and Shoe Workers' Union
Bricklayers, Masons and Plasterers International Union of America
United Brotherhood of Carpenters and Joiners of America
United Cement, Lime and Gypsum Workers International Union
Communications Workers of America
Distillery, Rectifying, Wine and Allied Workers' International Union of America
International Union of Dolls, Toys, Playthings, Novelties and Allied Products of the United States and Canada, AFL-CIO
International Brotherhood of Electrical Workers
International Union of Elevator Constructors
International Union of Operating Engineers
International Association of Fire Fighters
International Brotherhood of Firemen and Oilers
American Federation of Grain Millers
Hotel and Restaurant Employees' and Bartenders' International Union
International Association of Bridge, Structural and Ornamental Iron Workers
Laborers' International Union of North America
AFL-CIO Laundry and Dry Cleaning International Union
International Leather Goods, Plastics and Novelty Workers Union
Lithographers and Photoengravers International Union
International Association of Machinists and Aerospace Workers
Industrial Union of Marine and Shipbuilding Workers of America
Amalgamated Meat Cutters and Butcher Workmen of North America
Office and Professional Employees International Union
Oil, Chemical and Atomic Workers International Union
International Brotherhood of Painters and Allied Trades
Operative Plasterers' and Cement Masons' International Association of the United States and Canada
United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada
International Brotherhood of Pottery and Allied Workers
International Brotherhood of Pulp, Sulphite and Paper Mill Workers of the United States and Canada
Brotherhood of Railway, Airline and Steamship Clerks, Freight Handlers, Express and Station Employes
Retail Clerks International Association
Retail, Wholesale and Department Store Union
United Rubber, Cork, Linoleum and Plastic Workers of America
Seafarers International Union of North America
Sheet Metal Workers International Association
American Federation of State, County and Municipal Employees
American Federation of Technical Engineers
United Telegraph Workers
United Textile Workers of America
Upholsterers' International Union of North America

April 6, 1972

The Honorable Warren G. Magnuson
The United States Senate
Suite 127
Old Senate Office Building
Washington, D. C. 20510

Dear Senator Magnuson:

For your information I am enclosing a copy of a resolution, together with covering letter from Executive Secretary-Treasurer Henning of the California Labor Federation, AFL-CIO. This resolution supports the legislative program agreed upon by all AFL-CIO maritime unions and adopted by the Executive Council of the AFL-CIO.

This legislation is of the utmost importance to efforts to revitalize the American merchant marine and to develop further American shipbuilding capability. We respectfully urge your support of this legislative proposal.

We would like to call your attention to H.R. 10331, which is pending in the House and is a companion bill to S.2404 to preserve the merger of El Paso Natural Gas and Pacific Northwest Pipeline Company and to S.3404, which is companion legislation to H.R. 12324 to require that at least 50 percent of all U. S. oil imports and natural gas be carried in U. S. flag ships.

Thank you for your kind consideration.

Sincerely yours,

Bill

O. William Moody, Jr.
Administrator

bbr

CALIFORNIA LABOR FEDERATION, AFL-CIO

JOHN F. HENNING
Executive
Secretary-Treasurer
ALBIN J. GRUHN
President

GENERAL
VICE PRESIDENT
Manuel Dias

VICE PRESIDENTS
Geographical
District No. 1
Max J. Osslo
District No. 2
M. R. Callahan
Ray S. Mendoza
District No. 3
Anthony J. Bagdanowicz
John L. Dales
John A. Cinquemani
Kenneth D. Larson
Joseph H. Seymour
Ray M. Wilson
District No. 4
G. A. McCulloch
District No. 5
Bennie Arellano
District No. 6
H. D. Lackey
District No. 7
C. A. Green
District No. 8
Thomas A. Small
District No. 9
Morris Weisberger
Joseph R. Garcia
Fred L. Martin
Wm. G. Dowd
District No. 10
Richard K. Groulx
Lamar Childers
District No. 11
Leo Mitchell
District No. 12
Stanley Lathen
District No. 13
Harry Finley
District No. 14
Leonard Cahill
District No. 15
Lloyd J. Lee

VICE PRESIDENTS
At Large
Loretta Riley
James R. Poole
Edward T. Sinclock
Sigmund Arywitz
Jerome Posner
Joseph P. Mazzola
Steve Edney
Fred D. Pierce
Frank S. Monroe
[illegible]7

995 MARKET STREET, SUITE 310
SAN FRANCISCO, CALIFORNIA 94103
415 986-3585

March 21, 1972

Mr. Frank Drozak, Vice President
Seafarers International Union
of North America
1321 Mission St.
San Francisco, Ca. 94103

Dear Sir and Brother:

Enclosed find copy of your Resolution adopted unanimously by our Executive Council on March 8, 1972.

The enclosed copy tells of our Executive Council action.

With kindest personal regards, I remain

Fraternally yours,

John F. Henning
Executive Secretary-Treasurer

JFH:km
ope 3-afl-cio (31)
Enclosure

RESOLUTION

There is urgent need to expedite implementation of the Merchant Marine Act of 1970 to reverse rising unemployment in American Shipyards and to rebuild as quickly as possible the American flag merchant marine whose strength is at an all time low. Achievment of these desired objectives can be assisted by enactment into law of a legislative program agreed upon by all AFL-CIO maritime unions and adopted by the Executive Council of the AFL-CIO at its meeting in Bal Harbour, Florida, on February 21, 1972.

Therefore, be it resolved by the California Labor Federation, AFL-CIO, that it support and call upon Congress to enact the following legislative program which was endorsed by the Executive Council of the AFL-CIO:

1. Opposition to compulsory arbitration or any form of government interference in any manner in collective bargaining.

2. Support of H.R. 12324 to require that at least 50% of all U.S. oil imports and natural gas be carried in U. S. flag ships, and support of S. 2404 to preserve the merger of El Paso Natural Gas and Pacific Northwest Pipeline Company as a means of assuring the development of U. S. technology in this highly specialized ship building field and to assure maximum U.S. flag participation in the transportation of Liquid Natural Gas which will have an increasingly vital role in meeting America's energy requirements.

3. Support of H.R. 10923 that would require government-financed cargo to be carried 100% on American Flag ships, provided freight rates are equal to those charged by foreign flags.

4. Support all legislative efforts to modernize and preserve the existing U. S. Public Health Service Hospitals and prevent efforts of the Department of Health, Education and Welfare to close these essential health care facilities.

Submitted by Frank Drozak, Vice President, Seafarers International Union of North America

Resolution adopted unanimously by the Executive Council of the California Labor Federation, AFL-CIO, March 8, 1972

ope 3-afl-cio (31)



THE
NEW ENGLAND
COUNCIL
STATLER OFFICE BUILDING
BOSTON, MASSACHUSETTS 02116
(AREA CODE 617) 542-2580

May 3, 1972

Honorable Russell B. Long
Chairman
Senate Subcommittee on Merchant Marine
United States House of Representatives
Washington, D. C.

Dear Mr. Chairman:

This letter is written on behalf of the New England Council ("NEC") to comment on S.3404, proposed legislation to extend the cargo preference law to the import of oil into the United States, so as to require that at least 50 percent of imports from foreign sources be carried in United States flag ships.

The NEC was organized in 1925 as a non-profit-non-partisan private organization to advance the development of the New England economy. Comprised today of approximately 2,000 members from business, industry, academic and financial interests in the region, the NEC has been for years actively seeking programs to assure adequate supplies of petroleum products to the region at reasonable costs. The NEC has urged the end of the mandatory oil import program as not serving the interests of national security and placing disproportionate costs on New England consumers.

The projected needs for petroleum in the next 30 years are enormous and even the strongest proponents of the mandatory program agree that it must be relaxed if adequate energy supplies are to be available to the United States.

It would be anomalous, indeed, if Congress were to impose mandatory flag restrictions on the importation of oil into the United States at the very time that more, not less, flexibility is needed to meet the energy crisis.

At a time when the United States necessarily will have to depend increasingly on offshore supplies of oil, it would not be sound national policy to invite retaliation by other maritime nations by imposing flag restrictions. Over a period of years, the United States has moved toward a more liberalized trade policy in the belief that freeing international trade from quota restrictions and other discriminatory practices would serve the objectives of both the national and international economic community. In the case of oil, free trade principles will serve the national security interest.

It should be emphasized that New England as a very high cost fuel area is faced with further substantial cost increases if the pending bill is enacted. Because importation is heaviest in the Northeastern part of the United States, these increased costs fall disproportionately on consumers in that region. At a time when the Federal government should pursue positive actions to assist the region in dealing with its economic difficulties, the pending proposal represents a step backward and one that will seriously hurt the region's economy.

Accordingly, we recommend that S.3404 not be enacted.

Sincerely yours,

A. Thomas Easley

A. Thomas Easley
Executive Vice President

HOGAN & HARTSON

FRANK J. HOGAN 1877-1944

NELSON T. HARTSON
EDMUND L. JONES
SEYMOUR S. MINTZ
LESTER COHEN
GEORGE E. MONK
EDWARD A. McDERMOTT
FREDERICK M. BRADLEY
FRANK F. ROBERSON
MERLE THORPE, JR.
LEE LOEVINGER
CORWIN R. LOCKWOOD
WILLIAM T. PLUMB, JR.
C. FRANK REIFSNYDER
GEORGE W. WISE
ROBERT K. EIFLER
EDGAR W. HOLTZ
J. BRUCE KELLISON
JOHN P. ARNESS
FRANCIS L. CASEY, JR.
E. BARRETT PRETTYMAN, JR.
ARNOLD C. JOHNSON
JOHN J. ROSS
HOWARD F. ROYCROFT
ROBERT H. KAPP
WILLIAM O. BITTMAN
SHERWIN J. MARKMAN
ROBERT J. ELLIOTT

JAY E. RICKS
ROBERT M. JEFFERS
DENNIS J. LEHR
ARTHUR J. ROTHKOPF
KEVIN P. CHARLES
JEROME N. SONOSKY
JAMES A. HOURIHAN
GERALD E. GILBERT
JOHN M. FERREN
CHARLES E. ALLEN
AUSTIN S. MITTLER
VINCENT H. COHEN
GARY L. CHRISTENSEN
ALFRED T. SPADA
BOB G. ODLE
RICHARD S. RODIN
ALFRED JOHN DOUGHERTY
PETER W. TREDICK
PETER F. ROUSSELOT
STUART PHILIP ROSS
RICHARD B. RUGE
ANTHONY S. HARRINGTON
JAMES J. ROSENHAUER
SARA-ANN DETERMAN
TIMOTHY J. BLOOMFIELD
ROBERT S. BENNETT
JOE CHARTOFF

MARVIN J. DIAMOND
HAROLD HIMMELMAN
DAVID J. HENSLER
GEORGE W. MILLER
ERIC H. SMITH
ALVIN ERNIN
JOSEPH M. HASSETT
RICHARD J. M. POULSON
RAYMOND E. VICKERY, JR.
DAVID A. LUDTKE
STANLEY J. MARCUSS
ERIC A. VON SALZEN
THEODORE L. PRESS
WILLIAM A. BRADFORD, JR.
DAVID B. LITTLE
CURTIS E. VON KANN
W. LANGHORNE KEITH
MICHAEL H. CARDOZO, II
ALAN GUNN
ALFRED F. DOUGHERTY
SAMUEL SHEPARD JONES, JR.
WILLIAM S. REYNER, JR.
JAMES N. BIERMAN
VINCENT J. ROCQUE
DOROTHY J. GLANCY
PHILIP C. LARSON

815 CONNECTICUT AVENUE
WASHINGTON, D. C. 20006

TELEPHONE (202) 298-5500

CABLE ADDRESS "HOGANDER WASHINGTON"

TELEX 89-2757

COUNSEL
CHARLES E. SHREVE

May 4, 1972

Re: CENSA - S. 3404

Dear Mr. Rouvelas:

We note in the testimony of Mr. O. William Moody, Jr. before the Subcommittee on Merchant Marine yesterday, May 3, 1972, in connection with the consideration of S. 3404, a grossly inaccurate and misleading reference to the position of the Committee of European National Shipowners' Associations with reference to the Merchant Marine Act of 1970. Mr. Moody stated "They (CENSA) testified against the Merchant Marine Act of 1970" and further that "The Committee of European National Shipowners, in opposing this legislation (S. 3404), added to its record of opposing every single piece of legislation that could be of assistance to the U.S. Merchant Marine. By their record it could be said that they are devoted to the destruction of our fleet as a competitor on the world's seas".

As the record of those earlier hearings will disclose, in its submission to the Subcommittee, on March 9, 1970, CENSA expressed, as it has in the past and since, its grave concerns about the extention of cargo preference but specifically stated:

> "CENSA wants it made clear it does not seek to tell the United States how to run its merchant marine and shipbuilding industries. European and Japanese shipowners understand and appreciate the aspirations of the United States to have a strong merchant marine and shipbuilding capacity. To oppose the development of a competitive U.S. merchant marine would be an admission of lack of faith in our professed goal." . . .

"Our concern, therefore, is not that the United States subsidizes its merchant marine, but rather the adverse effects on international shipping of other current methods of governmental support."

CENSA regrets this misrepresentation of its position and asks that its position as actually stated in its submissions to the Subcommittee be kept in mind in considering Mr. Moody's criticism.

Yours very truly,

Edward A. McDermott

American Maritime Association
SUITE 510 • 1612 K STREET, N. W. • WASHINGTON, D. C. 20006 • (202) 628-5562

May 16, 1972

Honorable William B. Spong, Jr.
Subcommittee on Merchant Marine
Committee on Commerce
United States Senate
5202 New Senate Office Building
Washington, D. C.

My dear Senator Spong:

During the hearings we were asked to comment on the testimony and correspondence from representatives of the Departments of State and Interior, respecting S. 3404, as well as the testimony of the American Petroleum Institute and the Committee for Flags of Necessity. We have considered them carefully, and are glad to reply.

1. The Department of State

Mr. Rein's present statement concerning the cost consequences of the bill is that "at least some" of the benefits of low-cost imports "must" at present be passed on to the consumer, and that a transfer of part of such benefits to American carriers would constitute a new cost also passed on to the consumer - or that at any rate "it would appear imprudent to expect" that it would not. He advances no proof or argument to sustain his conclusion. However, the Chairman of the Cabinet Task Force, to whose report the Secretary of State subscribed, was rather forceful on the point. Secretary Schultz, who is now Director of the Office of Management and Budget, wrote the Senate Judiciary Committee in 1970 concerning among other matters the impact of a tariff substituted for the import quota, which of course resembles any increase in import costs (The Petroleum Industry, Part 4, S.Res. 334, 91st Cong., 2d Sess., pp. 1788-89):

> At present, the import program quantitatively limits imports of No. 2 fuel oil, which during 1966-68 supplied only 3-7% of East Coast heating oil demand. (See Appendix L.) Hence, it is evident that the East Coast heating oil price

> is primarily determined not by the foreign heating oil price plus the cost of transportation but by the costs of domestic refining and transport. The circumstance that No. 2 fuel oil refined abroad generally can be delivered to the East Coast at less cost than domestically refined No. 2 oil mainly results not in a lowering of the domestic price but in unearned "rents" to the few historical importers now permitted to import No. 2 oil.
>
> Once it is acknowledged that under the present quota system the domestic price of No. 2 oil is independent of the delivered price of product imports, it follows that imposition of even a prohibitively high product tariff would have no effect on the long-run domestic price. That price would still be determined - as at present - by the costs of domestic refining plus transport. Any long-term price rise must stem either from an increase in these costs or from anticompetitive behavior by domestic refiners. Neither would be affected by adoption of a tariff, regardless of its level.

This statement, which also applies to crude oil and other nonresidual refined products, is fully consistent with our analysis before your Committee. The Commerce Department agrees with this analysis, as well. In a letter of April 5, 1972, addressed to the House Committee on Merchant Marine and Fisheries, the Acting Assistant Secretary of Commerce for Maritime Affairs, expressed the opinion that "the increased costs of utilizing U.S. flag tankers, will not, in all probability, be passed on to the ultimate consumer." He too points out that domestic costs determine cost to the consumer of imported oil. We attach a copy of Mr. Blackwell's letter which is germane to many other contentions of the opponents of your bill.

Mr. Rein mentions residual oil as a case where there is no ticket value to absorb increases in transportation cost. We agree of course. Unlimited imports of residuals ensure that they will sell in this country at world prices. For this reason we believe your bill excludes residuals in contradistinction to crude and other refined products for which the quota system is intended to protect domestic supply by preserving a structure above world prices. The Committee may perhaps consider amending the bill to make this exclusion explicit.

Mr. Rein lays stress on the need for "flexibility in transportation" in meeting political interruptions of petroleum supply. So far as this seems to imply that the nation will find

such flexibility in foreign-flag shipping, we invoke Secretary Blackwell's letter which says that on the contrary "an energy transportation capability which can be fully subject to the national interest is imperative if the nation is to preserve the option to shift from an embargoed source to an alternative producer." Mr. Blackwell makes clear that he means American ships. It is interesting that the Maritime Administration, which is the agency charged with executing shipping policy, cites exactly the same historical and current crises as Mr. Rein to justify an exactly opposite conclusion: assurance is lacking that foreign-flag vessels can be relied upon in future crises, and accordingly the United States must "secure ... the measure of independence it needs to compensate for the lack of such assurance." Impending steps mentioned by Mr. Rein, looking toward favoritism for national fleets by oil-producing countries would seem to accentuate, not mitigate, this requirement.

Mr. Rein's observations concerning the impact of increased transportation costs upon the oil industry's ability to expand will be dealt with later. But we must point out that his concern seems to be, not with the American industry, but with "the tremendous capital requirements facing the world's oil industry", which he estimates at $500 billion. The exact relation of an increase in American shipping costs to the power of the world oil industry to grow is not explained and seems remote; however, we note that Mr. Rein estimates the amount of the increase in shipping costs as $1 billion annually by 1985; this figure (which is to be contrasted with Secretary Blackwell's estimate of $25 million per annum) would be 0.002 of the capital Mr. Rein says is required.

2. The Department of the Interior

No representative of the Department testified before your Committee but we have had the opportunity to study a letter addressed by Assistant Secretary Dole to the House Committee on Merchant Marine and Fisheries, which we understand is also before your Committee. The views expressed in Mr. Dole's letter are somewhat more technical than those of the Department of State. Mr. Dole also says that an increased cost of transporting foreign oil to this country will result in increased prices to consumers.

So much of his reasoning as rests on the case of residual oil is necessarily beside the point, since residual is not subject to the Spong-Beall bill, as we have understood it. But he stretches the case to cover crude oil and refined products, to which we cannot agree it is applicable.

Apparently conceding that the cost of foreign crude has had no visible effect on crude prices in this country, Mr. Dole

now shifts the argument to an altogether different market: the refining industry, where as we have said a whole tier of new factors in the markets for the different products is at work.

His reason for believing that increased costs of crude would be passed along to the consumer of refined products is not precisely expounded but appears to be that cost savings on foreign oil are at least in part so passed along.

The analytical content of Mr. Dole's statement is not easy to follow because of its internally inconsistent formulation. He suggests that owing to the proportionately greater allocation of imported crude to smaller - and therefore presumably marginal - refiners, the quota system significantly reduces raw material costs "at the industry margin, increasing the likelihood that cost savings are passed on to the consumer."

But such a "likelihood" would certainly depend on the structure of the market, and particularly on the degree of competition prevailing in it. Yet without any discussion of the structure of the markets for refined products, Mr. Dole goes on to the purely conclusory statement that the "weighted average of the cost of marginal domestic crude and the marginal foreign crude" is "lower than the marginal cost of domestic crude alone and implies that at least some of the lower cost of imported crude must be passed along in the form of lower product prices."

The fundamental relation of marginal costs to prices is that under competitive conditions, given a demand, prices are influenced by the marginal cost of the marginal producer or seller. But Mr. Dole advances an ambiguous concept of "weighted average of the cost of marginal domestic crude and marginal foreign crude" to the refiner as a buyer. We cannot understand the meaning of this concept in the framework of Mr. Dole's discussion of marginal-pricing theory. He himself seems to sense the inconsistency, for in his very next paragraph he expressly discards the marginal-pricing approach, and rejects short-term profit maximization in favor of long-term profit maximization.

We are sure that upon reflection, Mr. Dole will see that he has not provided a basis, either in theory or in fact, for his bare conclusion (which he really phrases quite tentatively) that the benefit of low-cost imported oil is passed on to the consumer.

We should not, however, neglect to weigh the saving in raw material cost that would be represented by a weighted average mix of domestic and imported crude for the industry, and the magnitude of the increased cost from American transportation if it were actually transmissible.

Refinery quota allocations of crude oil for Districts I-IV

now total about 657,000 B/D, or 6.7% of total refinery inputs during the year ending September 1971, leaving 93.3% of such inputs to be satisfied from domestic sources or overland imports. With domestic crude prices at the well now averaging $3.48 bbl, and with the quota ticket price at about $1.00 bbl, the estimated landed cost of crude imports in Districts I-IV is $2.48 bbl. The weighted average cost of all refinery crude inputs can now be computed:

Domestic Crude Price		% of Domestic Crude		Cost Foreign Crude		% of Foreign Crude		Weighted Average Crude Cost
$3.48	x	.933	+	$2.48	x	.067	=	$3.413 bbl

If the transportation cost of crude imported by sea is increased by $0.11 bbl through the use of American tankers, the average crude cost becomes $3.420 bbl.

Obviously, the change of $0.007 bbl plays no significant role in determining prices of refined products. Even if the increase in transportation costs is doubled, the average cost of the inputs rises only by $0.015 bbl. Increases of such magnitude, even if transmissible in whole or in part, could not have any discernible impact on wholesale product prices which fluctuate far more widely:

Monthly Weighted Average of Three Main Refined Products [1]

East of California

Year	Yearly Average ($/bbl)	High ($/bbl)	Low ($/bbl)	Range ($/bbl)
1969	5.13	5.23	5.00	0.23
1970	5.21	5.52	5.04	0.48
1971	5.36	5.52	5.28	0.24

1. Gasoline, distillates, kerosene

Realistically, then, importance attaches to other factors operating in the refining industry, not to expected changes

in transportation cost of foreign crude.*

But we do not accept the theory that an increase in transportation costs, small though it may be, is automatically passed on to the consumer.

Is it not clear, as Secretary Schultz (himself a distinguished economist) and Secretary Blackwell have pointed out in the testimony cited above, that refiners acquire the imported oil in these cases for a price equal to the domestic price of oil and transportation? Whether they buy oil or tickets, whether they use their own oil or their own tickets, their cost (opportunity cost) remains precisely the same. For they pay the sum of (1) landed foreign price + (2) the ticket price (which is the difference between foreign landed cost and domestic landed price) = domestic price.

Although the transaction in his case nominally takes the form of an exchange for domestic oil, even the inland refiner pays the equivalent of domestic cost for the domestic oil for which he exchanges his quota ticket just as the coastal refiner does.

The sole difference is that the ticket seller derives his ticket from the government's grant and does not pay for it.

From this very fact it follows with certainty that he absorbs any increase in costs of foreign oil that diminishes the value of the ticket by reducing the spread from the domestic price. If the price of transportation rose, and with it that of landed foreign crude, while American oil remained steady, then the ticket would be worth less by the added cost of transportation. As Mr. Dole himself acknowledges, past increases or decreases in transportation cost - even when these were of great magnitude - have not been passed on to the consumer. It must follow then that the benefit of the low-cost foreign oil is in the nature of economic rent and retained by the quota holder or refiner.

Mr. Dole suggests (contrary in this respect to the American Petroleum Institute) that the industry's behavior is

---

* An extreme increase in imports to (say) 50% of the total crude would alter the proportions somewhat, the weighted average crude cost becoming $2.98 bbl and the American tanker impact 5-1/2¢ bbl; but the "savings" in crude would on this reasoning be so great, amounting to 37.8¢ bbl, that instead of an increase from tanker costs, there would have been a large net saving to the beneficiary - the ticket seller, as we believe, or to the ticket purchaser or the public to such indefinable degree as Mr. Dole contends that the saving "may be" passed on.

one of long-term rather than short-term profit maximization, and that the contention that past changes in transportation costs have not been reflected in consumer prices "does not support a conclusion that a sustained cost increase will not be passed on to consumers."

The principle of economic rent is not negated by the long-term: its very substance derives from the long term.

Mr. Dole points to a decline in real prices of refined products during import controls. It is not clear what this proves, beyond the bare fact that prices fluctuated over time. Simple inspection of price movements proves nothing when no causality is established, and when a host of other factors could much more probably have been responsible for price behavior. As for his 5-year comparison between the rate of return on investment for all manufacturing (12.5%) and petroleum (12.3%), whatever may be the significance of these data, it must be recognized that they do not reflect the special tax benefits available to the petroleum industry.

Mr. Dole is concerned that the reduction in ticket value will impair the industry's ability to expand its capacity in keeping with demand (with an implicit reference to defense considerations). Here the ticket value (quite apart from the quota system) is represented as one of the criteria for measuring the national security, which is thus made to depend in part on the vagaries of a fluctuating residual element.

Aside from being far-fetched, the argument is also contradictory to earlier assertions. One cannot argue that the oil industry should retain the whole of the quota to enhance its expansion potential and also argue that the quota value is not retained in the first place but is transferred to the consumer. The two arguments are not compatible.

But there is no reason to assume that the ticket value will be eroded, as we have already explained. On the contrary, expanding imports anticipated for the near future will multiply the aggregate value of the windfall even after increased American transportation cost.

Mr. Dole makes a number of other points on which we may make brief comment:

It is correct that the addition of Far East and Middle East oil to the cost of transportation would raise our estimate of the increase under American flag to 23¢ bbl, but we made clear that the most efficient use of American tonnage, as at

present configured, is in the shorter trades where it would be economically rational to employ them under the compulsion of market forces. Our figure of 11¢ remains therefore a proper estimate of the extra cost. It will, besides, not be necessary to remind the Committee that the Cabinet Task Force urged strong concentration on Western Hemisphere sources in the interests of national defense. However, if purely economic trends swing to the Middle East, enactment of the bill might well stimulate the construction of the large tankers most suitable for the long-voyage trades, once suitable port facilities are created. Secretary Blackwell may be cited in support of this analysis and of the correctness of our figures.

Finally, it is clearly not a necessary consequence of the Spong-Beall bill that refinery capacity should be exported. The Department supervising distribution of quotas can restrict them substantially to the importation of crude oil.

3. American Petroleum Institute

Many of the Institute's points are covered by our preceding discussion, including such matters as the residual problem, the outlook for foreign prices in relation to American prices, and the probable consequent trend in ticket values. We therefore mention here new points or those with a different emphasis.

The Institute recognizes that the coastal refiner who makes an exchange in order to acquire foreign oil pays "effective domestic cost" for the latter "since he pays a 'ticket value' to receive it". To admit this much is to admit our whole analysis. According to the Interior Department, of the total crude oil used by District I coastal refiners in 1971, 30% was of domestic origin and 49% foreign through tickets acquired from others; hence, on the Institute's own statement, practically 80% of their requirements was at "effective domestic cost". We have shown in our main paper that the case is no different with respect to the remaining 20%, which was oil imported under tickets originally granted to the coastal refiners themselves, or with respect to the inland refiners, who exchange (sell) their tickets for domestic oil: for both the total price, whether for domestic or foreign oil, includes the ticket value as well, and is therefore the domestic price.

Significantly, the Institute also concedes that "until this year" American oil prices have behaved independently of foreign prices (par. 7 of its appendix). This is an authoritative admission by the oil industry itself that we have correctly read the empirical data.

As to the forecast that this independent price behavior will cease in future because American wells are operating at virtual capacity and expanding demand will require foreign imports even when they grow more costly than domestic supplies, this can only come to pass if we ignore the practically unlimited indigenous resources that it would then become economic to develop. All agree that such resources exist and require only adequate incentive for their exploitation; the added incentive is usually considered to entail higher prices, which the Institute here predicts by an unusual road. This does not look like a declining trend of American prices, especially when considerations of defense counsel against undue dependence on potentially unreliable foreign sources.

The Institute's discussion of tanker costs as they affect ticket value recognizes the latter's place as the mechanism for mediating the relation of foreign and domestic prices, but does not take into account its character as economic rent, and overlooks the previous admission that foreign oil is already being sold to the ticket-buying refiners at full domestic cost, which remains the limit on supply salable at that price.

Accepting that certain marginal refiners rely on ticket sales as a significant part of their profits, a sympathetic solution to their problem already exists in principle, and the Institute implicitly predicts its necessary extension. The quota system is said to be biased in favor of these small refiners as a matter of policy. The Institute, like all the writers to whom we are replying, expects a large expansion of imports under quota (though deprecating anything like repeal of the system itself). This would readily allow graduation of the shares assigned to the small refiners to balance out any excess tanker cost from an American cargo preference. We have estimated the added cost of using American tankers under the Spong-Beall bill at about 11% of current ticket values.

The Institute predicts magnitudes of cost from the use of American ships ranging cumulatively from $5-$7.5 billion by 1980, and of $.85-$1.2 million per annum. Lacking the materials to analyze these figures, we content ourselves with noting that Secretary Blackwell estimates the cost at $14-$25 million per annum or cumulatively through 1980 $112-$200 million.

The Institute also deplores the loss of tanker competition if preference is adopted, with deleterious effects on domestic freight rates. The Committee for Flags of Necessity employs almost the same terms speaking of "escalating premium rates in

a captive market" restricted to U.S vessels. Of course, tne U.S. tanker market is not a captive market since: (1) there are no barriers to prevent any citizen from building or acquiring American vessels, and (2) S. 3404 would require the use of American vessels only so long as they are available at fair and reasonable rates. The Cost-of-Living Council on April 13 exempted the tanker industry from the Phase-Two price freeze on the ground that it is "subject to intense price competition." The present market conditions for American vessels sufficiently attest this truth.

4. Committee for Flags of Necessity.

The testimony of this group (as well as of the American Petroleum Institute) concerning the defense significance of foreign ships owned by Americans is decisively answered by Secretary Blackwell's letter to the House Merchant Marine and Fisheries Committee of April 5, previously cited. According to this letter the Maritime Administration does not agree that the availability of foreign-flag vessels is assured for the future, and considers that the independence of United States tanker transportation must be secured, especially because in emergencies shifts of source must be planned for; further, Secretary Blackwell says so-called effective-control resources are quantitatively inadequate for emergency or even for long-range commercial expectations; and their availability is, besides, rendered more doubtful by foreign manning, and by their operation in non-United States trades, in which they would still be needed in emergency.

On the economic question of whether consumer prices will be affected by using American ships, the group's substantive contention is that although domestic American crude prices did not respond to changes in foreign transportation cost during 1969-1971, the prices of refined products did.

Two sufficient observations can be made about any fancied correlation between the trend of refined prices and of foreign transportation:

1. The correlation, if it existed at all, would in any case be spurious, rather like the classical instance of pigs and pig iron. Where no causality exists, and when the movements of both variables are dominated by a third, namely, demand, no significance attaches to the resemblance.

2. Furthermore, after elimination of residuals from other major refined products, statistical correlation anyhow ceases to exist. The correlation between changes in (1) quarterly-average prices of three refined petroleum products and (2) tanker freight rates for all charters was measured for the period from the first quarter of 1969 to the first quarter of 1972. The value of the coefficient of determination corrected for degrees of freedom (which represents the proportion of the total variation that has been explained) is $r^2 = 0.10958$. This value reflects no significant correlation between the variables.

Mr. Loree compares the "permanent" cost increases from American transportation to an industry-wide wage increase in the automobile industry. He does not differentiate between average and marginal costs and consequently does not distinguish between a change in the position of the industry supply curve and a change in its shape below the relevant range. The former affects prices; the latter does not.

Finally, Mr. Loree grossly overstates the cost of the Spong-Beall bill by including residual oil, and assuming an irrational economic behavior by tanker users.

Please include a copy of this letter as part of the record of your hearings.

Sincerely yours,

Clifford Maslin

Executive Director
American Maritime Association

Attachment

THE ASSISTANT SECRETARY OF COMMERCE
Washington, D.C. 20230

APR 5 1972

Ralph E. Casey, Esquire
Chief Counsel
Committee on Merchant Marine and Fisheries
U. S. House of Representatives
Room 1334, Longworth House Office Building
Washington, D. C. 20515

Dear Mr. Casey:

Reference is made to your letter dated March 15, 1972, which forwarded a list of questions relating to H.R. 12324, a bill to amend the Cargo Preference Act of 1954 for certain purposes.

With the exception of Question No. 12, the questions appended to your letter are restated and responded to on the attached pages. The answer to Question No. 12 will be forwarded under separate cover within the next few days.

Sincerely,

Robert J. Blackwell

ROBERT J. BLACKWELL
Acting Asst. Secretary
for Maritime Affairs

RECEIVED
APR 5 1972
COMMITTEE ON
MERCHANT MARINE AND FISHERIES

Question No. 1

Would you submit for the record a list of foreign-flag vessels that are owned directly or beneficially by American companies, but not under so-called "Effective Control". For each such vessel would you give the following: (a) Owning company, and foreign operating subsidiary, if any, (b) DWT, (c) Type and age, (d) Registry, and (e) Crew nationality.

Answer

The attached schedule provides a listing of foreign-flag tankers owned by foreign affiliates of companies incorporated under the laws of the United States, but which are not under so-called "Effective Control", as of December 31, 1970. This schedule shows (1) the name of the foreign affiliate owner, (2) the name of the United States parent company, (3) the name of the ship, (4) the number of vessels, (5) the year built, (6) the deadweight tonnage and (7) the country of registry. The requested data as to the nationality of the crew are not available.

FOREIGN FLAG TANKERS OWNED BY FOREIGN AFFILIATES OF
UNITED STATES COMPANIES INCORPORATED UNDER THE LAWS OF THE UNITED STATES
BUT NOT UNDER SO-CALLED "EFFECTIVE CONTROL"
As of December 31, 1970

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Grand Total	169		10,292,789	
A/S Petrolea	1		18,500	
Standard Oil Co. of New Jersey				
ESSO FLAGEN		1968	18,500	Norway
Belgulf Tankers, S.A.	5		92,182	
Gulf Oil Corp.				
BELGULF ENTERPRISE		1962	18,651	Belgium
BELGULF GLORY		1958	18,200	Belgium
BELGULF PROGRESS		1959	18,000	Belgium
BELGULF STRENGTH		1962	18,687	Belgium
BELGULF UNION		1962	18,644	Belgium
Britama Tankers Ltd.	4		169,276	
Gulf Oil Corp.				
GULF BRITON		1961	42,869	United Kingdom
GULF DANE		1961	42,969	United Kingdom
GULF FINN		1963	40,500	United Kingdom
GULF SCOT		1961	42,938	United Kingdom

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Caribbean Oil & Transport, Inc.	1		35,555	
Standard Oil Co. of New Jersey				
IMPERIAL ST. LAWRENCE		1957	35,555	United Kingdom
Chevron Tankers (Nederland) N.V.	6		146,694	
Standard Oil Co. of California				
CHEVRON ARNHEM		1958	34,307	Netherlands
CHEVRON DELFZYL		1955	3,255	Netherlands
CHEVRON EINDHOVEN		1958	32,052	Netherlands
CHEVRON LEIDEN		1944	22,403	Netherlands
CHEVRON ROTTERDAM		1956	32,325	Netherlands
CHEVRON THE HAGUE		1945	22,352	Netherlands
Chevron Transport Corp.	2		423,000	
Standard Oil Co. of California				
JAMES E. O'BRIEN		1970	213,000	Liberia
N. J. HAYES		1970	210,000	Liberia
Compania de Petroleo Lago	2		21,810	
Standard Oil Co. of New Jersey				
ESSO LA GUAIRA		1954	10,905	Venezuela
ESSO MARGARITA		1954	10,905	Venezuela
Creole Petroleum Corp.	4		150,759	
Standard Oil Co. of New Jersey				
ESSO AMUAY		1960	35,417	Venezuela
ESSO CARACAS		1959	39,000	Venezuela
ESSO CARIPITO		1960	35,417	Venezuela
ESSO MARACAIBO		1959	40,925	Venezuela

78-255 O - 72 - 29

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Dansk Esso A/S	4		101,073	
Standard Oil Co. of New Jersey				
ESSO AALBORG		1959	34,070	Denmark
ESSO AARHUS		1956	27,600	Denmark
ESSO BALTICA		1967	5,333	Denmark
ESSO DANMARK		1960	34,070	Denmark
Esso International Co., Inc.	1		255,000	
Standard Oil Co. of New Jersey				
ESSO NEDERLAND		1970	255,000	Netherlands
Esso Marine (Belgium) S.A.	4		206,208	
Standard Oil Co. of New Jersey				
ESSO ANTWERP		1967	76,209	Belgium
ESSO BRUSSELS		1960	41,109	Belgium
ESSO GHENT		1959	41,353	Belgium
ESSO LIEGE		1960	47,537	Belgium
Esso O/Y, A/B	4		10,878	
Standard Oil Co. of New Jersey				
ESSO FENNIA		1960	3,617	Finland
ESSO FINLANDIA		1950	1,065	Finland
ESSO NORDICA		1964	4,039	Finland
ESSO SAIMAA		1970	2,157	Finland
Esso Petroleum Co., Ltd.	31		2,757,929	
Standard Oil Co. of New Jersey				
ESSO ANGLIA		1969	170,800	United Kingdom
ESSO BERNICIA		1968	199,000	United Kingdom
ESSO CAERNARVON		1962	1,550	United Kingdom
ESSO CAMBRIA		1969	255,000	United Kingdom
ESSO CARDIFF		1963	50,761	United Kingdom
ESSO EDINBURGH		1963	51,332	United Kingdom
ESSO FAWLEY		1967	18,087	United Kingdom

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Esso Petroleum Co., Ltd. (continued)				
Standard Oil Co. of New Jersey				
ESSO GLASGOW		1944	16,143	United Kingdom
ESSO HAMPSHIRE		1962	85,175	United Kingdom
ESSO HIBERNIA		1970	250,262	United Kingdom
ESSO IPSWICH		1960	1,570	United Kingdom
ESSO LAMBETH		1943	5,400	United Kingdom
ESSO LANCASHIRE		1962	85,002	United Kingdom
ESSO LINCOLN		1962	50,769	United Kingdom
ESSO LONDON		1964	94,512	United Kingdom
ESSO MERCIA		1968	166,820	United Kingdom
ESSO MILFORD HAVEN		1968	17,150	United Kingdom
ESSO NEWCASTLE		1963	51,306	United Kingdom
ESSO NORTHUMERIA		1969	253,000	United Kingdom
ESSO OXFORD		1953	28,175	United Kingdom
ESSO PEMBROKESHIRE		1961	84,717	United Kingdom
ESSO PORTSMOUTH		1959	39,889	United Kingdom
ESSO PRESTON		1956	2,790	United Kingdom
ESSO PURFLEET		1966	4,431	United Kingdom
ESSO SALISBURY		1957	38,094	United Kingdom
ESSO SCOTIA		1969	250,300	United Kingdom
ESSO ULIDIA		1970	250,500	United Kingdom
ESSO WARWICKSHIRE		1962	84,688	United Kingdom
ESSO WESTMINSTER		1954	28,232	United Kingdom
ESSO YORK		1955	28,233	United Kingdom
ESSO YORKSHIRE		1963	94,241	United Kingdom
Esso Rederi A/B	2		79,193	
Standard Oil Co. of New Jersey				
ESSO GOTHENBURG		1956	26,753	Sweden
ESSO STOCKHOLM		1961	52,440	Sweden

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Esso Standard Eastern Tankers, Ltd.	1		16,645	
Standard Oil Co. of New Jersey				
ESSO MACQUARIE		1953	16,645	Australia
Esso Standard Oil Co. (Uruguay)	1		49,802	
Standard Oil Co. of New Jersey				
ESSO URUGUAY		1958	49,802	Uruguay
Esso Standard Soc. Anon Francaise	6		361,755	
Standard Oil Co. of New Jersey				
ESSO ALSACE		1960	39,124	France
ESSO BOURGOGNE		1959	39,134	France
ESSO LORRAINE		1961	48,966	France
ESSO PARENTIS		1958	37,981	France
ESSO PARIS		1969	193,900	France
ESSO PORT JEROME		1947	2,650	France
Esso Tankschiff Reederei, G.m.b.H.	11		548,260	
Standard Oil Co. of New Jersey				
ESSO BAYERN		1964	90,600	Germany
ESSO BERLIN		1958	38,270	Germany
ESSO BREMEN		1959	50,900	Germany
ESSO DEUTSCHLAND		1963	94,560	Germany
ESSO ESSEN		1960	50,900	Germany
ESSO FRANKFURT		1955	28,000	Germany
ESSO HAMBURG		1955	27,850	Germany
ESSO KOLN		1961	50,640	Germany
ESSO MUNCHEN		1956	27,850	Germany
ESSO NURNBERG		1960	38,270	Germany
ESSO STUTTGART		1959	50,420	Germany
Esso Tankvaart Maats N.V.	1		94,640	
Standard Oil Co. of New Jersey				
ESSO DEN HAAG		1963	94,640	Netherlands

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Esso Tankvaart Nederlandse Antilles N.V.	3		536.073	
Standard Oil Co. of New Jersey				
PETROMAR MENDOZA		1960	36,169	Argentina
ESSO EUROPOORT		1970	249,952	Netherlands
ESSO NEDERLAND		1970	249,952	Netherlands
Esso Transport Co., Inc.	1		36.028	
Standard Oil Co. of New Jersey				
ESSO EL SALVADOR		1959	36,028	Panama
Esso Transport & Shipping Co., Inc.	1		50,500	
Standard Oil Co. of New Jersey				
ESSO BALBOA		1959	50,500	Panama

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Imperial Oil Ltd.	5		37,292	
Standard Oil Co. of New Jersey				
IMPERIAL ACADIA		1966	10,310	Canada
IMPERIAL BEDFORD		1969	13,980	Canada
IMPERIAL QUEBEC		1957	6,462	Canada
IMPERIAL SKEENA		1970	4,500	Canada
IMPERIAL VANCOUVER		1938	2,040	Canada
La Columbia Soc. Marit, per Azioni	7		418,596	
Standard Oil Co. of New Jersey				
ESSO AUGUSTA		1970	140,000	Italy
ESSO MILANO		1966	70,310	Italy
ESSO NAPOLI		1961	47,497	Italy
ESSO ROMA		1960	35,871	Italy
ESSO TORINO		1966	66,740	Italy
ESSO TRIESTE		1959	36,273	Italy
ESSO VENEZIA		1955	21,905	Italy
Maats, tot Financiering van Bedrijf-Spanden N.V.	4		159,688	
Standard Oil of California				
CALTEX NEDERLAND		1963	48,210	Netherlands
CHEVRON AMSTERDAM		1960	31,911	Netherlands
CHEVRON MADRID		1961	48,211	Netherlands
CHEVRON NAPLES		1961	31,356	Netherlands
Mobile Carriers, Ltd.	1		84,256	
Mobile Oil Corp.				
MOBIL LIBYA		1965	84,256	United Kingdom
Mobil Oil Co., Ltd.	1		1,740	
Mobil Oil Corp.				
VACUUM PIONEER		1953	1,740	United Kingdom

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Mobil Oil Francaise	3		239,181	
Mobil Oil Corp.				
ARAMIS		1963	102,366	France
ATHOS		1965	84,620	France
D'ARTAGNAN		1959	52,195	France
Mobil Oil Philippines, Inc.	1		1,350	
Mobil Oil Corp.				
MOBIL VISAYAS		1945	1,350	Philippines
Mobil Shipping Co., Ltd.	7		725,302	
Mobil Oil Corp.				
AUSTRALIAN PROGRESS		1960	13,950	Australia
MOBIL ASTRAL		1964	101,282	United Kingdom
MOBIL DAYLIGHT		1964	101,058	United Kingdom
MOBIL ENERGY		1962	54,345	United Kingdom
MOBIL PEGASUS		1969	210,000	United Kingdom
MOBIL PINNACLE		1970	211,660	United Kingdom
SYLVAN ARROW		1955	33,007	United Kingdom
Mobil Tankers Co. (Liberia) Ltd.	1		86,382	
Mobil Oil Corp.				
MOBIL JAPAN		1965	86,382	Liberia
Mobil Tankers, Ltd.	3		127,602	
Mobil Oil Corp.				
MOBIL ACME		1960	18,950	United Kingdom
MOBIL ENDURANCE		1962	54,345	United Kingdom
MOBIL ENTERPRISE		1961	54,307	United Kingdom
Nedgulf Tankers, N.V.	4		190,864	
Gulf Oil Corp.				
GULF HANSA		1962	50,120	Netherlands
GULF HOLLANDER		1962	45,114	Netherlands
GULF ITALIAN		1962	50,340	Netherlands
GULF SWEDE		1962	45,290	Netherlands

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Olympus Shipping & Trading Corp.	1		76,268	
Gulf Oil Corp.				
OLYMPUS		1961	76,268	Liberia
Regent Petroleum Tankship Co., Ltd.	1		49,329	
Standard Oil Co. of California				
TEXACO LIVERPOOL		1962	49,329	United Kingdom
Standard Oil Co. of British Columbia	1		1,500	
Standard Oil Co. of California				
STANDARD SERVICE		1923	1,500	Canada
Texaco (Norway) A/S	9		175,703	
Texaco, Inc.				
TEXACO BELGIUM		1965	20,500	Norway
TEXACO BOGOTA		1959	19,800	Norway
TEXACO BRASIL		1952	16,300	Norway
TEXACO BRITANNIA		1954	19,000	Norway
TEXACO NORGE		1962	21,200	Norway
TEXACO NUEVA GRANADA		1955	19,000	Norway
TEXACO OSLO		1960	19,713	Norway
TEXACO SKANDINAVIA		1962	21,200	Norway
TEXACO SOUTH AMERICA		1954	18,990	Norway
Texaco Overseas Tankship, Ltd.	22		1,653,639	
Standard Oil Co. of California				
TEXACO BAHRAIN		1953	17,500	United Kingdom
TEXACO ROME		1945	23,313	United Kingdom
TEXACO BOMBAY		1945	23,334	United Kingdom
TEXACO BRISBANE		1961	46,490	United Kingdom
TEXACO BRUSSELS		1968	24,624	United Kingdom

Foreign Affiliate United States Parent Company Name of Ship	Total No. Ships	Year Built	Deadweight Tons	Country of Registry
Texaco Overseas Tankship, Ltd. (continued)				
Standard Oil Co. of California				
TEXACO DENMARK		1970	254,500	United Kingdom
TEXACO EUROPE		1970	205,800	United Kingdom
TEXACO FRANKFURT		1969	205,780	United Kingdom
TEXACO GHENT		1968	22,200	United Kingdom
TEXACO GLOUCESTER		1959	18,764	United Kingdom
TEXACO GREENWICH		1962	54,850	United Kingdom
TEXACO HAMBURG		1969	206,000	United Kingdom
TEXACO MELBOURNE		1945	23,313	United Kingdom
TEXACO NORTH AMERICA		1969	208,700	United Kingdom
TEXACO PEMBROKE		1965	65,340	United Kingdom
TEXACO ROME		1945	23,313	United Kingdom
TEXACO ROTTERDAM		1968	23,682	United Kingdom
TEXACO SAIGON		1945	22,368	United Kingdom
TEXACO SOUTHAMPTON		1963	57,802	United Kingdom
TEXACO WELLINGTON		1944	22,367	United Kingdom
TEXACO WESTMINSTER		1968	100,600	United Kingdom
TEXACO WHITEGATE		1952	2,999	United Kingdom
Universe Tankships, Inc.	1		43,847	
Ludwig, D. K.				
COMMONWEALTH		1957	43,847	Liberia
World Wide Transport, Inc.	1		58,490	
Continental Oil Co.				
CONOCO LIBYA		1964	58,490	Liberia

Question No. 2

A number of witnesses have suggested that efforts to build up the U.S.-flag tanker fleet should be concentrated within the philosophy and framework of the Merchant Marine Act of 1970. What amendments, if any, to that Act would be required to stimulate the construction and operation of United States-flag tanker tonnage for the international oil trade at a level comparable to that which can reasonably be expected to follow enactment of H.R. 12324?

Answer

Basically, the policies of the Merchant Marine Act of 1970 provide the essential elements for the development of an American merchant marine sufficient to carry a substantial portion of our waterborne export and import commerce. The extent of change to the existing United States maritime program required to effect participation in oil imports to this country by tanker tonnage constructed in the United States and operated under the U. S. flag at a level comparable to that which would result from including such cargoes within the cargo preference laws cannot be established with any degree of precision.

During the period since enactment of this legislation, we have found that the restrictions imposed by Section 804 of the Act have created an impediment to the expansion of the U.S.-flag dry and liquid bulk cargo carrying fleet. The major oil companies and most of the independent tanker companies own, control and operate modern foreign-flag tanker tonnage, and for legitimate and cogent business reasons have made decisions to continue to maintain fleets registered under various foreign flags.

78-255 O - 72 - 30

Answer No. 2 cont'd.

The "grandfather" rights made available pursuant to Section 804(c) permitting continued ownership, charter or operation of foreign-flag vessels until April 15, 1990, have proven to be ineffective as a means of ameliorating the effect of this restriction. This is apparent from the fact that only one oil company and relatively few independents availed themselves of the provisions of the grandfather clause by filing information as to their foreign-flag affiliations within ninety days of enactment of P.L. 91-469.

Limitations on the extent to which vessels constructed with the aid of construction-differential subsidy and vessels eligible for operating-differential subsidy may engage in foreign-to-foreign commerce pursuant to Sections 905(a) and 601(a) of the Act respectively, also affect, to some extent, decisions on the part of the existing and potential tanker operators as to whether to participate in the new maritime program or build foreign and operate under foreign flag. Reduction in or the complete elimination of trading restrictions with respect to bulk vessels built and operated with Government assistance would undoubtedly offer a higher degree of attractiveness for U.S.-flag operations.

Any immediate significant increase in U. S.-flag participation in U. S. oil imports would require amendment of the subsidy program to enable existing U.S.-flag tankers to effectively compete with foreign-flag tankers. Although the 1970 Act permits the Secretary of Commerce to pay subsidy in such sums as are necessary to make the cost of operating American-flag bulk vessels competitive with the cost of operating similar vessels under the registry of a foreign country, there is no provision in the statute

Answer No. 2 cont'd.

for equalizing capital costs of American vessels that were not built with construction-differential subsidy with the lower foreign capital costs. In view of the substantially higher principal and interest payments required of owners of existing domestic tankers, such owners cannot effectively compete with their foreign counterparts even with the aid of operating-differential subsidy, particularly in the currently depressed condition of the world tanker market. //

Although the Maritime Administration is reviewing the Merchant Marine Act of 1970 to determine what amendments, if any, are required to make it a more effective vehicle for developing and maintaining a more modern and efficient U.S.-flag merchant fleet, we are not prepared at this time to offer any specific amendments to that Act.

Question No. 3

Do you believe that our national security requires that any portion of our energy imports be carried in United States-flag ships?

Question No. 4

On January 12, 1972, Assistant Secretary of the Interior, Hollis Dole, spoke at a Maritime Trades Department Luncheon. At that time he said, "There are certain things about a nation's life that are simply too important to be left to the control of others. One is ocean transportation. Another is energy. These and a handful of other truly strategic services constitute the irreducible minimum of capabilities which the nation must have under its own control at all times. . . . There is plenty of it (imported oil) and all we have to do as the critics of the oil import control program keep telling us is to let it come in freely and we can satisfy all our energy needs and have cheaper energy too. Well of course we could satisfy all our needs for ocean transport with foreign bottoms too, but it would be cheaper than to carry our trade in United States-flag ships. You don't buy that argument for reasons that are well known to you. The same reasons underlie our contention that we simply cannot allow ourselves to become beholden to any United States source for anything so critical to our economic growth and national security as energy." I would appreciate your views on these remarks by Secretary Dole.

Question No. 5

One of the witnesses at the hearings pointed out that it is not the availability of world oil but the severe transportation dislocations that have caused oil crises in the past. Do you feel that this is a valid position?

Question No. 10

The pending energy crisis would appear to thrust two fundamental responsibilities on the United States Government: first, the maintenance of successful politico-economic relationships with source nations, and, second, the assurance of secure and continued transport to our shores. All witnesses opposed to H.R. 12324 have downgraded the importance of the second factor, asserting that the current availability of foreign-flag vessels will be assured in the future. Do you agree?

Question No. 14

If we can rely on flags of necessity/convenience ships for oil imports, why have a subsidy program for any type ship? In other words, why have an American-flag fleet in the foreign trades?

Answers - 3, 4, 10 & 14

Questions 3, 4, 10 and 14 all bear on the general issue of energy resource imports and the national security implications of the system by which they are transported. Thus, I believe it would be best to respond to them as a single entity.

The object of the President's Maritime Program is the development and maintenance of a modern, efficient, and well-balanced merchant marine, including ships of all types. The Congress overwhelmingly supported the President's program and endorsed the objective to build up the inadequate U.S. foreign trade bulk fleet by providing essential construction and operating subsidies.

To date, the Maritime Administration has signed contracts for the construction of two 80,000 dwt. ore-bulk-oil carriers, three 38,300 dwt. tankers and has agreed in principle to subsidize the construction of one 225,000 dwt. tanker. Additional contracts expected to be awarded in the near future will call for the construction of six very large crude carriers (VLCC's) of 250,000 dwt. each and six liquefied natural gas carriers of 125,000 cubic meters each. Other proposals for building bulk carriers are undergoing review. Thus, a promising start has been made to correct this critical imbalance in our fleet.

This imbalance is particularly dangerous because the United States is facing an energy crisis. Government and industry oil

3. - 2, 4, 10, 14

experts are in general agreement that during the next 13 years the United States will have to import crude petroleum in such volumes that the equivalent of 520 tankers of 250,000 dwt. each will be required to maintain the supply line. In addition, by 1985, some 85 liquefied natural gas carriers of 125,000 cubic meters each will be required to transport the projected volume of LNG imports into the United States. Approximately one-half of these LNG's will be needed by 1980.

It is therefore apparent that our future industrial growth rate, which historically has been directly proportional to our energy usage, will be heavily dependent on foreign energy imports. Two major factors will affect the control of these imports: foreign supply, and transportation of the energy materials. While we cannot absolutely control the foreign supply of these imports, we can control their transportation.

We have made a start toward achieving a measure of this control. I feel confident that by 1976, the U.S. Merchant Marine will have a modest but impressive fleet of VLCC's and LNG's. However, to achieve the necessary full measure of control, we must insure that sufficient portions of our future energy imports are transported in these and subsequent U.S.-built U.S.-flag ships. My interpretation of the remarks of Assistant Secretary of the Interior, Hollis Dole, at the January 12, 1972 Maritime Trades Department Luncheon, leads me to believe that he and I are of one mind as to the need for this type of control.

4. - D, 4, 10, 14

The Maritime Administration does not agree with those witnesses opposed to H.R. 12324 who assert that the current availability of foreign-flag vessels will be assured in the future. It is the objective of the President's Maritime Program to secure for the United States the measure of independence it needs to compensate for the lack of such assurance.

Question 5 relates to the causes of oil crises in the past. The statement that past oil crises have been primarily caused by transportation dislocation and not by the lack of availability of world oil is essentially correct. Major oil crises have been precipitated by such phenomena as closure of the Suez Canal, labor disputes and armed conflict.

This situation has been greatly altered by the advent of Very Large Crude Carriers as the standard long haul bulk carrying vessel. Such vessels now permit Middle East petroleum to be carried around the Cape of Good Hope to Europe and the U. S. more economically than on smaller vessels transitting a reopened Suez Canal. Thus, the sudden closure of a reopened Suez Canal will no longer pose a major threat to worldwide petroleum distribution. The problem of potential labor disputes and possible armed conflicts, however, will still be with us for the foreseeable future.

An even greater hazard has been added to these potential transportation threats. This is the possibility of oil production itself being disrupted at the source. As the industrialized nations of the world come to rely more heavily upon petroleum

S. - 3 4, 10, 14

imports to meet energy requirements needed to maintain normal industrial production and general consumption, they will become more dependent upon the oil producing nations of the world. Much of the increased U. S. import requirement will be met by Eastern Hemisphere nations. The recent developments in Libya which threatened to disrupt vitally needed petroleum deliveries demonstrated the uncertainties connected with these sources. Thus, an energy transportation capability which can be fully subject to the national interest is imperative if the nation is to preserve the option to shift from an embargoed source to an alternative producer.

Question No. 6

Has the Maritime Administration conducted studies to determine what percentage of the landed cost of a barrel of imported oil represents transportation costs? Would you submit for the record what the total cost increase would be if United States-flag tankers were employed for the movement of this barrel of oil.

Answer

Existing U.S.-flag tanker tonnage because of size is primarily restricted to the carriage of oil on short hauls from the Caribbean and, to a lesser extent, intermediate hauls from North Africa and West Africa. Large size vessels are utilized for long hauls from the Persian Gulf and the Far East. The table below shows the percentage relationship of total transportation costs to total landed costs of a barrel of imported crude oil at the U.S. East Coast from near-by and intermediate foreign sources. Separate percentages are shown based on the use of chartered foreign-flag and chartered U.S.-flag vessels. This table also reflects the increase in the cost per barrel applicable to the use of U.S.-flag tankers.

Source	% of Chartered Foreign Flag Transportation Costs to Landed Cost	% of Chartered U.S. Flag Transportation Costs to Landed Cost	Cost/Barrel Increase of Using U.S. Flag Transportation
Caribbean	9%	12%	.12
North Africa	16%	26%	.45
West Africa	20%	28%	.41

78-255 1019

The higher transportation costs incurred in utilizing U.S. flag tonnage can be attributed to both higher capital costs and higher vessel operating costs, since existing U.S. flag tankers were constructed without the aid of construction-differential subsidy and are operated without benefit of operating-differential subsidy. Were these existing tankers to receive operating-differential subsidy, the cost/barrel increase would be reduced by approximately 50%, e.g., the differential in transportation costs from the Caribbean would be reduced from 12 cents per bbl. to about 6 cents per bbl.

Question No. 7

Why is the vast preponderance of United States tankers in lay-up owned by the so-called independent operators?

Answer

A number of interrelated factors have caused the currently depressed state of the tanker market to impact most severely on the independent operators. These factors relate first to a general reduction in U.S.-flag tanker employment opportunities, and specifically to the less favorable positions of the independents vis-a-vis the major oil company proprietary carriers.

The gradual increase over the past several years in import quotas for crude and refined products and the removal of limitations on the importation of residual fuel oils have greatly increased the percentage of imported oil to total U. S. consumption, which has had the effect of reducing the proportion of the domestic demand that is reserved for transportation to U.S.-flag tankers under the Jones Act. This situation has been further aggravated by the increased volume of domestic oil that is transported by pipeline and by the continued development of refinery capacity outside the territorial limits of the United States. This decline in the demand for U.S.-built tankers has adversely affected the U.S.-flag tanker industry, both independent and proprietary carriers alike.

The production, importation and distribution of petroleum products in the United States are controlled by large corporate interests. These companies normally provide sufficient in-house transportation capability, either by ownership or long-term charter, to satisfy their basic domestic

Answer No. 7 cont'd.

and foreign requirements. They utilize the market place to provide the surge capacity needed to meet peak and marginal demands. The independent carriers derive much of their employment in meeting these requirements, particularly in the Jones Act trades. For the reasons stated above, such employment opportunities have become drastically curtailed.

An additional element of competition to the independents results from the delays experienced in construction of the Alaska pipeline. Many of the major oil companies acquired additional U.S.-flag tankers by construction or long-term charter to participate in the expected movement of the North Slope oil. The failure of this movement to materialize as soon as anticipated has resulted in the availability of this tanker tonnage for alternative employment in competition with the independent carriers. In the past, when faced with declining demands in the commercial petroleum trades, the independents have turned to other markets, such as charter to the military and the carriage of preference grain cargoes. Both of these movements have also declined to a marked degree. The winding-down of the war in Southeast Asia and the reduction in our military installations overseas have greatly limited the demand for commercial tanker tonnage to supplement the nucleus fleet of the Military Sealift Command.

The above underlying forces more seriously affected the independents with the result that the preponderant number of tankers currently in lay-up are from this segment of the U. S. tanker fleet.

Question No. 8

The Committee has heard various estimates as to the total cost of implementing H.R. 12324. One witness estimated that it would cost from 5 to 7½ billion dollars by 1980. Would you submit for the record your estimate of the cost of implementing the bill and indicate how much of this cost would be passed on to consumers, if any, and how much represents a reduction in the value of oil import tickets.

Answer

Of current sources of foreign crude oil, the Caribbean area alone represents approximately 50%; North and West Africa account for an additional 21.5% of total imports. Together, these short and intermediate haul source areas currently provide over 70% of the total available crude oil cargoes. Assuming that existing U.S. tankers are employed exclusively in short haul Caribbean trade routes, the total cost of implementing this bill at current import levels is estimated at $14.2 million annually or approximately 12 cents per barrel. /Assuming that the U.S. fleet is employed in carrying petroleum imports from North and West Africa in addition to the Caribbean in direct proportion to the total movements from these areas, the total annual cost of implementing the bill would be about $24.7 million. This cost represents a weighted average increase of 21 cents per barrel for petroleum imports carried on U.S.-flag tankers. As these petroleum imports represent 50% of U.S. imports, the average effective increased cost will be approximately $0.10½ per barrel. /

In our opinion, the increased costs of utilizing U.S. flag tankers will not, in all probability, be passed on to the ultimate consumer. Essentially domestic costs and domestic crude prices determine cost to the consumer. With limitation on crude oil imports under the Mandatory Oil Import Program and the issuance of licenses or tickets, the price of crude oil in the U.S. is maintained at a level substantially higher than the landed cost of foreign crude. In practice, the tickets are traded to the coastal refiners at an exchange rate reflecting the difference between the selling price of domestic oil on the east coast and the landed cost of foreign oil on the east coast. The increased costs incurred in the use of U.S. flag tankers will, in effect, be charged against the exchange value of the tickets, which value, under all but extreme conditions, is considerably higher than the increased U.S. transportation costs on the short and intermediate hauls.

The vast increase in petroleum imports over the next decade will place a heavy reliance upon the Persian Gulf as the primary source of petroleum. This drastic shift in distribution patterns to more distant sources will necessitate the construction of large numbers of supertankers to carry this cargo. It is anticipated that under the Merchant Marine Act of 1970, U.S. flag supertankers built with the aid of construction-differential subsidy and operated with operating-differential subsidy, if required, will favorably compete with foreign flag supertankers without increase in transportation costs.

Question No. 9

Do you feel that enactment of H.R. 12324 would result in a significant improvement in our balance of payments?

Answer

Enactment of H. R. 12324 would result in a significant improvement in our balance of payments. If the bill as proposed were to become effective by January 1, 1973, the resulting balance of payments contribution during that year would be in excess of $300 million.

Question No. 11

Would you comment on the following statement:

"Given the realities of government assisted U. S. flag versus U. S. citizen owned foreign flag tankers in the international tanker trades of the world, it is doubtful whether many independent companies could afford to enter this market without government assurance that a percentage of total commercial oil imports would be reserved for U. S. flag tankers."

Answer

The "realities" of the international tanker trades are governed by the same economic considerations as any other industry. Provided reasonable parity in construction and operating costs, as afforded under the President's new maritime program, freedom from any undue restrictions associated with such government assistance and reasonable assurance of labor stability, we believe that the majority of American independent companies could compete effectively in the international oil trade without a reservation of cargo.

It is our opinion that with the incentives provided by construction-differential subsidy, operating-differential subsidy, capital construction funds, the current U. S. investment tax credit and more favorable financing terms under our Title XI insurance program than are obtainable in foreign shipbuilding centers, the U.S.-flag tanker fleet can be expanded to carry a substantial percentage of our oil import trade in furtherance of U. S. economic objectives and our national defense requirements.

Question No. 12

We understand that last year you or your staff approached the Office of Emergency Preparedness to discuss the matter of reserving various amounts of commercial oil imports for U.S.-flag tankers. What did you ask for; what reaction did you get; what is the present status of your effort?

Answer

In late August, 1971, Assistant Secretary Andrew E. Gibson met with General Lincoln of O.E.P. and they agreed to have their staffs explore possible means of making more cargo available to U.S. flag tankers.

The first staff meeting occurred in September and a discussion took place during which MarAd tentatively proposed that up to 50% of any increased quota of crude oil imported into USA be reserved for American flag vessels. It was explained that we hoped that the vessels involved in the carriage of this reserved cargo would be existing vessels receiving ODS and that there would be no additional cost to the consumer.

O.E.P. agreed that further exploration of the above proposal and/or any other similar proposal was in order. Since then, MarAd has studied a number of such proposals. The critical stumbling block is that even with ODS for existing tankers, these ships, because of their higher capital costs, could not be competitive with their foreign flag counterparts.

MarAd is now preparing a report for O.E.P. which will stress the national security considerations of a strong U.S. flag tanker fleet.

Question No. 13

In testimony before this Committee during the past year and in statements elsewhere you have tended to support the concept of bilateral shipping agreements where needed to insure a fair share of cargo for U.S.-flag vessels. Is not H.R. 12324 a logical and natural extension of this trend toward bilateralism? Do you distinguish in this regard between bulk and liner trades and, if so, what factors support a distinction?

Answer

Bilateral shipping agreements are not desirable in international ocean liner trade; they eliminate or restrict carriers' ability to compete for cargo by providing superior service. This not only affects third-flag lines, but also the ability of American lines to secure more than the Government-decreed percentage.

Since some sovereign nations with which we trade are determined to favor their own merchant marines, we, in the exercise of international comity, must either accept their policies or subject our carriers to discrimination. In my opinion we must therefore accept reasonable bilateral agreements. By taking this position we do have the leverage to ensure certain reasonable standards in bilateral agreements, such as sufficiency of service and the retention of some degree of competition.

I would take the same position in the bulk trades if the same issue were presented, but that is not now the case. We do not face legalized foreign discrimination against the carriage of our oil imports. Thus, the bilateralism we have experienced in the liner trades is not analogous. Should the situation change and, for example, the oil producing and exporting countries adopt a policy of flag discrimination in connection with the oil they export, we would have to reconsider our policy.

Question No. 15

In his prepared remarks, Mr. Philip J. Loree, Chairman, American Committee for Flags of Necessity, stated that: "Today only one out of every four tons of oil imported into the United States is transported by ships in this combined fleet." The combined fleet referred to included tankers under U.S. flag and tankers comprising the so-called Effective Control Tanker Fleet. Since virtually no imported oil is transported on U.S.-flag tankers, however, this statement should be read as referring essentially to the volume of imported oil transported on ships in the Effective Control Fleet. Mr. Loree's statement implies rather strongly that the overwhelming majority of ships in the Effective Control Fleet are not engaged in U.S. foreign trade but are rather engaged in transporting the petroleum needs of other user countries. Mr. Loree, and all other witnesses who testified in opposition to H.R. 12324, stated emphatically that in the event of national emergency the ships comprising the Effective Control Fleet would be made available to the United States. Mr. Loree stated: "In the event of a national emergency, this fleet could respond with a carrying capacity equal to more than one and a half times that required for U.S. oil imports and coastwise trade." In addition, Mr. Loree and other witnesses asserted that enactment of H.R. 12324 would cause serious international repercussions leading toward the adoption of measures by oil exporting countries and other importing countries of a similar nature.

It appears, however, that the sudden requisitioning of a substantial portion of the Effective Control Fleet by the United States during a national emergency would create even greater international repercussions, since these ships which are now employed in other world trades would no longer be available to transport the energy requirements of those countries. Would this not cause equally severe strains upon our relations with the industrialized nations of Western Europe and Japan? On balance, would it not be more sensible in the long run to substantially increase U.S. flag participation in the carriage of our essential petroleum imports prior to a national emergency, thus obviating the necessity of disrupting commerce throughout the world?

In essence, the fact that most Effective Control ships are not now operated in U.S. trades seems inconsistent with the theory that those same ships could readily be made available to the United States during a period of national emergency, and with the theory that measures taken during a period of relative world stability to increase U.S.-flag carriage of essential oil imports is less desirable from the viewpoint of international relations than a sudden requisitioning of tonnage scattered throughout the world during what might well be a worldwide politico-economic crisis.

Answer - NO. 12

Although the cargo carrying capacity of the Effective United States Control (EUSC) tanker fleet exceeds current U.S. tanker requirements, it is a misconception to think of this fleet as being capable of carrying all petroleum shipping requirements. Total U.S. imports of crude oil alone are projected to increase from a level of 650,000 barrels a day in 1970 to 8,780,000 barrels a day in 1980 and 13,940,000 barrels a day in 1985. In addition, the importation of refined and residual petroleum products will also increase, but at a less dramatic rate, going from 2,100,000 barrels a day in 1970 to 4,200,000 barrels a day in 1985. Furthermore, these volumes contemplate an eventual movement of approximately 2 million barrels a day of North Slope crude via a Trans-Alaskan Pipeline.

Clearly such a dramatic increase in the amount of petroleum being shipped into the country, much of it from distant Eastern Hemisphere sources, will create a demand for tanker capacity far in excess of even EUSC capability.

There is, however, an even more important obstacle to increased reliance upon EUSC resources in an emergency. Much of this capacity is employed in shipping vitally needed petroleum to Western Europe and Japan. A sudden requisitioning of a substantial portion of these tankers would seriously disrupt the economics of those countries. Requisitioning these vessels during a military contingency might also impair the military and productive effectiveness of certain NATO countries.

3. ANSWER NO. 15

Thus, in the long run the only means of assuring continued transportation of needed U.S. petroleum imports without posing a serious threat to world commerce would be for the United States to develop a U.S. flag fleet capable of carrying a substantial portion of future imports. This is a primary goal of the President's Maritime Program.

Question No. 16

The most recent Maritime Administration publication dealing with the Effective Control Fleet entitled Effective United States Control of Merchant Ships - A Statistical Analysis 1970 states: "With few exceptions, the EUSC tankers were staffed with foreign officers and crews. While such staffing results in lower operating costs compared with the wages paid to officers and crews on U.S.-flag tankers in peacetime, it can be a matter of concern in time of a national emergency, particularly if the crews are nationals of non-NATO countries and the ships are not in U.S. trades." (Page 12) Do you agree with this statement? If the position of the Maritime Administration has changed, please explain your current views.

Answer

The Maritime Administration continues to hold the view expressed in the quoted excerpt.

Question No. 17

Evidence presented to the Committee indicates that the overwhelming majority of tankers in the Effective Control Fleet are not regularly engaged in U.S. trades. No specific evidence has been presented indicating the predominant crew makeup of the ships. The report quoted above indicated that of 282 EUSC tankers, 147 are entirely staffed with citizens of NATO countries, 51 had entirely non-NATO crews, and 48 had mixed NATO and non-NATO crews. The crews of the remaining 36 tankers were indeterminate. Please advise the Committee whether the above breakdown is still relatively accurate, and furnish an exact breakdown of the crew makeup of the EUSC fleet, if such is available.

Answer

The referenced publication, "Effective United States Control of Merchant Ships -- A Statistical Analysis 1970" which reflected, to the extent available, the crew makeup of the EUSC fleet, in our opinion is still relatively accurate. The exact breakdown of the crew complements of the current EUSC fleet is not available.

Question No. 18

The above-cited report (Page 12) predicates the concept of Effective U. S. Control upon one or more of the following factors:

(1) Contractual agreement only with the Maritime Administration.

(2) Contractual agreement with the Maritime Administration and a U. S. parent company.

(3) Contractual agreement with/and granting of War Risk insurance by the Maritime Administration.

(4) War Risk insurance only.

(5) U. S. parent company control.

(6) No U. S. parent company, but at least 51% owned by U. S. citizens.

Please advise how many tankers in the Effective Control Fleet are covered under each of the above categories and the deadweight tonnage represented by these vessels. With respect to the first category, please explain what type of contractual agreement may exist with the Maritime Administration and furnish representative samples of such agreements. Please explain the difference, if any, between the contractual agreements that exist under categories 1, 2 and 3, and if there are differences, furnish representative samples of the various contracts. Please furnish representative samples of the War Risk insurance policies, and explain how the existence of such policies tends to enhance Effective U. S. Control. With respect to category 5, please explain how the Maritime Administration determines that a ship is under U. S. parent company control. What data is submitted by the parent company to support the position that it does exercise control? Does the Maritime Administration undertake to review

Question No. 18 cont'd.

independently the nature and extent of the parent company's control over its foreign subsidiary, particularly with reference to the domestic law of the nation in which the foreign subsidiary is incorporated?

Answer

The term "effective U. S. control" developed about the time of World War II as a designation for those ships which could reasonably be expected to be made available to the United States in time of national emergency. The Department of Defense has in the past issued lists of ships which it deems to be under effective U. S. control. The Department of Defense cautions in its designation of such ships that it should not be assumed that every ship listed would necessarily be made available in time of emergency, nor, alternatively, that no other foreign-flag ships would be offered to the United States for emergency employment.

A historical background for the "effective U. S. control" concept is contained in the report cited under question No. 17. In brief, the term refers to ships registered under Panamanian, Honduran or Liberian flags which could be brought under United States control in time of emergency. The reasons for considering ships of these flags to be available for effective U. S. control are the absence of operational control restriction in the laws of Panama, Honduras and Liberia which permits the exercise of U. S. control without restraint, the limited shipping requirements on the part of these nations for carriage of their own trade, the probability that they will remain neutral in the event of war, and precedents established in World War II when all American-owned ships under Panamanian and Honduran flags were assimilated into the United States war effort.

Answer No. 18 cont'd.

The principal criterion used by the Department of Defense in designating the ships deemed to be under "effective U. S. control" is the existence of contracts of commitment entered into between the owner and the Maritime Administration providing assurance of the availability of the vessels to the United States in time of emergency under Section 902 of the Merchant Marine Act, 1936, as amended. A substantial number of these contracts have involved a commitment on the part of the owner to make the vessels available to the Government in time of emergency as a consideration for finding the vessels eligible for interim war risk insurance.

As was noted in the list supplied in response to Question No. 1, there are a substantial number of tankers owned by foreign affiliates of United States companies incorporated under the laws of the United States and registered under the flags of foreign nations, principally United Kingdom, Belgium, Netherlands, Denmark, France, Germany, Italy and Norway. The foregoing are all NATO nations which in general have committed their merchant shipping to a common pool in the event of a NATO war, and, as we understand it, NATO policy would preclude our taking control of such U.S.-owned ships as may be under NATO flags. These countries are traditional maritime nations which have the facilities for operating a large fleet of ships, but also incorporate rigid restrictions in their maritime laws with respect to ownership, manning and control of ships flying their flags. In the foregoing respect they differ markedly from ships registered under the Pan-Hon-Lib flags and are not considered to be under effective U. S. control.

Answer No. 18 cont'd, - 2

The number and deadweight tonnage of tankers in each category of the EUSC fleet, as reported in the referenced analysis, during 1968 were as follows:

	Number	Deadweight Tonnage (000)
Contractual agreement only	46	1,209
Contractual agreement with the Maritime Administration and a U. S. parent company	8	307
Contractual agreement and War Risk Insurance	35	1,320
War Risk Insurance only	131	6,630
U. S. Parent company control	35	1,716
No U. S. Parent company but at least 51% of stock owned by U. S. citizens	27	1,040
Total	282	12,222

Basically, the Maritime Administration exercises control over such vessels under two statutory authorities. Under Sections 9 and 37 of the Shipping Act, 1916, as amended, the Maritime Administration exercises control over the sale, mortgage, lease, charter, transfer and delivery of vessels, whether documented or undocumented, which are owned in whole or in part by citizens of the United States, to foreign nationals, and/or the documentation of such vessels under foreign registry and flag. Also, under Title XII of the Merchant Marine Act, 1936, as amended, the Maritime Administration makes war risk insurance available to certain vessels under specified conditions.

Registry and Transfer pursuant to Sections 9 and 37 of the Shipping Act, 1916, as amended.

Section 9 of the 1916 Shipping Act provides that it shall be unlawful to sell, transfer, mortgage, lease, charter, or deliver to any person not a citizen of the United States, or place under foreign registry or flag, any vessel or any interest therein, owned in whole or in part by a citizen of the United States and documented under the laws of the

Answer No. 18 cont'd. - 3

United States, without the prior approval of the Maritime Administration. Section 37 of the Shipping Act is emergency legislation and is applicable only during a war or during any National Emergency declared by the President. Since December 16, 1950, the United States has been under a National Emergency declared by a proclamation of the President. Under these circumstances Section 37 requires the approval of the Maritime Administration to transfer or place under foreign registry a vessel owned in whole or in part by a citizen of the United States.

There are attached three basic forms of contract commitments applicable to actions taken under Sections 9 and 37 of the Shipping Act, 1916, as amended. These relate to (1) U. S. citizen-owned companies, (2) sale to a foreign corporation and (3) sale to a U. S.-controlled foreign corporation. It will be noted that the latter two contracts each contain an "Availability" clause making the vessel subject to sale or charter to the United States on the same terms and conditions upon which a ship owned by a U. S. citizen could be requisitioned for purchase or charter under Section 902 of the Merchant Marine Act, 1936. In each case this condition will have been met for those vessels transferred to the flag of a NATO country if the vessel upon request is made available to a NATO country. The Contract with a U. S. citizen-owned vessel does not contain the "Availability" clause since U. S. citizens are subject to the statutory authority in Section 902. All three of the contracts include a trading restriction against engaging in trade prohibited to United States flag vessels.

Answer No. 18 cont'd. - 4

As of December 31, 1971, there were 106 tankers totaling slightly over 3 million tons deadweight under contractual control pursuant to the above-cited provisions of the Shipping Act, 1916, as amended.

War Risk Insurance and Effective U. S. Control

Title XII of the Merchant Marine Act, 1936, as amended, authorizes the Secretary of Commerce, with the approval of the President, to provide insurance against loss or damage by war risks whenever it appears to the Secretary that such insurance adequate for the needs of the water-borne commerce of the United States cannot be obtained on reasonable terms and conditions from companies authorized to do an insurance business in a State of the United States. Of particular pertinence to the relationship of war risk insurance to effective U. S. control, the Maritime Administrator on November 23, 1959, found that vessels of Panamanian, Honduran and Liberian registry, when eligible under certain categories, are deemed to be engaged in services which are in the interest of the national defense of the United States. On April 8, 1960, war risk insurance was made available for such vessels provided they remain eligible in accordance with published regulations and also are made available to the United States Government upon request in the event of a national emergency, pursuant to an unqualified Contract of Commitment in the form prescribed by the Administration, both of these requirements to be warranted in the application, binder and insurance policy. The Administration requirements with respect to eligibility of a vessel and its owner for insurance, the warranties required of an applicant, the supporting documents and the conditions and limitations attendant to war risk insurance are spelled out in detail in General Order 75, 2d Revision a copy of which is attached.

Answer No. 18 cont'd. - 5

There are basically two categories of vessels eligible for war-risk insurance. One includes vessels enrolled under the laws of the United States and owned by a citizen of the United States. The other category includes foreign-flag vessels under Panamanian, Honduran or Liberian registry, 1,500 gross tons and over, self-propelled, and not over twenty years of age (unless authorized by the Maritime Administration), which are subject to an unqualified Contract of Commitment with the United States. Such vessels must be (1) owned by a U. S. corporation, or a foreign corporation in which a majority of the stock is owned and controlled by United States citizens, whether direct or through intervening corporations, foreign or domestic, or (2) owned by a foreign corporation which is not directly or beneficially owned by United States citizens or corporations, but which vessel is under a long-term charter or other long-term contract covering the use of the vessel on terms deemed by the Maritime Administration to subject the vessel to U. S. control in the event of emergency. In this case the charterer must demonstrate the same U. S. citizenship control as described above. Thus, there are two contract forms to meet the above conditions, i.e., one an Owner's Contract of Commitment for Pan-Hon-Lib vessels owned or controlled by U. S. citizens, and the other a Joint Contract of Commitment which both the owner and charterer must execute for vessels under long-term charter as described above. Both contracts, copies of which are appended, are identical in terms of the commitment to make the vessel available to the United States during any period in which vessels may be requisitioned under Section 902 of the Merchant Marine Act, 1936, as amended, i.e., whenever the President

Answer No. 18 cont'd.

shall proclaim that the security of the national defense makes it advisable or during any national emergency which may have been declared by proclamation of the President.

Applicants for war-risk insurance must submit a citizenship certificate along with warranties, among other things, that the insured vessel will comply with Department of Commerce Transportation Orders T-1 and T-2, as well as with certain restrictions as to chartering and employment of the vessel.

As of June 30, 1971, there were 198 tankers totaling approximately 12.6 million deadweight tons under War Risk Insurance Contracts of Commitment.

Included in this category are 25 tankers of about 1.1 million deadweight tons that are also subject to Maritime Administration contractual control under Sections 9 and 37 of the 1916 Shipping Act.

Question No. 19

There seems to be some confusion over the precise circumstances under which ships in the Effective Control Fleet may be made available to the United States. Some writers on the subject refer to periods of national emergency; others refer to times of war, or both. Please furnish the Maritime Administration's position with respect to the circumstances under which the United States may exercise control over the EUSC Fleet, and more specifically advise whether the United States may exercise any operational control over the EUSC Fleet in the absence of formal invocation of section 902 of the Merchant Marine Act of 1936.

Answer

In our opinion the United States may exercise operational control over the EUSC fleet only after the formal invocation of Section 902 of the Merchant Marine Act, 1936, as amended. The contracts of commitment provided in response to Question No. 18 above each cite Section 902 in the "Availability" clause.

INDEPENDENT U.S. TANKER OWNERS' COMMITTEE,
May 17, 1972.

Hon. WILLIAM B. SPONG,
Chairman, Committee on Commerce, New Senate Office Building, Washington, D.C.

DEAR SENATOR SPONG: During the recent hearings on S. 3404, Mr. Ran Hettena, a Director of the American Maritime Association, provided economic and other data showing that enactment of the bill would be in the national interest as well as the interest of the American merchant marine. He also submitted to the Committee a letter, refuting the contentions of certain witnesses before the Committee that enactment of the bill would result in higher prices to consumers.

This letter is to inform you that we, the undersigned members of the Independent U.S. Tanker Owners' Committee, fully support the views expressed in the aforementioned testimony and letter.

We thank you for your introduction of the bill and your conduct of hearings on it, and sincerely hope that the Committee will now favorably report the measure so that this legislation, of such great import to the American-flag tanker fleet, can move forward.

Very truly yours,

By Joseph Kahn, Chairman of Board, Seatrain Lines Inc.; Anton Heinrich, vice president of Penn Tanker Co.; Alfred Segal, vice president, American Trading Transportation Co., Inc.; John P. Coakley, president, United Tanker Corp.; Stanley S. Unger, vice president, Ogden Marine Inc.; David D.C. Mackenzie, vice presi-president, Ogden Marine Inc.; David D. C. Makenzie, vice presi-American Eagle Tanker Corp.; J. S. Someck, vice president, Vancor Steamship Corp.; J. J. Ervin, president, Mathiesen's Tanker Industries, Inc.

○