

DEPOSITORY

AUTHORIZE APPROPRIATIONS FOR FISCAL YEARS 1978
AND 1979 FOR CERTAIN MARITIME PROGRAMS

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HEARING

BEFORE THE

SUBCOMMITTEE ON
MERCHANT MARINE AND TOURISM

OF THE

COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION

UNITED STATES SENATE

NINETY-FIFTH CONGRESS

FIRST SESSION

ON

S. 1019

TO AUTHORIZE APPROPRIATIONS FOR THE FISCAL YEARS
1978 AND 1979 FOR CERTAIN MARITIME PROGRAMS OF THE
DEPARTMENT OF COMMERCE, AND FOR OTHER PURPOSES

APRIL 7, 1977

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1. The first part of the report deals with the general situation of the country and the progress of the war. It is a very interesting and well-written account of the events of the year.

2. The second part of the report deals with the financial situation of the country. It shows that the government has been able to maintain a budget surplus throughout the year, which is a very good sign.

3. The third part of the report deals with the social and economic conditions of the country. It shows that the war has had a very serious effect on the economy, but that the government has been able to take effective measures to deal with the situation.

4. The fourth part of the report deals with the foreign relations of the country. It shows that the government has been able to maintain friendly relations with all the major powers, which is a very important achievement.

5. The fifth part of the report deals with the military situation of the country. It shows that the army has been able to maintain its strength and that the navy has been able to protect the coastlines.

6. The sixth part of the report deals with the internal security of the country. It shows that the government has been able to maintain order and that there has been no serious threat to the stability of the country.

7. The seventh part of the report deals with the education and culture of the country. It shows that the government has been able to maintain the educational system and that there has been a steady increase in the number of students.

8. The eighth part of the report deals with the health and welfare of the population. It shows that the government has been able to take effective measures to deal with the health and welfare of the population.

9. The ninth part of the report deals with the foreign trade of the country. It shows that the government has been able to maintain a balance of trade and that there has been a steady increase in the value of exports.

10. The tenth part of the report deals with the general outlook for the future. It shows that the government has a very bright future and that the country is well-placed to meet the challenges of the future.

AUTHORIZE APPROPRIATIONS FOR FISCAL YEARS 1978 AND 1979 FOR CERTAIN MARITIME PROGRAMS

THURSDAY, APRIL 7, 1977

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
SUBCOMMITTEE ON MERCHANT MARINE AND TOURISM.

The subcommittee met at 9:40 a.m., in room 235, Russell Senate Office Building, Hon. Donald W. Riegle, Jr., presiding.

OPENING STATEMENT BY SENATOR RIEGLE

Senator RIEGLE. The subcommittee will come to order. This morning the Committee on Commerce, Science and Transportation will receive testimony on S. 1019, a bill to authorize appropriations of funds for the maritime programs of the Department of Commerce for fiscal years 1978 and 1979.

We have a very short lease on this room this morning. Nonetheless we are holding this hearing today because the Congressional Budget and Impoundment Control Act of 1974 requires that all legislation authorizing appropriations of money must be reported to the Senate by May 15.

Although this request legislation of the Secretary of Commerce authorizes funds for the Maritime Administration for both fiscal years 1978 and 1979, we will be considering only the fiscal year 1978 authorization today.

The 1978 total request is \$549,224,000.

[The bill follows:]

S. 1019

A BILL To authorize appropriations for the fiscal years 1978 and 1979 for certain maritime programs of the Department of Commerce, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Maritime Appropriation Authorization Act for Fiscal Years 1978 and 1979".

SEC. 2. Funds are 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 years 1978 and 1979, as follows:

(1) for 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 \$135,000,000 for fiscal year 1978, and such sums as may be necessary for fiscal year 1979;

(2) for payment of obligations incurred for operating-differential subsidy, not to exceed \$372,109,000 for fiscal year 1978, and such sums as may be necessary for fiscal year 1979;

(3) for expenses for research and development activities, not to exceed \$18,325,000 for fiscal year 1978, and such sums as may be necessary for fiscal year 1979;

Staff members assigned to the hearing: Richard Daschbach and Philip Grill.

(4) for reserve fleet expenses, not to exceed \$5,137,000 for fiscal year 1978, and such sums as may be necessary for fiscal year 1979;

(5) for maritime training at the Merchant Marine Academy at Kings Point, New York, not to exceed \$14,633,000 for fiscal year 1978, and such sums as may be necessary for fiscal year 1979; and

(6) for financial assistance to State marine schools, not to exceed \$4,020,000 for fiscal year 1978, and such sums as may be necessary for fiscal year 1979.

SEC. 3. There are authorized to be appropriated for the fiscal years 1978 and 1979, in addition to the amounts authorized by section 2 of this Act, such additional supplemental amounts for the activities for which appropriations are authorized under section 2 of this Act, as may be necessary for increases in salary, pay, retirement, or other employee benefits authorized by law, and for increased costs for public utilities, food service, and other expenses of the Merchant Marine Academy at Kings Point, New York.

Senator RIEGLE. Our first witness this morning will be the Senator from the State of Maine, Senator Hathaway. We are delighted that you are here, and I apologize for my delay in getting here, and hope it has not inconvenienced you.

Senator HATHAWAY. Not at all.

Senator RIEGLE. Please proceed.

STATEMENT OF HON. WILLIAM D. HATHAWAY, U.S. SENATOR FROM MAINE

Senator HATHAWAY. Thank you very much, Mr. Chairman. I appreciate the opportunity to testify before you.

On Tuesday Senator Muskie, who by the way could not be here this morning because he is tied up in a House-Senate conference, Senator Muskie and I introduced an amendment to the Maritime Act which would increase the cadet subsidy from the 1958 authorization of \$600 to \$1,200.

This would affect students of the State schools in Maine, Michigan, California, New York, Texas, and Massachusetts. This same change in the authorization has been offered to the Maritime Administration authorization bills in both the House and Senate in the past.

While I realize that the funds requested for the State academies by the Maritime Administration in the bill under consideration today, S. 1019, reflects only the \$600 cadet subsidy, I understand that the Maritime Administration does, in general, support such an increase.

As background, the State cadet subsidy is a subsistence allowance which is provided to students attending State maritime academy schools to help defray the cost of uniforms, textbooks, and other expenses. The underlying basis for it is that there is a strong Federal interest in maintaining a well-trained U.S. merchant marine, that students attending the maritime schools do not have the same opportunity for outside summer employment as other students because of the need to spend summer training time on board ship, and that they have special expenses such as uniforms which other students do not have to meet.

This rationale for the State school cadet subsidy is still operative today. However, the cadet subsidy has remained at \$600 since its enactment in 1958. The impact of inflation in the 19 years since that time is well known to all of us. The doubling of the subsidy is justified on the basis of inflationary increases alone.

In addition, this increase would give the maritime students eligible for the subsidy parity with the Naval ROTC students who are "contract" students in the ROTC program. These Naval Reserve students originally received a \$600 per year stipend, but this was increased to \$1,200 several years ago. It is time that the maritime students received an equal increase.

In regard to the relationship between the Naval ROTC students and the State maritime students, I would point out that there is a bill presently pending the House, H.R. 1091, which would authorize the Secretary of the Navy to appoint State academy students as midshipmen in the U.S. Naval Reserve.

Apparently at the present time the Secretary of the Navy does not have that authority and he has indicated his support for such a bill.

I would like to quote from a letter sent by the Department to Chairman Price of the House Armed Services Committee, which indicates the close relationship between our naval and merchant marine forces:

The dependence of the Navy on the U.S.-flag merchant marine for sealift support has become more pronounced in recent years. Increasingly, Navy fleet support ships are manned by civilians, a trend which emphasizes the importance of a maritime service manned by officers knowledgeable in communications, tactics, and those skills which will ensure effective combined operations with naval vessels. Enactment of this legislation (H.R. 1091) would provide the Secretary of the Navy with the authority to control this course of already trained manpower for augmentation in the Navy or for use in the merchant marine.

I think this excerpt clearly illustrates the importance of a stronger merchant marine to the country, and the need to ensure that the highest quality students are attracted to and able to attend our maritime institutions.

I have heard from the superintendent of the Maine Maritime Academy, Adm. Ted Rodgers, indicating his support for H.R. 1091, and I feel that this authority should be extended to State academy students as is now the case with graduates of the Federal Academy at Kings Point.

I would emphasize at this point, however, that the increase in the individual cadet subsidy itself in no way affects the number of students receiving the subsidy or entering our maritime institutions. There is presently a ceiling on the number of students in each freshman class who may receive the subsidy. The ceiling number is 673 and was set by the Maritime Administration in 1972 on the basis of pre-Vietnam manpower needs. The subsidies themselves are not transferable from one student to another, and are paid on a monthly pro rata basis and credited to the student's school accounts to cover the necessary expenses.

Although I do not presently have the precise figures of the number of students receiving the subsidy, the estimated cost per year of this amendment is approximately \$1.2 million. Since the subsidy is non-transferable and is prorated, based upon attendance, the figure is not precisely a matter of simple mathematics. My own figuring indicates that of the total \$4,020,000 requested by MarAd for the State schools in S. 1019, approximately \$1,170,000 is for the student subsidy at the \$600 rate. A doubling of the basic stipend would, of course, double this figure per year.

A bit of history on this increase in the cadet subsidy may be instructive. In 1975, the House adopted this increase in the cadet subsidy as an amendment to the maritime authorization bill; it was later deleted in conference because a report was due from the House Ad Hoc Committee on Maritime Education and Training. This report was subsequently printed, and recommended a doubling of the subsidy. However, a General Accounting Office report had then been requested on all of the maritime schools, Federal, State, and union.

Hence, an attempt last year to increase the subsidy was defeated on the grounds that it should be deferred pending the GAO report.

On the Senate side, a modified increase to \$900 per year was adopted as an amendment to the MarAd authorization bill, but was again deleted in conference pending the GAO report.

This history of the past efforts to enact the increase illustrates the problems which have occurred in discussion of the cadet stipend increase.

First, the argument has been made that this increase will just provide more trained individuals than there are jobs, and result in further unemployment in the maritime industry.

As pointed out above, this is just not so. The two issues are not related to one another; the number of students receiving the stipend is controlled by MarAd and is not affected by an increase in the individual amount.

Second, pending reports have been used as a reason for deferring action on the increase. Yet one report recommending the increase has already appeared, and the second report expected from the General Accounting Office is not expected to speak to this precise issue.

In any event, the GAO report is now expected to be available by the end of this month in the event that its findings are relevant to this point. I feel, however, that it is time to recognize the fact that this increase in the cadet subsidy is a question of simple equity to the student, accounting for the increase in costs since 1958. By insuring that realistic financial support is available to these State maritime students, the quality of the education and of the students able to attend State maritime schools will be enhanced, with the long-term benefit of upgrading the quality of our merchant marine forces.

I would recommend, then, that this increase in the cadet stipend be adopted as an amendment to the Maritime Administration authorization bill being considered today, and am hopeful that the subcommittee and committee will adopt such an increase this year.

Thank you very much, Mr. Chairman. This turns out to be a labor of love, since I served on the Merchant Marine Committee in the House and the stipend, as I mentioned before, has been \$600 since 1958. Though many of us have made an effort to increase it over the years, it still stays at \$600, and it seems to me totally unwarranted on the basis of inflation alone.

In fact, it should go up a lot more than just the \$600.

Senator RIEGLE. I appreciate your statement and the time and consideration, personal consideration, you have given to it.

Have you gotten any sense for what the GAO report may show?

Senator HATHAWAY. No; I don't at this juncture. There have been no leaks.

Senator RIEGLE. Well, I certainly support the rationale you have expressed here.

I think if we are going to have a subsidy, it ought to keep some kind of pace with the increases in the cost of living, plus, I appreciate your argument that there ought to be some comparability between the maritime students and the ROTC students.

But let me ask you. Should we be providing a subsidy at all?

I understand that there are some extraordinary costs, and if these students are going aboard ships in the summer time they can't find summer jobs and that works a hardship. I am wondering if this training is not desirable enough in itself. Is it really necessary as an inducement, or if there wouldn't be more qualified applicants waiting to get in anyway, who would be able to finance it on their own.

Senator HATHAWAY. Well, I can't really answer the question of whether there would be or not. I think from the experience I have with the Maine Maritime Academy, most of the students who go there are pretty hard pressed and they can certainly use the extra \$600.

I think it is in the national interest to make this token subsidy, because they do serve in the Coast Guard and they do serve in our merchant marine, and they do serve as Reserves for the Navy. It is certainly a very small amount of money relative to the great benefit that we will get from having them in.

To be sure many of them do not stay in the service for more than 1 year or 2 years. I think the record of the Maine Maritime Academy is probably better than most. But we make a tremendous investment in the cadets who go to West Point and Annapolis, and the Air Force, and we don't require them to stay in the service for their life time, they can get out after a short period of time.

Senator RIEGLE. Is there some requirement that these cadets spend some time in military service after they graduate, do you know?

Senator HATHAWAY. No; I don't believe there is any. We held extensive hearings in the House on that point, we tried to work out some agreement. Maybe now that the voting age has been lowered—one of the arguments that was made then was you couldn't hold them to a contract because they were under 21 years of age.

Maybe now with the age of responsibility in many States being lowered to 18, so they are not considered minors anymore, there might be a possibility of entering into a contract.

Senator RIEGLE. Not to belabor the point, but when I think about how many people are seeking one kind of college level training or another, all of whom are hard-pressed financially, and all of whom would like help, stipends of one sort or another, I question how we justify differentiating this group from others. Why is it in fact in the national interest to do this?

I would feel more comfortable about it if there was some obligation of national service.

But in any event, I think your logic is fair, if we are going to have a stipend at all, I think it should be adjusted. So I appreciate what you have said, and certainly am sympathetic with it.

Senator HATHAWAY. There is no clear-cut obligation that they will spend so many years in service. But I think we get enough of them to spend time in the merchant marine and in the Reserve and the Coast Guard that it is worth the investment.

You can't really do it on a per student basis, but the overall cost is worth it in the long run to maintain these academies.

Evidently the Navy, as the statement from the Secretary of the Navy, indicates does consider it a worthwhile investment. They do learn enough there to become Reserve officers in the Navy.

Senator RIEGLE. Well, I appreciate your statement.

Senator Inouye, Senator Hathaway has made his statement, and I have asked some questions with respect to it.

Do you have any questions at this time?

Senator INOUE. No.

Senator RIEGLE. We appreciate your coming.

Senator HATHAWAY. Thank you.

Senator RIEGLE. Our next witness is Mr. Howard Casey, Deputy Assistant Secretary for Maritime Affairs, Department of Commerce.

The subcommittee welcomes you. We have your statement. We will insert it in the record, it will be helpful to us if you will summarize it, rather than read it.

STATEMENT OF HOWARD F. CASEY, DEPUTY ASSISTANT SECRETARY FOR MARITIME AFFAIRS, DEPARTMENT OF COMMERCE

Mr. CASEY. I had intended to ask your permission to do so, sir.

Senator RIEGLE. Fine.

Mr. CASEY. I am Howard F. Casey, Deputy Assistant Secretary for Maritime Affairs. Mr. Chairman, and members of the committee: I am pleased to appear before this committee today. I do have a rather lengthy statement to submit for the record and I will, as you suggest, present a condensation of that statement in my oral testimony.

My testimony today supports the Maritime Administration request for appropriations authority for fiscal year 1978. The Maritime Administration requests a total of \$549,224,000 in appropriations authority for fiscal year 1978.

This request is an increase of \$101,183,000 over fiscal year 1977 authority and consists of the following:

For ship construction, \$135 million. This amount, together with \$98 million projected to be available in 1978 from existing funds will provide total program funding of \$233 million in support of competitive U.S. shipbuilding.

For research and development activities, \$18,325,000. This amount will continue to support the practical application of innovations and new technology to U.S. shipbuilding and ship operations.

For support of the National Defense Reserve Fleet, \$5,137,000; \$14,633,000 for the Merchant Marine Academy; and \$4,020,000 for State marine schools.

The requested legislation includes the President's proposed amendments to the program presented in the budget transmitted to the Congress in January. The original January budget reflected restraints on funding for ship construction and operating differential subsidies pending the completion of a major review of the basis of Federal support to the maritime industry. There was also a moratorium on renewal of long-term operating differential subsidy contracts pending completion of the study. These restraints have been removed in the amended budget.

A strong, competitive, and productive American merchant marine and shipbuilding industry is necessary to the national security of our Nation as well as to the support of our national and international trade. The appropriations authority requested for Maritime Administration programs in 1978 will continue Federal support to maintain these industries and to increase their competitiveness.

I would like to turn to the specific authorization requests for 1978.

The appropriation authority requested for 1978 for the 1978 ship construction program is \$135 million.

Current projections indicate that construction differential subsidy levels of \$264,811,000 in 1977 and \$233 million in 1978 will be needed to support the demand for new ships and ship conversions. Funds available in 1977 will provide for the total 1977 program and will provide \$98 million applicable to the 1978 program. The requested appropriation level is needed to complete the funding of the 1978 program. Subsidized construction in 1978 is projected for seven ships, including three liquefied natural gas carriers, one barge carrier (LASH), one containership, and two breakbulk containerships.

The liquefied natural gas carriers in the 1978 program are expected to be ordered in connection with a liquefied natural gas project now under consideration by the FPC. FPC hearings are complete and approval is expected before the end of fiscal year 1977. The barge carrier represents the fourth ship in a replacement obligation of an operator under an operating differential subsidy agreement. The first three ships in this project are expected to be contracted for in 1977. The containership and the breakbulk containership projects also represent replacement obligations under existing ODS agreements.

The appropriation authorization requested for operating differential subsidies is \$372,109,000.

Although \$403,721,000 was authorized for the 1977 program, only \$388 million was appropriated. This change was effected by the Appropriations Subcommittee based on the high level of idle ship years which occurred during 1976 and on the projection that idle ship years would continue to be slightly higher than projected during 1977.

Subsidized U.S.-flagship operations planned for 1978 include 4.6 ship years for passenger and passenger-combo ships, 163.7 ship years for general cargo ships, and 34.1 ship years for bulk ships, including 13.3 ship years for the carriage of U.S.S.R. purchases of grain during the year. The 1978 purchases are estimated at a total of 6 million metric tons, the minimum purchase set forth in the current U.S.-U.S.S.R. Grain Purchase Agreement.

The requested authority reflects a decrease of 10.3 ship years and \$15,891,000 from 1977 levels. This is primarily the result of the reduction in ship years needed to carry the U.S. share of 1978 Soviet grain purchases and the termination of subsidy for two passenger ships at the end of their 25-year economic lives. U.S. flagships are projected to carry a total of 3.9 million metric tons in the U.S.-Soviet grain trade during 1977. This total is based on the one-third U.S. share of 1977 Soviet purchases of 8 million metric tons, plus 1.2 million metric tons due U.S. flagships from previous purchases.

In 1978, U.S. flagships will carry the one-third U.S. share of Soviet purchases projected at 6 million metric tons. This reduced level of U.S.-flag carriage results in a reduction of \$19,177,000 from 1977 fund-

ing levels. The two Pacific Far East Line passenger ships, SS *Mari-rosa* and SS *Monterey*, will reach the end of their 25-year economic lives during fiscal year 1978. Under section 605(b) of the Merchant Marine Act of 1970, these ships will no longer be eligible to receive operating subsidy. The reduction from 1977 levels is \$7,790,000.

Other offsetting factors reflected in the 1978 authorization request are: (1) the escalation of U.S. and foreign operating costs over 1977 costs which results in an increase in subsidy funds of \$8,782,000; (2) the annualization in 1978 of bulk ships and general cargo ships entering the fleet during 1977, which results in an increase of \$3,300,000; and (3) the reduction in balances due for payment of prior year subsidy obligations which results in a decrease of \$1,006,000.

Appropriation authority requested for research and development in 1978 totals \$18,325,000. This represents a decrease of \$175,000 from the appropriation enacted for 1977.

The 1978 funding level will permit the continuation of the 1977 program at approximately the same level with some adjustments for individual projects as they proceed toward implementation or completion.

In 1978, the competitive nuclear ship program and the ship operations information system project will be phased out. Increased emphasis will be directed to shipboard automation, the ship operations research and simulation facility (CAORF), and analysis of advanced ship systems including design work on an emergency mobilization ship.

The appropriation authority requested for National Defense Reserve Fleet expense totals \$5,137,000.

The increase of \$577,000 over 1977 in this program results from three primary changes: Budgetary integration of the ship transfer activity into this program; higher Reserve fleet operating costs due to increased costs of personnel, supplies, utilities, and repair and maintenance for the fleet's service craft; and implementation of the joint Maritime Administration-Navy program to improve the reactivation response time for selected ships in the Reserve fleet, the designated ships to form a Ready Reserve Fleet.

The 1978 appropriation authority requested for the Merchant Marine Academy is \$14,633,000.

This represents an increase of \$1,591,000 over the level of funds appropriated for this program in 1977.

The remaining increase of \$838,000 is almost totally associated with the modernization program.

The principal project in the 1978 modernization program, will be the expansion and renovation of Fulton Hall. This building houses the Department of Engineering and the Department of Mathematics and Science, and contains the majority of the Academy's laboratories. Phase I of this project, for which funding is requested in this budget, will provide for the addition of a new wing to the existing building. The new wing will house 10 laboratories and provide additional classroom and office space.

Funding for phase II will be requested in 1979 to renovate the existing building, and phase III, planned for 1980 funding, will provide the furnishings required to complete the project.

The question of introducing charges for tuition, room, and board at the Academy is still under consideration. A proposal to effect these

charges is included in the 1978 budget. However, the proposal is still under review in the executive branch.

Appropriation authority requested for State marine schools in 1978 totals \$4,020,000.

This is an increase of \$279,000 over the funds appropriated for this program in 1977, and continues the 1977 program with additional funds for increased costs of maintenance and repair of schoolships.

Mr. Chairman, this completes my prepared statement. I will be pleased to address any questions that you or the other members of the subcommittee may have.

Senator RIEGLE. I appreciate your testimony. I do have some questions. One relates to the Merchant Marine Academy.

You are asking for a little over \$14.5 million, and you are upgrading the facility. I gather that that is a major program. Other moneys have been used to steadily upgrade this place.

Wouldn't we be as well off to move away from that concept and instead concentrate on the State schools.

In other words, rather than have one basic facility in one location, go to the State marine schools and perhaps even have a larger number of them.

What is your thought about that? I know your reflex is probably to defend it, but let me ask you to think beyond your reflex for a minute.

Mr. CASEY. I think, Mr. Chairman, that having a Federal Academy is a significant item in the national interest and it does set the pace for maritime training. We, the Federal Government, have complete control of the curriculum and the activities of that Academy, which we do not have in the State schools.

You are absolutely correct, as far as cost is concerned, the cost per student from the Federal Government's standpoint at least is considerably less for the State schools.

Senator RIEGLE. What would be your estimate?

Mr. CASEY. The actual cost of educating a student at the State schools is about the same. It amounts to about \$37,000 over the 4-year curriculum.

However, for the State schools the Federal portion last year amounted to about 23 percent. It has varied from 17 percent to 23 percent over the last several years.

Senator RIEGLE. Who put up the difference? Is it the States themselves, or the students?

Mr. CASEY. A number of sources. The State puts up a substantial amount from appropriated State moneys. The students are charged tuition. They do have endowments in most of the schools that provide additional funding.

Of course in the Federal school, 100 percent of the cost is borne by the Federal Government. So, as I say, the Federal control over the Federal Academy is substantially greater than over the State schools.

Senator RIEGLE. Is there an obligation to the Federal Government from the students who graduate from the Merchant Marine Academy?

Mr. CASEY. At the present time they have no service obligation. We are contemplating legislation which would impose a service obligation on the graduates of Kings Point.

Senator RIEGLE. But it is a fully subsidized operation.

Mr. CASEY. Yes. Of course he pays his own miscellaneous expenses. He does get a stipend for books and uniforms and so forth. I am sure there is some cost to the student.

Senator RIEGLE. But room and board, the major costs, are Government-provided?

Mr. CASEY. Yes, sir.

Senator RIEGLE. So what you are saying is that the Federal cost for 4 years is \$37,000, is that an accurate figure?

Mr. CASEY. Of the \$14,633,000 that we are asking for this year, \$4 million is for modernization, which is a capital cost. The amount for the actual operations of the Academy is about \$10 million or \$10.5 million.

Senator RIEGLE. How about the State schools? Do you provide money for their modernization, or are they responsible for that themselves?

Mr. CASEY. They cover that themselves. The only thing we provide, Mr. Chairman, is the scholarship, the training ship. We maintain that ship.

Senator RIEGLE. I visited the school in Michigan and I have seen that facility. I would prefer to see us spend money to upgrade these State schools as I would see us upgrade one central facility. But that is my own thought.

For the record you state that it costs about \$37,000 in Federal Government out-of-pocket cost, to put a cadet through 4 years at the Merchant Marine Academy?

Mr. CASEY. I believe that is the current figure.

Senator RIEGLE. That covers all costs, all of the overhead, everything?

Mr. CASEY. Yes, sir. Spread over the 4 years, that covers the costs.

Senator RIEGLE. So about \$10,000 a year to provide the education, facilities, food, lodging, everything?

Mr. CASEY. Yes, sir.

Senator RIEGLE. I would be surprised if that is the figure.

Mr. CASEY. Of course there has been a study recently by the GAO which compared the cost of educating a student at Kings Point with costs at the other service academies, and Kings Point was by far the low one. The Air Force Academy and the Naval Academy were up in the neighborhood of \$60,000 to \$80,000 per student. But our figure was to the best of my knowledge \$37,000.

Senator Riegle. Where does the evaluation stand in terms of the possibility of requiring some period of Federal service after receiving this \$37,000 education?

Mr. CASEY. As I say, within the agency we are currently preparing legislation which would impose a service obligation.

Senator RIEGLE. In other words, it is your position that there ought to be such an obligation?

Mr. CASEY. Yes. As a matter of fact there is an organization, ACTA, which is a part of the alumni association of the Kings Point Academy, and they advocate, as I understand it, such a service obligation.

Senator RIEGLE. What do you envision? Two years, or more?

Mr. CASEY. I would think more like 3 to 5 years. Probably 5.

Senator RIEGLE. I can see a big difference between graduates of the State schools—as you heard, Senator Hathaway advocated an increase

in the annual stipend, which is only \$600 a year. Of course there is some built-in help in terms of financing these things that tend to become kind of an indirect subsidy for those students.

But I can see a real distinction between what I think ought to be the obligation of the cadets that get this 4-year package, versus those at the State schools who basically have to contribute more money themselves.

Mr. CASEY. I would agree with that observation.

Senator RIEGLE. When are we going to get that recommendation for legislation?

Mr. CASEY. I would think within a matter of weeks. Of course we have to run it through the normal legislative process in the administration.

Senator RIEGLE. It has just been pointed out to me, and I didn't know this, but it is an ironic note here, that one of the alumni of Kings Point is apparently now the head of the U.S. operations of the Soviet Union commercial fleet. Is that right?

Mr. CASEY. That is Mr. Novacek, and he is the President of MORAM, which is the agency or organization which handles Soviet ships in the United States; yes.

Senator RIEGLE. So we trained that man. The Russians are getting a free ride on our training, you could say. The question in my mind is how much money we ought to be sinking into operating that facility.

Mr. CASEY. I might say in that regard, Mr. Chairman, that that facility was built in the early 1940's, and it had very little maintenance over the course of the 30 years intervening. It has only been in the last few years that we have had appropriations for modernization.

Senator RIEGLE. But this isn't maintenance. You are talking about building a whole new wing here. You are talking about building 10 laboratories, additional classrooms.

Are you going to increase the size of the student body?

Mr. CASEY. No, sir. The student body has stayed about the same. We have been graduating about 200 students from Kings Point, and that has been for many many years.

Senator RIEGLE. How many attend Kings Point? About a thousand?

Mr. CASEY. About 1,000 students would be enrolled; 200 or more of them are out at sea at any time. They have to go for a year's sea duty at 6-month terms, so there are 750 or 800 resident in the Academy at any one time.

Senator RIEGLE. You are not increasing the student body, just adding 10 new laboratories and additional classrooms and office space? Normally with an expansion of that size, you think of the organization as growing in size.

But you are staying relatively constant in terms of the size of the student body.

Mr. CASEY. Yes. I believe really the 10 laboratories is more relocation of laboratories, they are too crowded in space now, and they are really expanding the space per laboratory, rather than—

Senator RIEGLE. Would you check that out and let us know for sure?

You know, you can always say you are doing away with one facility here and building another over here, but the new one is three times larger and is really different. I would like to know how much of this

is net expansion versus just honest to goodness relocation of existing or equivalent kinds of facilities.

Mr. CASEY. I will submit that for the record.

[The following information was subsequently received for the record:]

None of the Merchant Marine Academy modernization projects have been for expansion of the student body. The Fulton Hall project, which represents the only add-on academic buildings in the entire modernization program, is proposed in order to meet drastic changes which have been made in recent years to update the curriculum and to relieve overcrowding. The existing and proposed additional space is as follows:

[In square feet of floor space]

	Fulton Hall (existing)	Fulton Hall (renovated)	Proposed addition	Total
Laboratories.....	27,414	28,648	16,550	45,198
Classrooms.....	8,669	8,669	3,120	11,789
Offices.....	7,270	6,036	3,280	9,316
Total.....	43,353	43,353	22,950	66,303

Today's modern, more complex ships require officers who have received more technologically advanced training. Thus, in the past five years, the Departments of Engineering and Mathematics and Science have increased their activities from 208 to 413 hours of instruction. This upgrading of curriculum has not been accompanied by any increase in space which had already been inadequate. The laboratories have not been substantially improved since they were built twenty-five years ago. A report by the accreditation evaluation team of the Commission on Higher Education of the Middle States Association stated that " * * * the present facilities are minimal, at best."

It is proposed to relocate five specialized laboratories which currently occupy space in the general purpose laboratories in the existing building and to add an additional five specialized laboratories which existing space cannot accommodate. This proposal and the addition of three classrooms, one lecture theatre, and 24 faculty offices will meet the demands of an expanded curriculum and will eliminate overcrowding in existing space which has been detrimental to the learning climate and effectiveness of classroom teaching.

Senator RIEGLE. Senator Griffin.

Senator GRIFFIN. Let me ask a question about the construction funds that you referred to.

As I understand it, the Ford budget asked for no funds for construction differential subsidy on the grounds that there was \$348 million of unobligated funds available to support the CDS program and that by the beginning of 1978 an estimated \$201 million would be available for this purpose.

In your statement you anticipate only \$98 million to be available in 1978. Can you account for this discrepancy?

Mr. CASEY. I think I can explain it. There is some \$348 million coming forward into fiscal 1977 from prior appropriations which were not spent—

Senator GRIFFIN. Or obligated.

Mr. CASEY. Not obligated, right. There is an additional \$15 million which we believe will be deobligated from an existing contract where there was a cancellation and some de-obligation funds are available. That would bring us up to about \$362 million.

Under the Ford budget, what was proposed was that \$163 million, in round figures, would be applicable to fiscal 1977, and \$200 million to fiscal 1978.

We asked for an additional \$135 million for fiscal 1978. What that means is of the \$363 million coming forward, we would use in fiscal 1977 \$264 million, or \$265 million, rounded off, and defer \$98 million into fiscal 1978, which, plus the \$135 million which we are asking for in new appropriations in this budget, would give us a program of \$233 million in 1978.

Senator GRIFFIN. In other words, you are planning to spend or obligate in 1977 considerably more than the Ford budget projection?

Mr. CASEY. That is right, sir. About \$100 million.

Senator GRIFFIN. How much of the wages of the average American seaman operating on the high seas on a U.S.-flag ship are paid by the United States taxpayer in the form of a subsidy?

Mr. CASEY. Of course it varies, Senator, among the various trade routes, because we compute the subsidy on a parity basis, and it all depends on the foreign wages on the competitive ships.

Senator GRIFFIN. My question was the average.

Mr. CASEY. The average would be about 60 percent.

Senator GRIFFIN. I had heard it was 75.

Mr. CASEY. On some trade routes it would be as high as 75. On others it is as low as 50. In other words, Norwegian competition, for example, is relatively high cost competition. Chinese competition would be relatively low cost. Under the parity principle, the operator gets the difference in wages between what he pays in U.S. costs and what his principal competitors are paying.

Senator GRIFFIN. So you put the average somewhere around 60 percent?

Mr. CASEY. Yes.

Senator GRIFFIN. So 60 percent of the wages of the average U.S. seaman operating on a U.S. ship in foreign trade is paid by the taxpayers now.

Mr. CASEY. That is not all take-home pay, Senator. Of course there is a considerable amount of pension and welfare contributions, training funds, et cetera, which are involved in the total U.S. wage cost. Only about 54 percent of the U.S. wage cost is basic wages and overtime. A very substantial amount is vacation pay, pension and welfare, training, social security taxes, and so forth.

This, incidentally, is where the biggest differential occurs between U.S. costs and foreign costs. In a lot of foreign jurisdictions, such things as social security taxes are paid for by the state and not by the operator.

Senator GRIFFIN. Counting in those fringe benefits, which realistically have to be counted in when you are figuring what the cost of doing business is, what is the average annual wage of a U.S. seaman now?

Mr. CASEY. I think the average would probably be somewhere around \$15,000. But that would be an average of some rather disparate numbers, probably from \$10,000 to maybe \$50,000 for a captain of a big ship.

Senator GRIFFIN. Now although there have been increases in every other kind of subsidy that comes out of your Department, there hasn't been an increase in the allowance for a student at a State maritime academy, which Senator Riegle was referring to, since 1958.

Why don't you people recommend anything in the way of an adjustment there? Don't you think the cost of living goes up?

Mr. CASEY. As Senator Hathaway said, this matter has been raised in Congress over the last several years—

Senator GRIFFIN. I know it has in Congress, but I am noting the fact that you are not recommending anything.

Mr. CASEY. I would have to recognize, Senator, what Senator Hathaway said, that that stipend has remained the same since 1958, and I would have to recognize that there has been substantial inflation since then, undoubtedly doubling costs, and that the U.S. dollar only buys half as much today as it did in 1958.

Senator GRIFFIN. Do you have any idea or any picture of what happens to the graduates of these State academies as far as whether the graduates are needed and get jobs, or whether they are not needed and there is no national interest involved?

Mr. CASEY. Yes; we have statistics on that. Of the most recent class at Kings Point, I think the number was 54 percent took actual seagoing jobs, about 23 percent took maritime-related jobs on shore, about 4 percent took nonmaritime shoreside jobs, and about 4 percent went in the service, Navy or Coast Guard. I have forgotten the exact percentage, but a relatively low percentage went to graduate school, 5 or 6 percent. And about 10 percent didn't respond to the questionnaires.

Senator GRIFFIN. That is Kings Point. What is the corresponding figure for the State schools?

Mr. CASEY. For the State schools, the number that went to sea, either deep sea or inland waterways or Great Lakes or offshore drilling rigs and supply boats, was a little over 60 percent. The shoreside maritime related was somewhat lower.

Senator GRIFFIN. As I understand it then, the taxpayers pay all of the costs of students going to Kings Point and 54 percent of them actually go to sea. However, from the State schools, where the Federal contribution is very small, a higher percentage of students go to sea. Is that correct?

Mr. CASEY. Somewhat higher, I think between 60 and 54 percent.

Senator RIEGLE. I think that fact is important.

Mr. CASEY. That is last year's class. If you go back in history, during Vietnam, I think you would find the opposite occurring, where a higher percentage of Kings Point graduates were going to sea than the State schools. It has been a situation with respect to jobs, primarily. At the present time, the job market has declined and there are not as many deep sea jobs available.

Now we foresee that this situation is going to change in the not too far distant future. The average age of officers aboard ships today is over 50. A very substantial number of them actually went to sea during the war and are still sailing. There is going to be a big increase in the number of retirements in our opinion and the supply-demand picture will change rather substantially over the next several years.

Senator RIEGLE. May I ask what happens to the graduates of Kings Point who don't go to sea? What do they do? I believe the figure was 54 percent went to sea. What do the other 46 percent do?

Mr. CASEY. Twenty-three percent of the last class, I believe that is the figure, took maritime-related shoreside jobs. This would be in

marine insurance, brokerage, shoreside jobs with steamship companies—

Senator RIEGLE. These are private industry, basically?

Mr. CASEY. Private industry, yes.

Senator GRIFFIN. Is Kings Point the only U.S. academy where no commitment of any kind following graduation is imposed?

Mr. CASEY. I believe so.

Senator GRIFFIN. Certainly if you go to West Point or Annapolis there is a commitment involved.

Mr. CASEY. There is a commitment for a certain number of years, yes. I believe all of the other service academies have such a commitment. I am not quite sure about the Coast Guard, but I am relatively sure they have an obligation. It is not a lifetime obligation, of course.

Senator GRIFFIN. No; I understand that. But at Kings Point there is no obligation at all.

Mr. CASEY. At the present time, that is right.

Senator GRIFFIN. Was there ever?

Mr. CASEY. To my knowledge, no. But as I responded earlier, we are proposing legislation now which would impose such an obligation.

Senator GRIFFIN. I see.

In the maritime authorization bill for fiscal year 1976, there was an amendment requiring that at least 10 percent of the construction differential subsidy funds be used in the Great Lakes. Is that correct?

Mr. CASEY. There is such a provision. It is qualified, though, Senator. It says to the extent that contracts are awarded.

Senator GRIFFIN. Now will you give me a report on the status of your compliance with that provision?

Mr. CASEY. Yes, sir. I am glad you asked that question because I can give a good report.

Recently we have had two construction differential subsidy contracts which have gone to Great Lakes builders. We first had a tug and barge operation where the tugs are being built at Marinette Shipyards in Marinette, Wis.

That is a relatively large contract for them, \$13 or \$14 million, I believe.

We also recently awarded a contract for the construction of two heavy lift ships and these ships are being built by Peterson Shipyard in the Lakes.

Senator GRIFFIN. Where is that?

Mr. CASEY. Sturgeon Bay, Wisc., I believe. This is a big contract, some \$35 million. So of the moneys that we have disbursed recently, the Great Lakes has gotten substantially more than 10 percent with those two contracts.

Senator GRIFFIN. What percentage is that of the total amount for the year though?

Mr. CASEY. Well, if my numbers are correct, just round numbers, something like \$13 and \$34 million, that would be \$47 million, which would be about 20 percent of what we have allocated for this year for example.

Senator GRIFFIN. And does the same 10 percent guideline apply to the other three seacoasts or is it just the Great Lakes?

Mr. CASEY. I think the law says for each seacoast. It was obviously intended for the Great Lakes, the so-called Mondale amendment, I think.

Senator GRIFFIN. Right. Because more than that is being spent in the other three areas, right?

Mr. CASEY. Generally, yes.

Senator GRIFFIN. I have no further questions.

Senator RIEGLE. You said earlier that about 60 percent of the cost of seamen on American-flag ships would be Government-subsidized. Do foreign governments likewise subsidize the labor costs, the manpower on their ships in their merchant fleets? If so, what would be some comparable percentages?

Mr. CASEY. Unfortunately, or fortunately the U.S. Government is much more candid and open in its programs, than are foreign jurisdictions. There are more de facto and hidden subsidies in the foreign costs and there are overt subsidies.

As I indicated to Senator Griffin, many of the foreign jurisdictions cover such things as health insurance, social security, pension and welfare, and so forth, which the foreign operator does not have to absorb.

Senator RIEGLE. I can appreciate that, they do that in a lot of areas. But you have obviously made some estimates. What do you estimate the subsidies would be for say other western democracies?

Mr. CASEY. I am not aware, Senator, of any program similar to ours, where there is a grant of subsidies to offset the cost of seamen's wages.

Senator RIEGLE. So it might be as low as 10 percent for other industrialized countries, or even maybe less than that?

Mr. CASEY. Would you be including in that figure such things as State-supported social security, training—

Senator RIEGLE. Well, I think that is probably relevant to include that.

Mr. CASEY. I would think, vis-a-vis the U.S. 100 percent cost, which includes all of those fringe benefits, and the foreign, what the State might support, I would think it would be substantially higher than 10 percent.

Senator RIEGLE. What do you think it would be? Twenty percent?

Mr. CASEY. I would think more in the neighborhood of 20 percent. I do not have specific statistics.

Senator RIEGLE. Would you try to find out?

Mr. CASEY. We can try; yes.

Senator RIEGLE. I would like you to do that, because I think it is important.

I gather the rationale for us doing it is, this is a national defense rationale, a strategic rationale?

Mr. CASEY. It is both national defense and economic. The whole purpose of the subsidy program is to permit an American operator to have a ship that will cost him the same as a ship would cost his competitor—that is the construction differential subsidy program—and to be able to operate his ship at the same cost as his foreign competitor.

Senator RIEGLE. Why do we care about that? Why is that something we subsidize, if it is not for national defense?

Mr. CASEY. It has a national defense rationale, but I believe that the economic benefits that inure from the subsidy programs are also significant. By having our own ships we can assure that we will not be discriminated against by foreign ships as far as freight rates are concerned. There is also a balance of payments benefit from carrying cargo in our own ships.

Senator RIEGLE. Let me get to what I am driving at, and that is, are there major shipping lines in this country that make money in the shipping industry?

Mr. CASEY. Without subsidy?

Senator RIEGLE. Well, after the subsidy. I mean the subsidy gets built in somewhere in the income statement, at the bottom line there is either a profit or there is not.

I assume there are shipping companies that are making money with subsidy as part of the picture.

Mr. CASEY. That is true, although the net income return in the steamship business has been traditionally low.

Senator RIEGLE. I don't know whether that is right or not. As you know, there are a lot of ways to make a low profit figure appear. One of the ways is to build in a lot of costs, with high salaries and other things that tend to produce a low net income figure, or you can find situations that are different from that, where it is really bare bones.

When you tell me there are low profit figures, I don't know whether that really means there are low profits or not.

Mr. CASEY. Of course you can hide profits only for so long a time.

Senator RIEGLE. What do shipping executives earn? Are there shipping executives in this country that make \$200,000 a year?

Mr. CASEY. I don't believe there are any that make that much.

Senator RIEGLE. You don't know of any?

Mr. CASEY. No; I don't. I would think more in the \$100,000, to \$150,000 range.

Senator RIEGLE. Are these companies, like some in other industries, where they are topheavy with management, or are they pretty lean operations?

Mr. CASEY. I think they are reasonably lean operations. As I say, subsidy does not guarantee any profit to them. They have to operate efficiently and productively.

Senator RIEGLE. Who would be the most profitable line that would get any major amount of U.S. subsidy?

Mr. CASEY. Well, this past year several lines showed fairly good profit results, Moore-McCormack, for example, in New York.

Senator RIEGLE. How much would they make, roughly?

Mr. CASEY. I think their profit figure on the bottom line was somewhere around \$30 million. But that is not strictly from their steamship operations. They are also in the Great Lakes operation, also in coal mining, and they have a lot of other businesses that make up that total profit. I think the steamship line was probably the biggest single enterprise, but it did not generate all of that profit.

Senator RIEGLE. So if you were going to summarize it, would you say over the last 5 years that the carriers that have received the bulk of the subsidy the Government provides have been relatively profitable in terms of their operations or not?

Mr. CASEY. We have all kinds, Mr. Chairman. There are several lines that have shown rather substantial losses.

Senator RIEGLE. Let me stop you for a minute and put the question a different way. Do you have a tally sheet that you run within your operation that shows what you think the benefits are that accrue to the country from the subsidies on the one side, versus the costs that we put in, both the subsidized costs and so forth that we put in on the other side? In other words, are you able to demonstrate that this total number of dollars of expenditures for these different forms of subsidy really is a good bargain for the country, because this is what we get for it? Do you do that kind of calculation?

Mr. CASEY. Well, I don't know that we have ever associated the two. Of course obviously we know the cost to the Government of the subsidy program. We have quantified, in most cases, what the benefits are, but not in terms of precise dollars. We can quantify the balance-of-payments contribution, for example.

Senator RIEGLE. Did you say you can?

Mr. CASEY. Can, yes. About \$700 million to \$1 billion a year of favorable balance of payments is achieved by paying freight moneys to Americans instead of paying it to foreigners.

Senator RIEGLE. Your feeling is you would lose all of that otherwise? I mean that is a direct tradeoff?

Mr. CASEY. That is right. Now we know what the employment is in the shipbuilding and ship operating industries. We can relate the subsidies to jobs.

Senator RIEGLE. Let me tell you what I think you ought to do, and I would like to ask you to do it. I would like to see a calculation like that. Add all of the subsidies on one side of the ledger and on the other side indicate what we get as a result whether it is an improvement in the balance of payments or some other benefit.

Mr. CASEY. As I say, some of the items you can not quantify.

Senator RIEGLE. Obviously the ones you can't quantify, just say we think the value is this range. In the case of the strategic argument we want to have a merchant fleet in case of an international problem, I know you can't assign a dollar value to that.

But the things were there are dollar values, I think it would be useful to have some cost-benefit estimate.

Mr. CASEY. We can do it. You are absolutely correct in one of your statements, in that the national security, national defense objectives of the American merchant marine are the major ones in my opinion. That is the major objective that we would see from the American merchant marine.

However, it does have economic benefits. One of the objectives we raise frequently with economists is that they take a single economic objective and try to relate the whole program to it. Of course, we object to that on the basis that you have to take all of these things cumulatively.

Senator RIEGLE. We are giving you more latitude than that. I am prepared to have you put everything on that side of the ledger you think belongs there. But I would like to see it, and I think it is important for the Senate to see it. There is nothing magical about particular subsidy levels. Maybe they ought to be lower, maybe

higher. You could also make an argument that we make a lot of money on this money as an investment. If so, maybe we ought to spend a little more and get a little more. Maybe it doesn't come out that way, perhaps we spend too much.

Mr. CASEY. They had hearings in the House starting at the end of fiscal year 1975 through the course of 1976, a series of oversight hearings, that really analyzed the program in four different areas. One was the national security and economic benefits on a general basis, and then it looked at each of the programs individually, the operating differential subsidy program, construction differential subsidy program, and title XI financing guarantee program. It was a series of hearings involving both witnesses from the administration and outsiders on each of those programs. There have been reports issued on the results of those oversight hearings.

Senator RIEGLE. Why don't you update that information and make it available to us? I am talking now about basically this sort of a balance sheet listing of what we spent and what it is you think we got for it.

Mr. CASEY. We will do that, sir.¹

Senator RIEGLE. I want to quickly cover a couple more questions and I will give you some to respond to for the record.

Would a rate of return subsidy concept enhance U.S.-flagship participation in U.S.-Canadian translake trade in your judgment?

Mr. CASEY. Of course, the rate of return type arrangement would be a guaranteed profit type of arrangement. I wouldn't think that would be a very efficient way for the Federal Government to subsidize the industry. As they increase their investment, they increase their profit, at a guaranteed specified rate of return.

With respect to your specific question, a good part of the translake cargo, which is bulk cargo essentially, is carried by proprietary carriers. Generally these are Canadian subsidiaries of major American companies, like Bethlehem or U.S. Steel. We had a subsidy contract with American Shipping Co. up in the lakes where we subsidized them as they engaged in the United States-Canadian trade. They weren't in it all of the time, because most of their business was in the U.S.-to-U.S. trade. But as they did carry cargoes in the United States-Canada trade, we paid them a subsidy based on the parity system. They gave that subsidy up. Actually the company was sold to GATX, and GATX had some foreign-flag affiliations so they had to give up the subsidy.

But in point of fact they did not use that subsidy very much, because most of their cargo carriage was in the U.S.-to-U.S. trade.

Also we talked to Oglebay Norton, another major independent steamship line up in the lakes, regarding giving them a subsidy for trans-lakes cargo. They decided against it on the basis that most of their business is in the domestic trade, and actually the cost differential on the parity system between U.S. costs and Canadian costs is not that great. Canadian costs are relatively close to U.S. costs.

So I don't believe that a rate of return type of arrangement would generate any substantial increase in U.S. flag participation.

¹ See p. 38.

Senator RIEGLE. Earlier this week the Department of Agriculture announced that 200,000 metric tons of wheat would be supplied to Bangladesh by September 30 of this year. Do you know how that is going to be shipped?

Mr. CASEY. A purchase authorization for that cargo came out Monday of this week, and so far they have not gone out for tenders.

What happens is that a purchase authorization is issued, then the USDA, after 10 days, goes out for a tender of ships, both U.S. and foreign ships. This cargo is covered by title I of Public Law 480, which requires that at least 50 percent of it go on U.S. flagships. So I would anticipate at least 100,000 tons of that 200,000 will go on U.S. flagships.

Senator RIEGLE. And the remainder will go out for competitive bid?

Mr. CASEY. They go out for tenders of both U.S. and foreign flagships simultaneously, and they will fix the American portion first, and then fix the balance with whatever foreign ships are available.

Senator RIEGLE. It has been projected from a number of sources that the Jones Act fleet of tankers will not be capable of carrying the anticipated demand from the Alaska pipeline.

I don't know whether you agree with that or what your projections are. But what is the Maritime Administration doing, if that is a problem?

Mr. CASEY. Our projections show that for the most part the Jones Act fleet is adequate to cover all of the oil originating in the Alaska North Slope, even though there is a surplus of oil on the west coast and some of it will have, initially at least, to be transported by ship through the Panama Canal to the gulf or east coasts. We do foresee certain periods, windows, where there may be a shortage of Jones Act ships. We do have another availability and that is ships that were built with construction differential subsidy. These ships are eligible to carry cargo in the Jones Act trade, but they must pay back a pro rata portion of their construction subsidy and of course they get no operating subsidy.

So when you throw that amount of tonnage, eligible tonnage, into the pot, we do not see any shortage of American ships to carry Alaskan oil at the present time.

Senator RIEGLE. I am going to give you some additional questions to answer for the record.²

I just have one more thing to cover, and that is this: as I look at these State schools, there is one in Maine, so that presumably covers part of the seacoast area in that vicinity, one in Michigan, which basically takes care of the Great Lakes, one in California, one in New York, one in Texas, and one in Maryland, that covers the Mid Atlantic coast—

That gives us a pretty good spread. Obviously some thought was given as to where they were placed.

The Academy is a high-cost operation, you testified to that effect today, and there is a major expansion of the place and so forth.

I just want to say to you, and I also want to say to Senator Griffin that the thought of decentralizing this more than we have and of mov-

² See p. 42.

ing in the direction of expanding these regional facilities which really get at the task of getting this job done appeals to me. I would rather add funds for regional facilities than to just one centralized location, particularly when only about half of the Academy graduates are going to sea anyway.

There is no Federal service requirement at the present time and to continue to pump in disproportionately large amounts of resources there, both per student and also per institution versus the others, I must say it is not clear to me what benefits we get for this.

It sounds to me like we are providing an awful lot of high-priced talent for private operations, who come through and take a free education, and are basically, I gather from what you have said, a large number of them are going out into private industry and I assume probably for pretty attractive jobs.

I would much prefer to see the subsidy dollars we are providing, these educational grant dollars, being used to meet some of the authentic regional maritime needs of the country.

I know, for example, our school in Michigan does that, and I assume these other schools located in other parts of the country do. I frankly am very much of a mind to move more in that direction than to have one expensive facility which is a free-ride facility.

I don't demean that institution or the people who attend it when I say that. I am talking about which way are we better off. I would like you to give us some indication, if we were to decide to basically put a ceiling on Kings Point, and redirect those dollars and expertise in trying to upgrade the regional facilities, what the implications of that would be.

I would like a formal response from you. You can do it for the record, but I really want some thought given to it. I would like to know whether you think that is a practical alternative, and if there are compelling reasons that would argue against it. My mind is open to hear those. But I would really like you to take a look at that, and I request that you take a look at it.

Mr. CASEY. We certainly will, Mr. Chairman. I do want to say a couple of things.

One is that the actual cost overall is not substantially different between the State schools and Kings Point; it is just the difference in the source.

I don't know how much the State funds—they may be using some revenue sharing funds that actually find their origin in Federal funds. It is true that we are building this new wing onto Fulton Hall—

Senator RIEGLE. Let me stop you there. Why don't you include that in the study I am asking you to do?

We are not talking about an endless task here, we have a discreet number of schools. Why don't you ask each school where the funding comes from and track it back to see, so we know. We ought to know that.

Mr. CASEY. The only other thing I would like to say is we have not increased the enrollment at Kings Point. It has stayed the same. Even during the Vietnam War it stayed the same. We graduated the students faster so they were available faster.

Senator RIEGLE. That, to me, is an argument for saying maybe we ought to reappraise the whole situation. The fact that you have a static

situation there. If we are going to be training people out really be a part of the merchant marine establishment, maybe we ought to be doing it in the regional centers, rather than in one spot.

Mr. CASEY. We will undertake such a study for you, sir, for the committee.

[The following information was subsequently received for the record:]

U.S. MERCHANT MARINE ACADEMY FUNDING

Federal support for the U.S. Merchant Marine Academy is mandated by the Merchant Marine Act of 1936, as amended. Section 216 specifically provides that the Secretary of Commerce shall maintain a U.S. Merchant Marine Academy at Kings Point, New York, for the instruction and preparation of officers for the merchant marine. The funding requested for the Academy will provide for its normal maintenance and operation, and the upgrading of its 35 year old facilities to adequate standards of heating, lighting, ventilation, safety and instructional facilities.

While we have a modernization program at the Academy for improvement and upgrading of physical facilities, the modernization projects are not occasioned by any expanded or anticipated expansion of enrollment but merely to improve existing facilities. There has been and will continue to be a ceiling on enrollment at a relatively constant level.

Freshman enrollment over the past ten years has averaged 346 incoming students per year, ranging from a low of 339 (-2.0 percent) to a high of 354 (+2.3 percent). This demonstrates the close control and the effective ceiling which has been in effect. We have no plans to change this ceiling.

\$14,633,000 has been requested in 1978 for operation of the Academy and for continuation of the program to modernize and upgrade facilities. The operating program includes \$2,381,000 for midshipmen costs; \$3,704,000 for the instructional program; \$2,876,000 to meet maintenance, repair and operating requirements; and \$1,672,000 for program direction and administration.

In addition, \$4,000,000 has been requested for the modernization program to continue to bring the 35-year-old facilities up to standards for academic institutions and to meet the standards of the Middle States academic accrediting committee. Prior to initiation of this program in FY 1973 there had been little upgrading of facilities since the Academy was completed at the end of World War II. To date, this program has involved replacing and improving the electrical distribution system, renovation of two of the principal academic buildings, construction of an addition to the Academy field house and a number of other projects of lesser scope. The 1978 budget requests funds for the first phase of the project to renovate and expand the academic building that contains most of the Academy's principal laboratories. This budget also requests funds for design work for subsequent year projects and for a few other projects of lesser scope.

In our view completion of the modernization program is absolutely essential if the Academy is to continue as a viable federal institution. It should be noted that the normal operation budget for the Academy is about \$10.6 million and is only expected to increase over the years in the same degree as the cost of procuring goods and services increases.

Further, it should be observed that the estimated total is fairly comparable to that at the State academies. For your convenience, we are providing a table of our latest estimates of the operating costs per graduate for the Class of 1976 at each institution:

School:	Estimated total cost ¹
U.S. Merchant Marine Academy-----	\$36, 625
California Maritime Academy-----	29, 269
Maine Maritime Academy-----	32, 172
Massachusetts Maritime Academy-----	22, 458
Great Lakes Maritime Academy-----	28, 692
State University of New York Maritime College-----	38, 801
Texas Maritime Academy-----	² 65, 649

¹ For the State academies includes State, student, and Maritime Administration funds. (Does not include State funds for Capital Expenditures.)

² High cost due to small graduating class. The school, currently is increasing its enrollment and expanding its facilities.

Redirecting federal funds from Kings Point to the State Academies would obviously decrease the quality of the U.S. Merchant Marine Academy and might even increase costs per graduate. As mentioned, the modernization program is attempting to overcome more than thirty years of obsolescence in physical plant and instructional facilities. It is directly related to the quality of the Academy. Erosion of funding for operation can only be met by decreasing faculty and support services—again affecting quality, or by a combination of that quality decrease plus a decrease in enrollment. Since fixed operating costs are significant and would continue, an enrollment decrease could increase costs per graduate. This effect is most noticeable in the costs per graduate shown for Texas Maritime Academy.

The State academies collectively produce more than twice the number of graduates as does Kings Point and have been growing in enrollments. It should be kept in mind that the Maritime Administration has no control over the program size at the State Academies, this being subject only to the authority of the States individually. We would have no guarantee that any substantial increase in Federal funding of the State academies would upgrade or expand the State academy facilities unless there were legislative amendments which would give the Maritime Administration authority in these areas.

Information on federal assistance the State academies may be receiving from other sources is not readily available on a consistent basis. The last time the academies provided us with data was in Fiscal Year 1974. We are providing a breakdown of that data below:

<i>School and type of Federal aid</i>	<i>Amount</i>
California Maritime Academy:	
Equal opportunity grant-----	\$26, 259
College work-study program-----	5, 000
Maine Maritime Academy:	
HEW interest subsidy-----	14, 159
HUD interest subsidy-----	9, 490
HEW library grant-----	5, 000
Equal opportunity grants-----	8, 910
Work study program-----	5, 902
Massachusetts Maritime Academy:	
Equal opportunity grants-----	33, 808
College work-study program-----	39, 478
Great Lakes Maritime Academy:	
Vocational education-----	10, 424
Salary reimbursement-----	
State University of New York Maritime College:	
Equal opportunity grants-----	14, 726
College work-study program-----	5, 508
Texas Maritime Academy (no report)-----	

NOTE.—More recent information on these and other possible Federal sources of funds to the State schools is not readily available.

Senator GRIFFIN. Earlier you gave us the figure that over 50 percent of the Kings Point graduates go to sea compared to 60 percent of the State school graduates.

What about the union school up in Baltimore? Do you have any figures on what percentage of their graduates get jobs and go to sea?

Mr. CASEY. I would think substantially all of them initially go to sea. How long they stay I really don't know.

Senator GRIFFIN. You won't have any figures for that?

Mr. CASEY. No, I don't have historical figures on how long they stay at sea.

Senator GRIFFIN. No, I am not trying to compare apples and oranges. I am trying to make the same comparison or get the same figures that you gave us earlier, but with respect to the union school in Baltimore. I wonder what that percentage is?

Mr. CASEY. I think the percentage, equivalent percentage to the percentage I gave you earlier—and I don't have the figures with me—

but I would say that substantially all of the graduates of the Calhoun School in Baltimore go to sea. It is only a 3-year—

Senator GRIFFIN. So it is a higher percentage?

Mr. CASEY. It is only a 3-year course and really is designed strictly for seagoing training. They don't get any degrees. It is not a regular educational institution.

Senator GRIFFIN. Do you receive any complaints that the union discriminates against graduates of Kings Point and the State marine schools?

Mr. CASEY. Yes, sir, we have received a considerable amount of correspondence on that. And there is no question that the graduates from the Calhoun School enter into the industry at a different status. They are in Class II status, because they already have credit for 200 hours of seagoing time, so that that puts them in a higher classification than a graduate of either Kings Point or the State schools. So they have difficulty, the State school and Kings Point graduates, have difficulty joining the union, because they don't have the qualifications, they have to go out and earn the qualifications, whereas the Calhoun students earn them during their educational period.

Senator GRIFFIN. Does the Maritime Administration have any jurisdiction over this? I suppose there are abuses associated with this. But can you do anything about it?

Mr. CASEY. Not through our own agency. This matter was taken up by the National Labor Relations Board as an item that was of a discriminatory nature. The trial examiner found in this case that MEBA members were supervisory type employees and consequently were not subject to the act, and that was never appealed. So actually the case was lost on the basis that the MEBA personnel were supervisory personnel and were not subject to the act.

Senator GRIFFIN. You mentioned that the Kings Point student body has remained pretty much the same in terms of numbers.

What about the student body in the State academies and the union school in Baltimore? What has happened there? Have they stayed the same or are they going up or down or what?

Mr. CASEY. Senator, the State schools were starting to expand 5, 6 or 7 years ago and the job market just didn't justify that expansion as far as the industry was concerned. It was at that time that we put a quota on the number of allowances that we would grant. It is now 673, spread between the various schools and is keyed back to 1964, which was the pre-Vietnam level.

Now that has to some extent put controls on the number of students at the State schools. They do have some students at them who do not get stipends, because they are not within the quota. But it was done for that specific purpose. It was to not have runaway increases in the State schools at a time when the industry just couldn't support the number of graduates that would come out of there.

As far as the Calhoun School is concerned, which is the only other school that provides initial officers, that has an output of about 90 people and it has stayed about the same. That school didn't start until 1966, so there wouldn't be any graduates from it until 1969 at the earliest. It has stayed about the same, also.

Senator GRIFFIN. It has not been going up. That is one thing I was wondering about.

All right. Obviously if the union is going to discriminate as far as the State schools are concerned in getting into the union, it would be very difficult to expand these State schools then. Also you have your own imposed policy where you limit the number of students that can receive a Federal stipend. Is that right?

Mr. CASEY. We have put a limit on the number of students, and that has been in effect now for about 5 years.

Senator RIEGLE. Would you yield at that point?

Senator GRIFFIN. Yes.

Senator RIEGLE. I have asked counsel, as I have been listening to your cross-examination, what would account for that practice, and apparently part of the answer would seem to be that the students attending the union school go to sea fairly soon after they begin their training, like within 90 days or so, and build up a fair amount of sea time, and I gather that what happens then is because they become members of the union at some point, they accrue seniority.

So by the time they graduate, they graduate with a seniority edge over those who come out of another program which is not the same and therefore they don't start at the same place in line.

Now one can argue whether that is an appropriate practice or not. But as far as I understand it, apparently that is how the differentiation gets established.

Mr. CASEY. That is right, Mr. Chairman. One year of their 3-year course is at sea in apprentice engineer statute.

Senator RIEGLE. Which group are you talking about now?

Mr. CASEY. The union school. It is a 3-year course. One year of that is at sea as an apprentice engineer. And they do get credit for that time for their status in the union and for eligibility for membership in the union.

Senator RIEGLE. What about our programs?

Mr. CASEY. At Kings Point and the State schools, they get no credit for any sea time during their curriculum.

Senator RIEGLE. How much sea time do they spend?

Mr. CASEY. At the State schools, of course, their sea time is on the school ships—

Senator RIEGLE. That is not the question. How much time?

Mr. CASEY. I would say they spend at least a year of their 4-year course at sea.

Senator RIEGLE. I am sorry, I missed your answer.

Mr. CASEY. In the State schools, they do not go out and work in industry—

Senator RIEGLE. Don't they work in the summer? I talked to one student from our school in Michigan, who in the summer period, did go out and work on a ore carrier.

Mr. CASEY. I am sorry, sir, Michigan is different. In Michigan they do go out and work on Great Lakes ships. I was thinking of the other five State schools, where they have Government-provided school ships. Their sea training is by an annual cruise, they go out on a cruise for 60 or 70 days each year, where they actually run the ship themselves, of course under supervision.

Now Kings Point is different. Kings Point has two periods of 6 months each during the course of the 4 years when they actually go out

and are assigned to ships and work on board ships. They do not, however, get credit for that under the union membership rules.

Senator GRIFFIN. Your answer is that in the State schools as well as Kings Point that they have about a year of sea training as they do at the union school?

Mr. CASEY. Yes.

Senator GRIFFIN. Except at the State schools and Kings Point they don't get any credit with the union?

Mr. CASEY. That is right, sir.

Senator RIEGLE. In Michigan where the students who go out and work in the summer time on a commercial vessel, I assume they would get that credit, wouldn't they?

Mr. CASEY. I think they go out as cadets, and consequently would not get it.

Senator RIEGLE. So there must be some arrangement with the union involved to allow them to come aboard under some special status, is that the idea?

Mr. CASEY. I believe it is. They go on board as cadets, they get a certain amount of pay as cadets, and they have a different status.

Senator RIEGLE. Would you find that out for sure and give us an answer for the record?

Senator GRIFFIN. Let me follow up on one thing here. With respect to the union school, the students go out and work as apprentice seamen in addition to getting scholastic credit and union credit. They get paid besides, don't they?

Mr. CASEY. Yes; there is a certain level of pay, it is a special rate.

Senator GRIFFIN. Is it lower than other apprentice seamen at sea?

Mr. CASEY. It is lower than for other engineers, for example. It involves a lower salary grade than for the third assistant engineer, which the student would be when he graduated.

Senator GRIFFIN. I see. That salary, of course, would be subsidized by the Government, would it not?

Mr. CASEY. Yes, sir. Under the normal subsidy scheme it would.

Senator GRIFFIN. I want to turn to another area here, if I may. Under the law, as I understand it, up to 50 percent of the construction costs of a U.S. ship can be subsidized. You indicated that an average of something over 60 percent of seamen's wages are paid by the taxpayers.

Looking, say, at the last year of ship construction, what has been the percentage of construction subsidy? Has it been 50 percent, or something less than that? Can you give me some idea?

Mr. CASEY. Yes; again it varies very substantially according to the type of ship. For a liquefied natural gas ship, for example, a very high technology type ship, the subsidy rates in the past have been as low as 16.5 percent. We had some that were 23 to 25 percent. We now would estimate, although we haven't had one recently, that the CDS rate on a LNG ship would be about 25 percent. For a more general type ship, a bulk carrier ship or tanker, which does not have the same sophisticated technology, it would be up to 50 percent or perhaps higher.

Senator GRIFFIN. You would go higher?

Mr. CASEY. We wouldn't go any higher; 50 percent is our limit. But the pure parity might be above 50 percent on some very simplified bulk ships, because; for example, the Japanese build these ships very

quickly, and very productively. The other ships, the liner type ships, would be somewhere between 40 to 50 percent, in the neighborhood of 45 percent.

Senator GRIFFIN. I don't know if you can address my next question. But, looking back over a period of a year, or 5 years would be better, what has been the percentage of subsidy for the construction of ships that you have contracted for?

Mr. CASEY. That I can answer. The law almost answers it for me. When the 1970 act was enacted, the limit of subsidy was reduced for negotiated contracts. Most of the contracts awarded are on a negotiated basis. It was established at 45 percent maximum, with a provision for a decrease of 2 percent each year. In other words, in fiscal 1971 it was 45 percent, 43 percent in fiscal '72, and so forth. It worked its way down to 35 percent. And all of the ships that were contracted for on a negotiated basis during that period were within that guideline subsidy. We were down to 37 percent at fiscal 1975.

But then, all of a sudden, the market changed rather drastically. The oil crunch came, the embargo, and it cut down the number of tankers that were being built and the Japanese particularly reduced their ship prices very, very substantially. As a matter of fact, the same ship may differ 20 percent in Japan, 20 percent lower 1 year than it was the year before. They eliminated all profit. They were quoting ship prices that were ridiculously low.

That, of course, under the parity system, increases our subsidy, because the American operator pays the foreign cost in a sense and we pay the difference between the foreign cost and the American cost. And that is what required us to go for a change in the law, to permit us to enter into negotiated ship construction contracts to award construction subsidy up to 50 percent.

Senator GRIFFIN. You are saying that up until a year or so ago, it was 35 percent, and now the limit is 50 percent?

Mr. CASEY. Now the limit is 50 percent, and we have had two that have been very close to the limit; they have been up to 49 percent.

Senator GRIFFIN. I am aware that on some ships the subsidy was less. I just wondered how it averaged out. Maybe you will have to work that out.

Mr. CASEY. As a matter of fact, I have a table, if you will bear with me for a moment, that shows subsidy rates calculated over a period of time.

Let me run down this table. This is yearly average CDS rates over time.

1966, 53.66 percent. 1967, 54.70 percent. 1968, 52.58 percent. 1969, 54.73 percent. 1970, 45.80 percent. 1971, 43.68 percent. 1972, 42.97 percent. 1973, 38.6 percent. 1973, with LNG's was 21.9 percent. 1974 was 35.6 percent, and 1975 was 35.08 percent. In 1976, with one contract, which was competitive rather than negotiated, it was 49.64 percent. In the transition quarter with one contract, it was 38.05 percent.

So you can see the trend was coming down rather substantially from 54 percent down to in the neighborhood of 35 percent, and just recently it has gone up because of the world shipbuilding situation.

Senator GRIFFIN. I am advised that in the Merchant Marine Act of 1970, there was a requirement that the Secretary of Commerce make

a survey of the American merchant marine fleet and report to Congress.

Are you aware of this requirement?

Mr. CASEY. I think what you may be referring to is the Commission on American Shipbuilding which was established to look into the whole shipbuilding situation in the United States, and to make a report to the President and to Congress.

That Shipbuilding Commission did operate and did complete its report, I think in about 1973.

Senator GRIFFIN. You think that is what I am referring to. Bear with me just a moment.

I am reading from section 201 of the act.

"It shall be the duty of the Secretary of Commerce to make a survey of the American Merchant Marine as it now exists to determine what additions and replacements are required to carry forward the national policy declared in Section 101 of this Act, and the Secretary of Commerce is directed to study, perfect, and adopt a long-range program for replacements and additions to the American Merchant Marine so that as soon as practicable the following objectives may be accomplished."

And then there is a list of several objectives.

You are not the Secretary of Commerce, I realize that. But it is my information that this requirement of the act has not been complied with. Do you have any information to the contrary?

Mr. CASEY. I really can take the out that I am not the Secretary of Commerce, because most of the maritime activities in the act have been delegated to the Maritime Administration.

I really am not wholly familiar with the particular subject matter you are raising or the time frame during which it was proposed to be accomplished. We do make annual reports. A lot of our reporting requirements are taken care of by our annual report to Congress each year.

Senator GRIFFIN. Well, if you are not familiar with that part of the act, maybe you can give me a written answer to it.

[The following information was subsequently received for the record:]

The cited language, which was part of the original 1936 Act, was designed to establish a method of implementing and controlling the development and maintenance of an adequate and well-balanced American merchant marine. A report to Congress was not required. Plans and specifications for ships to be built with construction are certified by the Secretary of the Navy as suitable for national defense requirements prior to their construction. MarAd continuously updates estimates of future U.S. oceanborne trade and works with DOD to determine defense needs in order to identify future requirements for shipping capacity and for specialized ship types. These requirements are reflected in MarAd R&D efforts and in MarAd advice to the industry regarding the future markets that must be the primary determinants of the composition of the future fleet.

Senator GRIFFIN. But aside from that, what other reports are available to indicate what has happened to the United States Merchant Marine fleet over the last few years?

Mr. CASEY. Well, we have any number of statistics, publications, and so forth.

Since 1970, the number of ships in the subsidized fleet has declined, but the carrying capacity has increased by about 52 percent.

The average age of the fleet has been reduced by almost 2 years. We are carrying substantially more cargo now than we were in 1970.

The percentage hasn't changed substantially, but because of the very great increase in total U.S. foreign trade, we are carrying much more tonnage now than we were in 1970.

For example in the liner section, general cargo, we now carry about 31 percent of total U.S. export-import cargo in liner vessels, and that compares with a low of 20 percent early in the decade, 1970. So the 1970 act hasn't perhaps done everything we would have liked to have seen it do, but it certainly has improved the American Merchant Marine.

Senator GRIFFIN. It wouldn't be surprising to you, I know, if I and my colleague here have somewhat of a parochial interest, too. Focus on the Great Lakes and tell us what has been happening as far as the U.S. fleet is concerned.

Mr. CASEY. Yes. The Great Lakes operators, of course, do not get subsidies, because they are in the domestic trade. They do and have used two of our programs very substantially—

Senator GRIFFIN. Just domestic trade? Isn't there any foreign trade?

Mr. CASEY. There is very little foreign trade. We do have two lines that are presently serving the Great Lakes to foreign destinations. Lykes now goes from the Great Lakes to the Mediterranean area. Farrell Lines goes from the Great Lakes to Africa. So within the last 2 years we have encouraged two existing lines to increase their service to cover the Great Lakes.

There are other proposals pending that look like they might materialize for an increase in foreign trade from the Great Lakes in the future. We just completed a study where we analyzed two different proposals, one a combination breakbulk and bulk service carrying some containers that looks like it would be economically feasible. We undertook the study so we could encourage some private interests to see that there were opportunities in the lakes.

Senator GRIFFIN. One of the problems with the lakes of course is that they are not open all year round.

Mr. CASEY. That is a very significant factor.

Senator GRIFFIN. And there is quite a need for ice breaker equipment in addition to other things that could be done.

To what extent is your agency interested in or concerned about that problem?

Mr. CASEY. We are very interested and concerned. We do participate in the Winter Navigation Board, we are one of the participants in that and have been for some time, the purpose of which is to extend the lakes season hopefully to a year-round operation.

We very recently, last year, conducted a conference up in Dearborn, Mich., to examine the problems, maritime problems, that exist within the lakes. A number of recommendations were made, and they will be handled by the various participants, the Maritime Administration, the Corps of Engineers, the Coast Guard, and the St. Lawrence Seaway Organization. Mainly within our research and development and our marketing programs we will be implementing the recommendations that came from that conference.

Senator GRIFFIN. One of the obvious needs is more and better ice-breaker equipment. I will just say it has been my own judgment that the Coast Guard has been rather timid about their budget proposals

and if your agency has a real interest in expanding the use of the lakes for shipping purposes, I would think you would be pushing and shoving to get more icebreaker equipment up there. Is that the case?

Mr. CASEY. Of course icebreaking is the function of the Coast Guard, there is no question about that.

Senator GRIFFIN. I know, but the shipping industry is directly affected by it.

Mr. CASEY. True. And we have supported everything that I am aware of applicable to the lakes. We created a regional office up in Cleveland—

Senator GRIFFIN. I was going to ask you about that. I wanted you to tell us about it, but finish the icebreaker issue first.

Mr. CASEY. From this Dearborn conference, one of the recommendations was there would be a substantial investment in new icebreaker equipment, I think \$100 million. It was the Coast Guard's responsibility, of course, but by cosponsoring that conference, we really support the things that came out of it. But that is an area that is really not within our competence, the icebreaking area.

Senator GRIFFIN. Will you tell us then about the regional office that is open for the Great Lakes area? What is going on, when did it open, how it is being manned, and so on?

Mr. CASEY. It opened in 1975. Actually what we have installed up in the Great Lakes is a regional office in Cleveland, and we have a radar school in Toledo. We did have a market development office in Chicago that we retained and we established another marketing office in Detroit.

Senator GRIFFIN. Marketing office, did you say?

Mr. CASEY. Yes. This regional office is presently manned with about 15 people, and it covers the normal programs. They really are our eyes and ears in the field for disseminating information with respect to our promotional programs. They handle ports, they handle marketing, they handle to some extent, although not much in the lakes area, the EEO and civil rights activities. But they are there to help new maritime interests in the Great Lakes area. They have their own resources and they can call on ours when necessary.

We are increasing that staff by one more person in our 1978 budget, a financial type. I think it has been very successful. The reports I get from the Great Lakes industry is that they are very happy with the establishment of this office, and with the performance of the personnel in the office.

Senator GRIFFIN. Who is the person that is the head of it? Do you happen to know?

Mr. CASEY. George Ryan. He has a very substantial steamship background. He came from Grace Line, he was an assistant port captain for Grace Line before he came with the agency. He was our representative in London for a number of years, a very very competent individual and very well liked by the Great Lakes people.

Senator GRIFFIN. I did know his name but had forgotten it. Thank you very much.

Senator RIEGLE. Along the lines of that colloquy, I understand that a major study has been done with respect to the Great Lakes by a company called SIMAT and others.

Mr. CASEY. SIMAT did that.

Senator RIEGLE. We have had some trouble getting a copy of that. Maybe you could help us obtain one.

Mr. CASEY. Surely.

Senator RIEGLE. Can you get a copy of it to us soon?

Mr. CASEY. Oh, yes, sir.

Senator RIEGLE. Fine. I think Senator Griffin and I both would like to have one.

We have also sent a letter to the Secretary asking for comment on a bill which I introduced that has to do with the diversion of cargo through Canada.

I just want a commitment from you that we will get some response on a timely basis. It is important that we have it.

Mr. CASEY. We will, sir.

Senator RIEGLE. All right. Now I want to come back to the Michigan school which is of great interest to Senator Griffin and to me.

The information that I have indicates that the breakdown of the amount of allocation that you give as between the various State schools, we don't do so well.

Every school gets a \$75,000 grant up front, but then there are other categories, as you know.

In the area, for example, of uniforms, textbooks and subsistence of cadets, there is a spread here. New York is the highest, with \$375,000; Maine with \$294,000, and then it drops down and Michigan is \$57,000, about the same as Texas, which is a smaller program. The number of cadets there at the present time—they are about the same, 107 and we are 104.

So they are roughly comparable. In any event, we show up in that category of \$57,000. Then if you go to the next category, which is maintenance and repair of vessels, we are really out of the ball game, quite frankly, in Michigan. California for 1977, \$374,000. Maine for 1977, \$502,000. Massachusetts, \$413,000. Michigan, \$20,000. New York \$412,000, Texas, a comparable size program, \$372,000.

Mr. CASEY. I think you are looking at the 1977 columns.

Senator RIEGLE. That is right. I am now about to go to 1978, because it doesn't get appreciably better.

There is some improvement but it doesn't put us on anything like an equal footing.

Take California, again \$340,000; Maine, \$489,000; Massachusetts, \$571,000; Michigan, \$77,000; Texas, which seems to me to be the one that is the most comparable to us, \$340,000.

Well, there is a whale of a difference between \$340,000 and \$77,000. I grant you \$77,000 doesn't look as bleak as \$20,000 the year before, but if that is the rate at which we are going to catch up, it will take us an awfully long time to do it.

What I would like to do—

Mr. CASEY. May I interrupt a moment?

Senator RIEGLE. Sure.

Mr. CASEY. Of course there is a whole different situation between Michigan and Texas with regard to school ships.

Senator RIEGLE. It sure looks that way.

Mr. CASEY. The Texas academy has a regular school ship which they use to go on cruises which go to foreign waters, and have to be up to

Coast Guard standards and so forth. In Michigan, they only have very small craft for training purposes.

Senator RIEGLE. I know. We want to improve that.

Mr. CASEY. The students actually go out into the Great Lakes carriers for most of their seagoing training.

They will go to Oglebay Norton, American Shipping, and Cleveland Cliffs, and they get trained, really, on board commercial ships, which is similar to what the situation is at Kings Point, but dissimilar from what it is at the other five coastal State schools where they get all of their sea training on old ships that have been provided by the U.S. Government for their training cruises.

Senator RIEGLE. Ours fall into that category in Michigan, too. The ships at that school, at least what I saw, were not brand new vessels.

Mr. CASEY. True, but they are very small craft. They are not the same kind of ships that Maine, Massachusetts, New York, Texas, and California have, which are old passenger ships, really, that have been converted into school ships, whereas up in the Lakes I think it is an old tug that has been converted into a school ship.

Senator RIEGLE. Yes. Well, I would like to see us do a little better, frankly, comparatively speaking. So I would like to talk with you and some of your people at a later point about what kind of a long-term plan you have for Michigan.

It is also my understanding, if you look at Kings Point, again by comparison, you want to spend about 5 million there.

Mr. CASEY. In improvements, 4 million is the budget for 1978, \$4 million for modernization.

Senator RIEGLE. My understanding is in years beyond, though, that you project something on the same order, that you are looking at a \$4 to \$5 million annual series of improvements.

I mean this is not a one-shot thing.

Mr. CASEY. No; we do have a long term facilities improvement program which we did not have for 30 years.

Senator RIEGLE. That is what I want to talk to you about with respect to our school in Michigan.

We need to really get the Great Lakes thing moving, and I appreciate the initiatives that have been taken in terms of opening the regional office and the study that has been done, and so forth.

But as I just look at this comparative data, I think it is going to take some extra initiative to get this program moving at a faster rate and get it more on an equivalent footing with some of the other schools.

Mr. CASEY. Yes. One significant factor, Senator, as far as the quotas are concerned, actually there are no students at Michigan that do not have the \$600 stipend. In all of the other schools, by establishing this quota, we have excluded certain students from getting the \$600. In the Michigan school, if you notice on page 21 of that book there, in Michigan all of the students are covered by the Federal stipend.

Senator RIEGLE. That is 104. I don't think that is the same thing as saying, however, that we have got as many slots there as we would like.

I am sure that we are not taking all comers.

Mr. CASEY. Frankly, I don't know whether they are turning people down there or not.

Senator RIEGLE. I am quite sure we are turning people down. We will check and find out. But I would be astonished if there aren't additional people seeking to come who can't be accommodated. But we will find that out.

In any event, I think what we have to do here—of course the Texas situation is much different. I mean they show two people who are non-federally assisted and 105 who are. And they are roughly on the same footing with us in that respect.

What I am much more concerned about now is the projections, what you project for the Michigan facility, as we go down the road, in terms of these other things. There is obviously some very elaborate planning that has been done with respect to Kings Point. I don't know if it is a gold plated plan or not, but it sounds to me to be pretty ample.

Mr. CASEY. It is not really gold plated. It got pretty antiquated.

Senator RIEGLE. How many students are there?

Mr. CASEY. At Kings Point there are about 1,000 in the school, and 800 are in residence at any one time.

Senator RIEGLE. You have 800 and we have 100 in Michigan. So if you are going to spend \$5 million at Kings Point, one-eighth of that would be about \$600,000. We would probably settle for that.

What I am saying is that both Senator Griffin and I have a particular interest in that particular facility. So I would like to talk with you later about what you foresee as a long term plan in terms of equipment and just the further strengthening and building of that institution.

That is all of the questions I have other than the ones I will submit for the record.

Do you have anything else, Senator Griffin?

Senator GRIFFIN. No.

Senator RIEGLE. We thank you for coming today. I appreciate your response to the questions, you have been very direct in responding. We appreciate that and look forward to working with you.

[The statement follows:]

STATEMENT OF HOWARD F. CASEY, DEPUTY ASSISTANT SECRETARY FOR MARITIME AFFAIRS, DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Committee:

I am pleased to appear before this committee today. My testimony today supports the Maritime Administration requests for appropriations authority for fiscal years 1978 and 1979.

The Maritime Administration requests a total of \$549,224,000 in appropriations authority for fiscal year 1978. This request is an increase of \$101,183,000 over fiscal year 1977 authority and consists of:

\$135 million for ship construction. This amount, together with \$98 million projected to be available in 1978 from existing funds will provide total program funding of \$233 million in support of competitive U.S. shipbuilding;

\$372,109,000 for operating-differential subsidies. This program level provides for the continued competitive operation of U.S.-flag ships in 1978;

\$18,325,000 for research and development activities. This amount will continue to support the practical application of innovations and new technology to U.S. shipbuilding and ship operations;

\$5,137,000 for support of the National Defense Reserve Fleet;

\$14,633,000 for the Merchant Marine Academy; and,

\$4,020,000 for State marine schools.

The requested legislation includes the President's proposed amendments to the program presented in the budget transmitted to the Congress in January.

The January budget reflected restraints on funding for ship construction and operating-differential subsidies pending the completion of a major review of the basis of Federal support to the maritime industry. There was also a moratorium on renewal of long term operating-differential subsidy contracts pending completion of the study. These restraints have been removed in the amended budget.

A strong, competitive, and productive American merchant marine and shipbuilding industry is necessary to the national security of our Nation as well as to the support of our national and international trade. The appropriations authority requested for Maritime Administration programs in 1978 will continue Federal support to maintain these industries and to increase their competitiveness. Before I discuss the specific authorization requests for 1978, I would like to briefly review the current status of our programs to promote a stronger U.S. Merchant Marine.

U.S. SHIPBUILDING

I am pleased to report to you that the resurgence in shipbuilding demand which was anticipated at the authorization hearings a year ago has materialized in the last ten months. The U.S. shipbuilding industry experienced a severe decline in new contracting during 1974 and 1975. The decline was largely a result of the embargo imposed by oil producing countries and the consequent reduction in demand for new tankers. After a period of almost two years in which only one contract was awarded for the construction of three tankers, we have, since June 1976, awarded contracts for the construction of eight new ships. The demand now is for containerships, and for high technology ship types, such as heavy lift ships and liquefied natural gas carriers. Work under two of the contracts for specialized ship types has been awarded to shipyards on the Great Lakes.

Prospects for additional contracting in the immediate future are exceptionally good. Of the construction subsidy applications presently in hand or under discussion, applications for the construction of up to 15 new ships are considered to be likely candidates for contract award before the end of 1978.

U.S. shipbuilding is not without problems, however. Although U.S. shipyard employment has been generally sustained by substantial orderbook backlogs, the absence of new contracting over a prolonged period has reduced backlogs and raised the specter of a sharp decline in employment. Six major yards need new contracts immediately in order to sustain workload and employment.

The enactment of Public Law 94-372, which extends negotiated contracting authority through June 30, 1979, and sets the subsidy guidelines ceiling for negotiated contracting at 50 percent of construction cost, has been a significant factor in the recent surge in construction contracting. Since 1971, negotiated bidding has been an effective means of holding subsidy rates under prescribed guidelines and has expedited the contracting process. Low prices in the world shipbuilding market and strengthening of the dollar have forced U.S. shipbuilding subsidies upward. Subsidy rates on recent contracts have varied from a low of 38 percent to more than 49 percent. Although subsidy rates for prospective liquefied natural gas carriers construction contracts can be projected at 25 percent, estimates for most liner type ships must be placed at the 45-50 percent level considering world shipbuilding projections for the next two years. We believe negotiated bidding will continue to be a useful tool in facilitating contracting within the 50 percent rate limit in this high cost era.

U.S.-FLAG SHIP OPERATIONS

The worldwide recession which followed the oil embargo also had an adverse impact on U.S.-flag ship operations. The effects on this segment of the industry were evidenced in late 1975 and in 1976 when the cargo volume in certain segments of international trade experienced a sharp decrease. As a result, a high level of idle time was experienced by subsidized general cargo and bulk ships during fiscal year 1976 and the transition period. The Congress recognized this phenomenon by reducing the 1977 appropriation for operating-differential subsidies to correspond to increased idle time.

The Maritime Administration has made recent adjustments in the operating-differential subsidy program to improve the competitiveness of subsidized U.S.-flag ships. The Maritime Subsidy Board approved the modification of two regulations affecting the subsidized bulk carrier fleet. A temporary waiver of foreign-

to-foreign trading restrictions was granted in July 1976 to extend through December 31, 1977. This waiver of trading restrictions is expected to make significant additional cargoes available to subsidized bulk carrier operators. The foreign-to-foreign market is at least as substantial as the U.S.-to-foreign market. Previously, subsidized operators were restricted to no more than 50 percent carriage in the foreign-to-foreign market while retaining full subsidy. The second modification granted by the Maritime Subsidy Board provides that subsidized bulk carriers may compete for that share of preference cargoes which is not reserved for U.S.-flag ships operating at fair and reasonable U.S.-flag rates. This change also opens a substantial new market of cargoes to subsidized bulk operators. Previously, they had been excluded from competing in this trade. We fully expect that these changes and other measures we are now contemplating will enhance the competitiveness of the subsidized bulk carrier fleet.

The operating-differential subsidy program has also encouraged U.S.-flag liner service from each of the four United States coastal areas. The program supports the trade services of ten U.S.-flag liner operators. Six of these operators have services to and from the Atlantic Coast; five operate off the Pacific Coast; five operate out of the Gulf Coast; and two are serving Great Lakes ports. These program improvements coupled with a recovery in cargo volumes have helped to decrease the amount of idle time in the subsidized U.S.-flag fleet. The subsidized fleet experienced the full-year equivalent of only 12 idle ship years during the first few months of this fiscal year. This represents a substantial improvement over 1976 levels of approximately 20 idle ship years.

1977 will be the fourth year of a substantial U.S./Soviet grain trade. There are currently two major bilateral agreements governing this trade. The U.S./U.S.S.R. Grain Purchase Agreement provides for annual Soviet purchases of a minimum of six million metric tons of U.S. grain over a period of five years beginning October 1976. In addition, a six-year U.S./U.S.S.R. Maritime Agreement became effective January 1, 1976. This Maritime Agreement provides for U.S.-flag carriage of one-third of the tonnage, including Soviet grain purchases from the United States, moving in the trade between the two Nations, or an amount equal to Soviet-flag carriage, whichever is greater. Together, these Agreements assure the employment of U.S.-flag tankers and other bulk carriers in the carriage of at least two million metric tons of grain per year over the next six years. While these Agreements certainly benefit the U.S.-flag fleet, they also provide significant benefits to the overall economy of the United States.

The program is also making progress in holding down increases in overall subsidy costs. Wage costs represent approximately 86 percent of total subsidy costs. The wage subsidy index system provides an incentive to U.S. ship operators to minimize wage increases reached in collective bargaining negotiations. Control over wage subsidy increases is also realized through review and approval by the Maritime Subsidy Board of manning schedules for new ships built with subsidy. Additional reductions in operating subsidies are being accomplished through the gradual elimination of subsidy for U.S. ship maintenance and repair and for hull and machinery insurance. Recent contracts with four operators provide for elimination of subsidy for these items of expense. U.S. costs for these items no longer appear to impose an appreciable competitive disadvantage on U.S. operators. The Maritime Administration will continue improvements in these and other areas of the program to encourage and assure U.S.-flag competitiveness.

RESEARCH AND DEVELOPMENT

The Maritime Administration research and development program, augmented by cost-sharing agreements with private industry, supports the investigation, development and dissemination of information and technology directed toward the reduction of shipbuilding and ship operating costs, and improvement of ship safety and performance. Direct cost-sharing by industry in research and development activities currently represents approximately 25 percent of total project costs. Specific accomplishments in this program include:

- Implementation in five shipyards of a shipbuilding automation system for automatic and highly accurate control of steel plate cutting and preparation of structural plans.

- Improved welding techniques in ship construction.

- Development of a main propulsion planetary gear system with contra-rotating propellers for greater propulsion efficiency.

Adaptation of satellites to commercial maritime communications and navigation.

Development of a highly advanced maritime operations simulator for developing standards for ship design, operation and safety and for establishing plans for improving harbor and terminal facilities.

OPERATIONS AND TRAINING

Three activities within the Operations and training appropriation require separate authorization; these are the National Defense Reserve Fleet, the Merchant Marine Academy, and the State Marine Schools programs. The remaining activities in Operations and training are authorized by Section 209(a) of the Merchant Marine Act, 1936, as amended.

NATIONAL DEFENSE RESERVE FLEET

The primary objective of the National Defense Reserve Fleet program is to assure the maintenance of a sufficient number of effectively preserved ships to supplement the active fleet in time of war or national emergency. The merchant ships in the reserve fleet are an important national asset since they are the only source of surge breakbulk shipping capacity to meet national emergency sealift requirements.

A major new program is being initiated in 1977 to establish a Ready Reserve Fleet—a select group of ships in the NDRF which will be upgraded and maintained in a readiness posture to meet Department of Defense contingency plans for supplementary sealift within the first 5 to 10 days of a commitment of American forces or material. Navy will fund the cost of upgrading ships selected for this program, and the Maritime Administration will fund the cost of maintaining the ships at a level to permit their rapid reactivation.

MARITIME TRAINING

The Maritime Administration supports quality education and training for the primary sources of officers for the American merchant marine at the Merchant Marine Academy at Kings Point, New York and at State Marine Schools. Over the past five years, the Academy and the State Marine Schools have graduated a total of about 2,500 persons qualified for service as deck or engineering officers. Six States currently participate in the State Marine Schools program: California, Maine, Massachusetts, Michigan, New York and Texas. These institutions and the Federal Academy provide the education and training necessary to maintain the high quality of officers in the American merchant marine.

I would like to turn to the specific authorization request for 1978. The appropriation authority requested for the 1978 ship construction program is \$135,000,000.

Current projections indicate that construction-differential subsidy levels of \$264,811,000 in 1977 and \$233,000,000 in 1978 will be needed to support the demand for new ships and ship conversions. Funds available in 1977 will provide for the total 1977 program and will provide \$98,000,000 applicable to the 1978 program. The requested appropriation level is needed to complete the funding of the 1978 program. Subsidized construction in 1978 is projected for seven ships including three liquefied natural gas carriers, one barge carrier (LASH), one containership, and two breakbulk/containerships.

The liquefied natural gas carriers in the 1978 program are expected to be ordered in connection with a liquefied natural gas project now under consideration by the FPC. FPC hearings are complete and approval is expected before the end of fiscal year 1977. The barge carrier represents the fourth ship in a replacement obligation of an operator under operating-differential subsidy agreement. The first three ships in this project are expected to be contracted in 1977. The containership and the breakbulk/containership projects also represent replacement obligations under existing ODS agreements.

The appropriation authorization requested for operating-differential subsidies is \$372,109,000.

Although \$403,721,000 was authorized for the 1977 program, only \$388,000,000 was appropriated. This change was effected by the Appropriations Subcommittee based on the high level of idle ship years which occurred during 1976.

and on the projection that idle ship years would continue to be slightly higher than projected during 1977.

Subsidized U.S.-flag ship operations planned for 1978 include 4.6 ship years for passenger and passenger/combo ships, 163.7 ship years for general cargo ships and 34.1 ship years for bulk ships, including 13.3 ship years for the carriage of U.S.S.R. purchases of grain during the year. The 1978 purchases are estimated at a total of 6.0 million metric tons—the minimum purchase set forth in the current U.S./U.S.S.R. Grain Purchase Agreement.

The requested authority reflects a decrease of 10.3 ship years and \$15,891,000 from 1977 levels. This is primarily the result of the reduction in ship years needed to carry the U.S. share of 1978 Soviet grain purchases and the termination of subsidy for two passenger ships at the end of their 25-year economic lives. U.S.-flag ships are projected to carry a total of 3.9 million metric tons in the U.S./Soviet grain trade during 1977. This total is based on the one-third U.S. share of 1977 Soviet purchases of eight million metric tons, plus 1.2 million metric tons due U.S.-flag ships from previous purchases. In 1978, U.S.-flag ships will carry the one-third U.S. share of Soviet purchases projected at six million metric tons. This reduced level of U.S.-flag carriage results in a reduction of \$19,177,000 from 1977 funding levels. The two Pacific Far East Line passenger ships, *SS Mariposa* and *SS Monterey*, will reach the end of their 25-year economic lives during fiscal year 1978. Under section 605(b) of the Merchant Marine Act of 1970, these ships will no longer be eligible to receive operating subsidy. The reduction from 1977 levels is \$7,790,000.

Other offsetting factors reflected in the 1978 authorization request are: (1) the escalation of U.S. and foreign operating costs over 1977 costs which results in an increase in subsidy funds of \$8,782,000; (2) the annualization in 1978 of bulk ships and general cargo ships entering the fleet during 1977 which results in an increase of \$3,300,000; and (3) the reduction in balances due for payment of prior year subsidy obligations which results in a decrease of \$1,006,000.

Appropriation authority requested for research and development in 1978 totals \$18,325,000. This represents a decrease of \$175,000 from the appropriation enacted for 1977.

The 1978 funding level will permit the continuation of the 1977 program at approximately the same level with some adjustments for individual projects as they proceed toward implementation or completion. In 1978, the competitive nuclear ship program and the ship operations information system project will be phased out. Increased emphasis will be directed to shipboard automation, the ship operations research and simulation facility (CAORF), and analysis of advanced ship systems including design work on an emergency mobilization ship.

The appropriation authority requested for National Defense Reserve Fleet expense totals \$5,137,000.

The increase of \$577,000 over 1977 in this program results from three primary changes: budgetary integration of the ship transfer activity into this program; higher reserve fleet operating cost due to increased costs of personnel, supplies, utilities, and repair and maintenance for the fleet's service craft; and implementation of the joint Maritime Administration—Navy program to improve the reactivation response time for selected ships in the reserve fleet, the designated ships to form a Ready Reserve Fleet.

The 1978 appropriation authority requested for the Merchant Marine Academy is \$14,633,000.

This represents an increase of \$1,591,000 over the level of funds appropriated for this program in 1977. Of this increase, \$753,000 is for higher operating costs, reflecting increases in personnel, utilities, and support contract costs. The remaining increase of \$838,000 is almost totally associated with the modernization program.

The principal project in the 1978 modernization program, will be the expansion and renovation of Fulton Hall. This building houses the Department of Engineering and the Department of Mathematics and Science, and contains the majority of the Academy's laboratories. Phase I of this project, for which funding is requested in this budget, will provide for the addition of a new wing to the existing building. The new wing will house ten laboratories and provide additional classroom and office space. Funding for Phase II will be requested in 1979 to renovate

the existing building, and Phase III, planned for 1980 funding, will provide the furnishings required to complete the project.

The question of introducing charges for tuition, room and board at the Academy is still under consideration. A proposal to effect these charges is included in the 1978 budget. However, the proposal is still under review in the Executive Branch.

Appropriation authority requested for State Marine Schools in 1978 totals \$4,020,000.

This is an increase of \$279,000 over the funds appropriated for this program in 1977 and continues the 1977 program with additional funds for increased costs of maintenance and repair of schoolships.

This completes my prepared statement. I will be pleased to address any questions you may have.

[The following information was referred to on p. 19:]

NATIONAL BENEFITS ASSOCIATED WITH HAVING A U.S.-FLAG MERCHANT MARINE

INTRODUCTION

The Maritime Administration endorses, and has done its best to follow, the policies stated in the Merchant Marine Act, 1936, as amended in 1970. Primarily, the benefits of the merchant marine relate to the national defense and security of the United States, and to the contributions that the industry and the maritime programs provide to the general economy.

As regards national defense and security, the CDS program since 1970 has produced, and the ODS program supported, high percentages of ships useful for defense, and all of the ships supported by subsidy contribute to the national security. However, the U.S.-flag fleet, with expected foreign-flag augmentation, is marginally adequate to meet major war shipping needs, and we believe there is need for further maritime industry progress in this area.

The economic contribution of the maritime program, representing the totality of its separate contributions in trade, employment, and balance of payments is highly significant and should not be discounted. Furthermore, the subsidized industry generates tax revenues that would not be generated without it, and this also makes a contribution. Finally, the U.S. maritime program stands as an effective counter to ambitious Soviet moves in the area of international shipping.

NATIONAL DEFENSE AND NATIONAL SECURITY BENEFITS

The national defense and national security benefits of the U.S. maritime program can be broken out as related to major war situations, nonmobilization contingencies, fleet support operations, peacetime contributions, and the national defense ship features. These benefits are summarized as follows.

Major wars—mobilization conditions

Direct support of military action:

During last three major wars, U.S. merchant marine carried approximately 400 million tons of military cargo support, and this doesn't include the number of U.S. troops that were also transported.

In the Vietnam Conflict about 97 percent of cargoes carried in support of military operations moved in merchant ships.

Effectiveness of national security support carriage has saved countless American lives and lives of our allies.

Adequate merchant fleet at a war's beginning can help shorten war and save lives. Also cost savings could be estimated based on average cost per month (for example, WW II cost has been estimated around \$5 billion per month).

Under mobilization conditions the entire U.S.-flag merchant marine is subjected to requisitioning by the Secretary of Commerce.

Essential materials can be imported to support the U.S. economy in wartime through U.S.-fleet efforts.

Merchant ship construction industry acts as a ship construction mobilization base resource for critical tasks in early months of major war, and to construct replacements and buildup in extended period of hostility.

Ship construction industry also aids in repair of battle damage to U.S. naval and merchant ships.

Nonmobilization contingencies

Involves such actions as resupply of an ally and the deployment and resupply of relatively smaller U.S. forces.

Existence of a U.S.-flag fleet provides early ship availability in non-mobilization contingencies.

U.S.-flag fleet augments demand for shipping beyond capacity of MSC controlled fleet.

Sealift Readiness Program (SRP)—carriers in the regularly scheduled berth-line trades who wish to move DoD cargo in peacetime must commit half of their ships for diversion to military support operations in the event of a contingency, with specific commitments time-phased after in initial callup.

National Defense Reserve Fleet (NDRF)—serves in callup periods such as Korean and Vietnam Wars. NDRD is also a source of shipping to help meet non-military emergency requirements.

The merchant ship construction industry is also involved in non-mobilization contingencies.

U.S. naval fleet support operations

U.S. merchant vessels are capable of serving as naval auxiliaries, both in contingency operations and under peacetime conditions.

Peacetime contribution

Existence of U.S.-flag merchant fleet reduces threat from leverage that can be exerted by groups of maritime nations that might be unsympathetic to U.S. objectives or desirous of obtaining political advantage.

This sort of threat supports reasoning for sabotage laws in most countries. U.S. is critically dependent on its domestic shipping and this will increase as trade increases, for example, as Alaskan oil production grows. We would be particularly vulnerable if we had to be dependent on foreign-flag shipping in our domestic trades.

Existence of U.S. tanker fleet resources help reduce the threat of Arab oil embargo and their efforts toward control of a significant part of the world tanker fleet.

National defense features on merchant vessels

The costs of National Defense Features (NDF) are funded in the Maritime Administration budget.

This NDF program has led to upgrading of ship design standards with the result that many characteristics, which were one peculiar to the NDF program are now conventional elements of merchant ship design.

ECONOMIC BENEFITS

The economic contribution of the maritime industry is the sum of its contributions in such areas as trade, employment, and balance of payments. In addition, some of the tax revenues generated by the maritime program can be considered as a legitimate marginal offset to its cost. The industry also serves a national purpose in the context of the developing competitive economic relationship between the Free World and the Communist nations. Emphasis must be placed on the totality of the economic contribution. None of the separate economic elements, regardless of its importance, is advanced in itself as an exclusive justification for support of the maritime program.

*Foreign trade**Deterrance to rate discrimination*

U.S.-flag participation in the carriage of our foreign trade helps assure the maintenance of fair and reasonable freight rates.

The problem of potential discrimination in ocean transportation, a matter of concern to the Federal Maritime Commission, is particularly apparent in the trades involving nations with centrally controlled economies.

Developing countries are currently providing another kind of challenge. Regardless of their economic systems, many less-developed countries are moving toward postures which could result in discriminatory treatment of U.S.-foreign commerce and many are seeking to acquire or enlarge existing national-flag merchant fleets. Among the developing nations actively expanding their com-

mercial fleets are the major oil-producing countries, particularly those in the mid-East.

Movements toward bilateral cargo division between trading partners will substantially lessen competition by limiting the participation of third-flag carriers. Under such circumstances, nations without merchant fleets could be severely disadvantaged in their trade relations with other nations.

Aid to trade expansion

By assuring the continuation of fair and reasonable ocean freight rates and reliable service, U.S. shipping makes a direct contribution to the maintenance and expansion of U.S. foreign commerce.

Increasing export sales are reflected in employment opportunities, higher corporate profit levels, and economies of larger scale production which help promote economic efficiency.

U.S. Maritime Technology as a Stimulus to International Commerce

The U.S. had made a major contribution in the advancement of world shipping technology in the decades since World War II. With the Mariner Class freighter, designed and built under MarAd auspices, the United States led the way in advancing cargo ship speeds to 20 knots from the old 15 knot norm. Since that development of the fifties, virtually every major advance in cargo ship design has been pioneered by our naval architects, builders, and carriers, including the containership, the Lighter-Aboard Ship (LASH) barge carrier and the Sea Barge ship, not to mention the development of the first liquefied gas carrier and the advancement of roll-on/roll-off technology.

As the worldwide shipping industry has followed our lead in many of these areas, commerce in general has benefited tremendously, and U.S. commerce continues to benefit.

Employment impact of U.S. maritime program

The maritime subsidy programs support a significant number of jobs in the ship construction and operating industries. It is important to recognize that many of the individuals who hold these jobs could be expected to experience unusual difficulty in finding and retaining permanent employment elsewhere. Also, many of the workers employed in the industry possess skills not readily transferable to other sectors of the economy.

During 1976 (as of 10-1-76), the average number of seagoing billets aboard U.S.-flag merchant ships was approximately 20,400. Since an average of 2.2 persons are employed to fill each seagoing job, U.S.-flag merchant ships provided seagoing employment for about 49,000 workers in 1976. In addition, we estimate that the ship operating industry employs about 16,000 workers in shoreside jobs. This totals 65,000 workers.

In 1976 (as of 8-1-76), about 73,000 production workers were employed in commercial shipyards capable of constructing vessels 475 feet by 68 feet or larger. Well over half of these jobs were provided by non-Navy commercial projects. In addition, these same yards employed about 22,000 people in managerial and clerical positions. This totals 95,000 workers.

United States shipbuilding is a particularly important source of jobs for minority groups and is a growing source of jobs for women. In 1969 nearly 20 percent of shipyard employees were members of minority groups. In 1976 the proportion was over 28 percent. In 1976 minority employees accounted for about 30 percent of the skilled workforce compared to 17.7 percent in 1969. Minority employment in this category increased from about 10,000 workers to over 17,000 workers. Also, minority white-collar representation increased from 4.1 percent in 1969 to 10.5 percent in 1976. In addition, in 1976 about 3,200 women held production jobs in the shipyards. In 1971, only 224 women were counted among those holding production line jobs. Minority businesses have also been among the beneficiaries of our shipbuilding programs. In fiscal year 1976, an estimated 11.0 million dollars in contracts were awarded to such firms.

Balance of payments (BOP) impacts of U.S. maritime program

The impact of the merchant fleet on the U.S. balance of payments can be calculated in terms of the net differences in our international accounts that result from building ships in the United States and operating them under Ameri-

can registry, i.e., by defining the extent to which the balance of payments differ from what it would be in the absence of such U.S.-flag ships.

The estimated effects of the merchant fleet on the balance of payments are substantial—approximately \$350 million in 1973, increasing to nearly \$1 billion in 1980. These estimates are reasonably representative of the dollar magnitudes involved. They are consistent in magnitude with Treasury Department estimates, calculated in a different way, of \$700 million a year for the next few years.

Tax revenues impact of U.S. maritime program

The tax contributions by those segments of the industry under the MarAd program is the sum total of taxes paid by: shipyards on that portion of work performed under MarAd contract; shipyard employees working on subsidized vessels; subsidized operators; and seagoing personnel engaged on vessels receiving ODS. The actual amount of taxes paid by corporate interests for these endeavors may be somewhat less than the potential tax yield figure. In addition, it is impossible to estimate accurately the net tax revenue effect which would result from the closing down of these industries, inasmuch as some employment alternatives would no doubt be available. However, in the face of the current unemployment and a record of chronic unemployment in areas where many U.S. shipyards are located, it seems likely that the net revenue loss, if the program were discontinued, would be substantial.

The total for both corporate and individual income taxes generated by all segments of the maritime industry has been estimated at approximately 650 million dollars, including both corporate and individual income taxes.

In the discussion of taxes, the above estimates should be reduced by certain tax benefits that accrue by law to the maritime industry. Under the Merchant Marine Act of 1936, ship owners are allowed to shelter a portion of their taxable income resulting from the operation of their ships by restricting such income to a capital construction fund (CCF) to be used for the future purchase of vessels. The annual revenue loss of these provisions has been estimated at about \$40 million for fiscal year 1976. If reducing the estimated CCF tax revenue loss of \$40 million from the above estimate, the net taxes generated becomes about \$610 million.

Table 1.—Summary: Subsidy Costs and the Benefits Associated With Having a U.S.-Flag Merchant Marine

[All figures stated in millions of dollars]

Subsidy cost (See table 2 for breakout of MarAd appropriations):	
Construction differential subsidy (based on average (CDS) appropriation for past 5 fiscal years)-----	\$176.0
Operating differential subsidy (based on average (ODS) appropriation for past 5 fiscal years)-----	312.7
Total subsidy costs-----	<u>\$488.7</u>
Benefits:	
National defense and national security benefits ¹ -----	
Major war-mobilization conditions.	
Nonmobilization conditions.	
U.S. naval fleet support operations.	
Peacetime contributions.	
National defense features.	
Economic benefits:	
Foreign trade ¹ -----	
Deterrence to rate discrimination.	
Aid to trade expansion.	
U.S. maritime technology as an stimulus to international commerce.	
Employment impact (65,000 workers)-----	
Balance of payments impact-----	700.0
Tax revenues impact-----	610.0

¹ These benefits—national defense and national security benefits, and foreign trade benefits—were discussed in the preceding pages in terms of qualitative values. We have not attempted to quantify their value.

TABLE 2.—MarAd APPROPRIATIONS FOR FISCAL YEARS 1974-78¹

[In millions of dollars]

	1974	1975	1976	1977	1978	Total	Average
Subsidy appropriations:							
CDS.....	275.0	275.0	195.0	-----	135.0	880.0	176.0
ODS.....	244.5	242.8	315.9	388.0	372.1	1,563.3	312.7
Total subsidy.....	519.5	517.8	510.9	388.0	507.1	2,443.3	488.7
Other MarAd appropriations:							
R. & D.....	19.0	25.9	12.0	18.5	183.	93.7	18.7
O. & T.....	36.8	41.2	45.0	48.2	53.0	224.2	44.8
Total other appropriations.....	55.8	67.1	57.0	66.7	71.3	317.9	63.5
Total appropriations.....	575.3	584.9	567.9	454.7	578.4	2,761.2	552.2

¹ Transition quarter, from July 1, 1976 to Sept. 30, 1976, was not included in developing the above 5-year averages.

[The following information was subsequently received for the record:]

Question 1. What is the man-year employment projection for the shipbuilding program contemplated by the CDS funds requested for fiscal year 1978?

Answer. The fiscal year 1978 Maritime Administration Ship Construction program anticipates the construction of seven new vessels. These include three 125,000 m³ LNG ships, one LASH barge carrier, one containership and two break-bulk/container ships. It is estimated that this shipyard work will generate 10,550 equivalent man-years of direct production and support employment for workers in shipyards. In addition, we estimate that 7,600 equivalent man-years of employment will be generated in those industries that manufacture a substantial number of vessel components. This direct employment will make other jobs possible in tertiary industries that supply goods and services to these shipyard and supply industry workers.

Question 2. How many man-years of employment will be generated by U.S.-flag ship carriage of Soviet grain purchases?

Answer. The 62 voyages projected for fiscal year 1978 will translate into about 600 jobs or employment for 1,200 seamen.

Question 3. Are the U.S.-flag grain carriers obtaining any backhaul cargoes? If so, is the revenue generated therefrom factored into the rate and/or subsidy payment?

Answer. Approximately 12 percent of the U.S.-flag ships which participated in the Soviet grain trade during fiscal year 1976 and the Transition Quarter obtained backhaul cargoes to the United States. While U.S.-flag ships in this trade are not guaranteed backhaul cargoes, most of the ships participating in the 1977 program have obtained backhaul cargoes.

The subsidy which is provided to operators participating in the Soviet grain trade is based on the difference between United States and foreign costs of operating comparable vessels in that trade. The subsidy contracts with these operators currently make no provisions for alteration of subsidy based on the acquisition or nonacquisition of backhaul cargoes. However, if the revenues generated as a result of participation in the Soviet grain trade yield excessive profits to the U.S.-flag operators, the subsidy contract is subject to renegotiation to eliminate the excessive profits under the Renegotiation Act of 1951, as amended (50 USC App 1213). No operator participating in this trade to date has been determined to be making excessive profits as a result of this participation. Consequently, no reductions or alterations of subsidy have been affected.

Question 4. Are the Soviet and third flag grain carriers obtaining any backhaul cargoes?

Answer. The Maritime Administration does not possess data concerning the backhaul cargoes of foreign-flag ships engaged in the Soviet grain trade. Soviet flag vessels do not obtain fixtures through commercial competition, as in the United States, but are assigned voyages and routes, which the Russians consider to be proprietary information. The third flag ships in the grain trade are under time-charter to the U.S.S.R. and these vessels, also, are routed per Soviet direc-

tion and do not make public reports of their voyage fixtures. In this situation, accurate monitoring of these cargoes is not possible.

Question 5. What is the basis for foreign to foreign trading restrictions? Is it statutory or administrative?

Answer. The Merchant Marine Act of 1936, as amended, provided the statutory basis for foreign-to-foreign trading restrictions. Section 601(a) of the Act limits operating-differential subsidy to vessels operating in an essential service in the foreign commerce of the United States. Section 211(b) of the Act indicates that bulk cargo carrying services are to be considered essential "... whether or not operating on particular services, routes or lines." In addition, Section 905 of the Act permits "in the case of liquid and dry bulk cargo carrying services, trading between foreign ports in accordance with normal commercial bulk practices in such manner as will permit U.S.-flag vessels to freely compete with foreign flag bulk carrying vessels . . ." This general statement is expanded by implementing regulations issued by MarAd which appear as 46 CFR, Part 278.

Question 6. Would you explain the modification made by the Maritime Subsidy Board permitting subsidized bulk carriers to compete for preference cargo not reserved for U.S.-flag ships operating at fair and reasonable U.S.-flag rates?

Answer. By law, at least 50 percent of government impelled cargoes must be transported on U.S.-flag vessels. These cargoes are carried at rates which are determined to be fair and reasonable and are sufficient to cover U.S. costs of operation. The remainder of the cargo, or foreign-flag portion, is carried by foreign-flag vessels at world market rates.

The Maritime Subsidy Board action permits subsidized U.S.-flag bulk ships to transport what has been considered the foreign-flag portion of government impelled cargoes at rates comparable to the rates offered by the foreign-flag ships. This does not reduce the amount of cargo normally reserved for the U.S.-flag vessels which operate at fair and reasonable rates. As a result, the subsidized U.S.-flag ships participate in the carriage of government impelled cargoes at no additional cost to the Department of Agriculture. Previously, the excess of such cargoes over the amount carried by U.S.-flag ships at fair and reasonable rates was carried exclusively by foreign-flag ships.

Question 7. What specific steps is MarAd taking to assure that all agencies are complying with government cargo requirements?

Answer. The Maritime Administration strives to assure agency compliance with cargo preference requirements in a number of ways. These include:

Assisting agencies in developing procedures for compliance with the 1954 Cargo Preference Act (Public Law 664).

Providing these agencies with consultation and advice on shipping matters. Informing all involved parties, including government agencies, carriers, shippers, freight forwarders and foreign embassies, of cargo preference requirements.

Monitoring agency shipments for cargo preference compliance. An expanded computer system, the National Cargo Shipping Analysis System, is currently being instituted to process Agency shipping reports and facilitate monitoring.

Establishing preference shipping requirements for programs that have previously been executed without cargo preference provisions.

Question 8. Is it feasible to base operating subsidy on a rate of return on investment basis rather than a parity concept?

Answer. The idea of a subsidy based on return on investment would appear to have merit, but there are certain major difficulties which would make it difficult to implement. A primary difficulty arises from the fact that much of the fleet is covered by leveraged lease arrangements. This creates major problems and probable inequities in the establishment of an appropriate return on investment for a company's assets. Other problems include determination of the value of the owned assets in the fleet and determination of appropriate levels of return. Finally, if a ROI program were to guarantee a rate of return, it would tend to destroy the incentive to conduct the most efficient operations.

Question 9. Why is operating subsidy extended to U.S.-flag operators in liner trades served by nonsubsidized U.S.-flag operators?

Answer. The primary reason that subsidized and nonsubsidized operators compete on the same trade routes in some instances is that some operators simply prefer the flexibility of nonsubsidized operations. By the nature of the subsidy contract, the ODS recipient incurs certain obligations such as minimum-maximum sailing schedules, required ports of call, and vessel replacement obligations. None of these would apply to the nonsubsidized operator.

Question 10. Does Pacific Far East Line desire to continue to operate the *Mariposa* and the *Monterey* with subsidy?

Answer. The Maritime Administration has thoroughly considered the issue of continued operation of the *Mariposa* and the *Monterey* as a part of the preparation of the fiscal year 1978 budget. The final decision of the Agency on this matter is to terminate subsidy on these vessels. Pacific Far East Line has not agreed to the elimination of subsidy on these vessels. The operator has applied for a long-term ODS agreement that would cover both vessels. The Maritime Administration staff is currently reviewing this application.

Question 11. Do you have the stationary authority to continue to subsidize these vessels for a short period, 3 or 5 years?

The *Mariposa* and the *Monterey* will reach the end of their economic lives (25 years) during fiscal year 1978. The Maritime Administration is required to terminate their subsidies by the Merchant Marine Act of 1936, Section 605(b). Some exceptions to Section 605(b) have been made in cases where an agreement exists for the replacement of the over-age ships. However, Pacific Far East Line has not proposed a replacement agreement for the two vessels. Thus, the decision to eliminate subsidy is based on the requirement of Section 605(b) and the absence of any replacement agreement.

Question 12. Must the replacement agreement contemplate the same type ships?

Answer. The Maritime Subsidy Board must determine that a replacement ship is the equivalent of, or an improvement over, the ships to be replaced. Although a new vessel design or technology can be used, the replacement ships must provide for carriage of at least the same percentage of the trade as was carried by the ships which are replaced. In the case of the *Mariposa* and the *Monterey*, replacement of the passenger vessels with liner cargo vessels would not provide for the passenger trade currently served by these ships.

Question 13. Are the female Kings Point graduates eligible for Navy Reserve commissions since their training is for deck and engine officers?

Answer. Yes; female Kings Point graduates are as eligible as male graduates to be offered reserve commissions in the Navy.

Question 14. Has the decline in marine officer billets on U.S.-flag oceangoing ships had any impact on Kings Point enrollment or on the number of state school cadets eligible for subsistence payments?

Answer. There has been no impact on Kings Point enrollment or on the number of state school cadets eligible for subsistence payments. The trend in demand for graduates from these schools is upward mainly due to attrition of the existing work force and the demand for graduates is expected to reach a level equal to or greater than the supply in the early 1980's.

Question 15. If subsidized tankers are permitted to operate in the Alaska oil trade, what incentives will there be to build strictly for Jones Act trade?

Answer. The shipping requirement which generates the need to employ tankers built with CDS in the Alaska oil trade is expected to last only for a short time. This temporary requirement results from the need to move surplus West Coast oil to other domestic markets. Until such time as current plans to move this oil by one of several pipelines are realized, it will be necessary to transport the surplus oil by tanker via the Panama Canal. It is anticipated that the pipelines will become operational by the early 1980's. Inasmuch as this requirement is only of a short-term nature, it is not likely to provide any incentive to build ships for the Alaska trade. Stated requirements for the use of subsidized tonnage relate only to this short-term surge, which would not of itself constitute a basis for new construction.

Under the Merchant Marine Act, 1936, as amended, the Secretary of Commerce may allow a ship which was built with CDS to operate in the domestic trades for a period of up to six months in any year if it is deemed necessary or appropriate to the purposes of the Act. The operator of the subsidized tanker must repay a prorata share of the construction-differential subsidy. This share represents the portion of the economic life of the vessel which the vessel is operated in the domestic trades.

Historically, this provision has not been invoked on a large scale basis. The only CDS paybacks resulting from domestic operations have resulted from the carriage of small amounts of cargo in the domestic trades as an incidental component of operations on a subsidized trade route.

The limitation on the time a vessel built with CDS can serve in the domestic trades and the requirement to repay a prorata share of CDS can serve to reduce the operational and economic attractiveness of placing CDS-built vessels in such trades. As a result, it appears that if an operator is committed to the Alaska oil trade, there is no disadvantage to the construction of ships for that trade created by the possibility of the temporary entry of CDS built vessels into that trade.

The Maritime Administration recognizes that some arrangements must be made in order to properly administer a subsidy repayment (or cessation) of the scale necessary to meet the demands of the Alaska trade. As a consequence, MarAd has published a proposed rulemaking setting forth procedures for processing such cases.

Question 16. Are the oil companies engaged in a building or chartering program for this trade, or are they laying back so they can come in with Jones Act waiver requests? If the latter is true, what can MarAd do about that?

Answer. The oil companies are engaged in a building and chartering program for the Alaska oil trade. Three oil companies will be carrying well over 90 percent of the oil: Sohio (over 50 percent), Exxon (over 20 percent) and Arco (over 20 percent). MarAd feels that Exxon and Arco are presently committed to sufficient tonnage to carry their share of the trade, while Sohio is committed to perhaps 80-85 percent of its requirements. It is expected that adequate arrangements can be made for the rest of the required tonnage in order to avoid Jones Act waiver requests.

An extensive MarAd analysis indicates that there is sufficient U.S.-flag tonnage available to carry this oil.

Question 17. Have any ODS recipient operators achieved wage cost increases lower than the national wage index?

Answer. Yes. The annual rate of increase in offshore maritime wages has been less than the index twice since the wage index system was established in 1970. Further, the seven-year experience with this system indicates a trend towards rates of offshore maritime wage increases more closely approximating those of the index.

Question 18. What is the overall record of this system?

Answer. The following table compares the rate of increase in offshore maritime wages and benefits with the index computed by the Bureau of Labor Statistics since establishment of the wage subsidy index system.

[In percent]

Period:	Offshore maritime	BLS index	Difference
1970-71	12.6	9.95	+2.65
1971-72	9.5	9.6	-.01
1972-73	11.3	9.15	+2.15
1973-74	9.9	8.45	+1.45
1974-75	10.14	8.95	+1.19
1975-76	9.11	9.95	-.84
1976-77	9.71	8.1	+1.61

Question 19. Are manning levels re-calculated for ODS ships built prior to 1970?

Answer. Manning levels for all ships receiving operating-differential subsidies are reviewed, and must be deemed fair and reasonable for the vessel to be eligible for subsidy. To date, reductions totalling 30 crewmen aboard 90 ships built prior to 1970 have been made.

Question 20. Have any actions been undertaken under Section 603(b) with respect to bulk cargo vessels?

Answer. Yes. Pursuant to the provisions of Section 603(b) of the Merchant Marine Act, 1936, as amended, the Maritime Subsidy Board has granted subsidy for several additional items of expense for ships engaged in the carriage of Soviet grain purchases. In addition to subsidy for wages, maintenance and repair not compensated by insurance, and insurance premiums and deductibles which are granted to general cargo ships, subsidy is provided for subsistence of officers and crew; stores supplies and expendable equipment; fuel; certain other vessel expenses; and vessel depreciation and interest expense attributable to vessel indebtedness for those vessels not built with the assistance of construction sub-

sidy. The unique nature of bulk operations vis a vis general cargo liner operations and the comparative significance of these additional expenses requires the provision of subsidy to make the cost of operating U.S.-flag bulk ships in this trade competitive with foreign operators.

Question 21. Is ODS a need-related system or does it merely try to achieve foreign-cost parity?

Answer. Operating-differential subsidy is designed to offset the higher cost of certain allowable U.S. ship operating costs vis a vis the costs of those same items if the ship were operated under the flags of substantial foreign competitors. As such, it is a parity system. It gives no consideration to profit levels, return on investment or any other measures. Subsidy is provided only upon application by the prospective recipient to the Maritime Subsidy Board and upon the determination by the Board that the granting of subsidy is consistent with the purposes, intent and requirements embodied in the Merchant Marine Act, 1936, as amended.

Question 22. Are capital costs as well as operating calculated in ODS determination?

Answer. Capital costs are generally not included in the computation of operating-differential subsidies. The only exception to this is the inclusion of interest expense attributable to vessel indebtedness and vessel depreciation in the calculation of subsidy for carriage of Soviet grain purchases.

Question 2. What other efficiency incentives besides the wage index exists in ODS? Should additional ones be incorporated?

Answer. The ultimate incentive which spurs the subsidized operators to achieve greater efficiency is profit. This criterion tends to override all other incentives, for it is the factor which pulls together all other company measures of success. Any efficiencies, cost reductions or productivity increases must result in increased profit if they are to be considered to be effective.

It is the policy of the Maritime Administration to preserve the basic parity concept with regard to operating-differential subsidies. This assures that U.S.-flag operators will be cost competitive with their foreign competitors at any given time. Wage subsidies, which account for approximately 86 percent of total subsidy, are controlled by the wage index system. The U.S. foreign cost differential and resulting need for subsidy for the other items (maintenance and repairs; hull and machinery; and protection and indemnity insurance) is a direct result of higher U.S. costs for shipbuilding, ship repair and wages. As efforts to reduce these cost differentials become effective, subsidy will be reduced. To this end, the Maritime Subsidy Board has determined in all recent subsidy contract renewals that the differential for maintenance and repairs and hull and machinery insurance is no longer significant. Accordingly, it has eliminated subsidy for these items in those contract renewals.

Question 24. What is the current U.S.-flag tonnage in container ships, Ro-Ro, and LASH/SEABEE?

Answer. As of December 31, 1976, the deadweight tonnage of these portions of the U.S. merchant fleet was as follows:

	[In thousands of tons]
Containerships	1,733.5
Ro-Ro	205.1
LASH/SEABEE	809.2
Total	2,747.8

Question 25. What is the current U.S.-flag liner carrying capacity?

Answer. As of December 31, 1976, the privately owned U.S.-flag liner fleet totaled 4,939.8 thousand deadweight tons, in the following vessel categories:

	Number of ships	Deadweight (thousand tons)
Containerships.....	105	1,733.5
Ro-Ro.....	13	205.1
Lash/Seabee.....	23	809.2
Container/Ro-Ro.....	4	52.8
Partial container.....	41	611.5
Breakbulk.....	113	1,517.7
Total.....	299	4,939.8

Question 26. Based on the most recent available trade data and assuming our vessels operate on their current routes, what percent of our foreign commerce is our liner fleet capable of carrying?

Answer. In 1976, the U.S. liner fleet, operating in the normal trading patterns, carried 15.4 million long tons which represented 30.8 percent of the total liner tonnage of nearly 50 million long tons which moved in the U.S. oceanborne foreign trade in 1976. It is roughly estimated that in 1976 the U.S. liner fleet could have carried an additional 15 percent of cargo if it had been fully utilized. Thus, if all U.S. liner vessels were full and down, that fleet would be capable of carrying about 17.7 million long tons which would have represented about 35 percent of the liner trade.

Question 27. What is the latest volume of bulk cargo imported into the U.S.?

Answer. Dry and liquid bulk cargoes imported into the U.S. during 1976 totalled 420.2 million long tons.

Question 28. What percent are U.S.-flag bulk ships capable of carrying? Please state petroleum products in a separate category.

Answer. The U.S.-flag bulk fleet, as of December 31, 1976, consisted of 254 tankers of 10.5 million DWT and 16 dry bulk carriers of nearly .37 million DWT. At that time 49 of the tankers and 4 of the dry bulk carriers were operating in the foreign trades.

In 1976, the portion of this fleet operating in the foreign trades carried 10.1 million long tons or 3.1 percent of our petroleum imports and 1.4 million long tons or 1.7 percent of our dry bulk imports. It is likely that some of the tankers in the foreign trade were carrying dry bulk products. Further, the fact that in 1976 a number of tankers were laid up resulting from a lack of cargo at appropriate rates, it can be assumed that the actual carrying capacity of that fleet is somewhat greater than the amount of cargo which was carried in 1976.

Determination of what the entire fleet could actually carry is hampered by substantial variations in trading patterns and cargo types. However, based upon the assumption that all vessels would be operating on a fixed route, a delivery capacity can be calculated. In this manner, assuming a representative 10,000-mile round trip route, the 254 tankers would have an annual delivery capacity of 115 million long tons or 35.2 percent, and the 16 dry bulk carriers would have a delivery capacity of 2.5 million tons, or 2.8 percent.

Question 29. I have seen figures that Soviet liner cargo totals less than 1% of world liner tonnage and that their liner carrying capacity exceeds 9% of world liner capacity, are those accurate?

Answer. In 1975 Soviet liners carried 12 million tons or about 2 percent of the world total of liner trade. The Soviet general cargo fleet has increased from 1969 when it comprised 8.2 percent of the world general cargo fleet, to 10.5 percent in 1975. This represents an absolute increase in the size of the Soviet liner fleet from 7.8 million DWT in 1969 to 10.7 million DWT in 1975.

Question 30. What flag carriers are predominant in U.S. trades?

Answer. The most recent data on the flag of registry of the predominant carriers in the liner service of the U.S. oceanborne foreign trade appears in the table below.

U.S. OCEANBORNE FOREIGN TRADE INDIVIDUAL FLAG OF REGISTRY PARTICIPATION, LINER SERVICE, CALENDAR YEAR 1975

Rank and flag of vessel	Percent of total	Percent of imports	Percent of exports
1 United States.....	32.2	31.5	32.7
2 United Kingdom.....	8.1	8.6	7.9
3 Germany (West).....	7.6	7.6	7.6
4 Japan.....	6.9	7.1	6.6
5 Liberia.....	5.3	6.7	4.2
6 Norway.....	4.8	4.7	4.8
7 Netherlands.....	3.0	2.7	3.2
8 Greece.....	2.9	3.4	2.6
9 Sweden.....	2.7	2.7	2.8
10 U.S.S.R.....	2.4	2.8	2.1

Petroleum imports, calendar year 1975

<i>Rank and flag of vessel</i>	<i>Percent of imports</i>
1. Liberia -----	43.50
2. Greece -----	11.16
3. Panama -----	7.69
4. Norway -----	5.94
5. United Kingdom -----	5.29
6. United States -----	4.44
7. Italy -----	3.29
8. Germany (West) -----	2.38
9. Netherlands -----	2.07
10. Japan -----	1.88

Question 31. Are all carriers, regardless of flag, granted LASH (canal and river) Ro-Ro (highway and container (highway and terminal) rights in the Soviet Union equal to those enjoyed by Soviet carriers? If not, does this raise legal issues under U.S. law?

Answer. Foreign carriers operating in the U.S.S.R. obtain access to Soviet-owned facilities through commercial agreements negotiated with SOVINFLLOT, the government agency responsible for such arrangements. The Maritime Administration is not aware of any problem in this regard. No. U.S.-flag liner operator has advised us of any problem in moving containers into, or out of the U.S.S.R.

Senator RIEGLE. The committee stands adjourned.

[Thereupon at 11:25 a.m. the hearing was concluded.]