Shipbuilding Plan -- Report to Congress

THE WHITE HOUSE

WASHINGTON

October 5, 1993

MEMORANDUM FOR WORKING GROUP ON U.S. SHIPBUILDING INDUSTRY

FROM: John Goodman

SUBJECT: Report to Congress

I am pleased to enclose a copy of "Strengthening America's Shipyards: A Plan to Compete in the International Market." The plan was formally submitted to Congress on October 1, and copies were sent to individual Senators and members yesterday. Please distribute to the appropriate people within your agency. Additional copies may be requested through the Office of Public Affairs at both the Department of Defense and Department of Transportation.

Thank you very much for all your efforts these past months. As I mentioned, the President has decided to keep the working group in existence to continue to monitor the issues affecting U.S. shipbuilding. I will be in touch regarding our next meeting.

STRENGTHENING AMERICA'S SHIPYARDS: A PLAN FOR COMPETING IN THE INTERNATIONAL MARKET

TO THE CONGRESS OF THE UNITED STATES:

In accordance with the requirements of section 1031 of the National Defense Authorization Act for Fiscal Year 1993 (Public Law 102-484), I transmit herewith a report entitled "Strengthening America's Shipyards: A Plan for Competing in the International Market."

The U.S. shipbuilding industry is unsurpassed in building the finest and most complex naval vessels in the world. Now that the Cold War has ended, these shipyards, like many other defense firms, face a new challenge -- translating their skills from the military to the commercial market. Individual shipyards already have begun to meet this challenge. The enclosed report describes steps that the Government is taking and will take to assist their efforts. I look forward to working with the Congress and the industry to ensure a successful transition to a competitive industry in a truly competitive marketplace.

William J. Clinton

THE WHITE HOUSE,

October 1, 1993.

EXECUTIVE SUMMARY

The National Defense Authorization Act of 1993 requires the President to develop "a comprehensive plan to enable and ensure that domestic shipyards can compete effectively in the international shipbuilding market." This report describes that plan. In approving it, the President directed initiation of those actions currently within the authority of the Executive Branch. Implementing legislation for the remaining actions will be submitted to appropriate committees of the Congress.

Background

In the past ten years, the U.S. shipbuilding designed and built the most capable naval fleet the world has ever seen. U.S. shipyards excel in the production of complex, high-quality naval vessels. With the end of the Cold War and the reduction in defense spending, large U.S. shipyards must now translate their skills from the military to the commercial market.

A major opportunity exists. The Maritime Administration estimates that 7,300 to 9,900 large, ocean-going ships will be built for international commercial market between 1992 and 2001, with three-quarters of this work after 1996.

Two steps will have to be taken for U.S. shipyards to compete successfully in the international market. First, subsidies provided by foreign governments to their shipbuilding industries, which artificially lower prices, must be ended so that there is a truly level playing field on which to compete.

Second, U.S. yards must adapt to the demands of the international commercial market. For the past decade, U.S. yards have been building ships to order for the U.S. Navy and the Jones Act fleet. At the same time, foreign yards have been building ships in series, benefiting from economies of scale and learning efficiencies. To compete, U.S. yards will have to develop and market competitive designs; fully employ modern technology and manufacturing processes; and remain competitive in wages.

The Administration's Plan

The Administration's five-part plan is intended to assist efforts already underway within the industry to compete internationally. It is a transitional program, consistent with federal assistance to other industries seeking to convert from defense to civilian markets.

Ensuring Fair International Competition The U.S. Government is seeking to level the international playing field through negotiations at the Organization for Economic and Cooperative Development (OECD) to end foreign shipbuilding subsidies. The current draft agreement prohibits direct and indirect subsidies to shipbuilders, including export credit programs with terms more generous than agreed international terms. It bans anti-competitive arrangements and domestic build requirements, except for the Jones Act. It establishes an injurious pricing discipline and binding dispute settlement procedures. January 1, 1995 is the target for its entry into force. The Administration believes that such a multi-lateral agreement is the best way to deal with the problem of foreign subsidies. To bolster these efforts, it will work with Congress on appropriate legislation.

Improving Competitiveness. Under MARITECH, the Department of Defense through its Advanced Research Projects Agency (ARPA) will share the costs of industry-initiated research and development projects to accelerate technology transfer and process change. MARITECH will focus on the manufacturing and information technologies used in ship design and production. Partnerships with customers, suppliers, and technologists will be encouraged. Projects will determine an actual market need, develop an innovative design, and define a competitive construction approach. Special consideration will be given to yards engaged in DoD and commercial work. MARITECH will be funded at $30 million in FY94, $40 million in FY95 and $50 million each year in FY96-FY98.

Eliminating Unnecessary Government Regulation. All government agencies will review and revise or eliminate any regulations that impose unnecessary burdens on the shipbuilding industry. Major activities include acquisition reform within DoD, standardization of international construction standards by the Coast Guard, and the updating of OSHA standards. Additionally, to facilitate cooperation in the shipbuilding industry, the Department of Justice will provide advisory opinions regarding proposed business conduct.

Financing Ship Sales through Title XI Loan Guarantees. Title XI now provides U.S. buyers of ships built in U.S. yards with loan guarantees. Forty seven million dollars are available for commitment in FY94. The Department of Transportation will support funding of $50 million in FY95, $30 million in FY96, and $20 million in FY97, which could guarantee an additional $2 billion in loans. To encourage foreign carriers to build in U.S. yards, the Administration proposes to extend coverage to foreign buyers.

Assisting International Marketing. Executive Branch organizations will initiate or expand activities to assist yards in their marketing efforts and to facilitate cooperative arrangements between U.S. and foreign yards.

Challenge for the Industry

The Administration's plan provides important assistance to U.S. shipyards in taking advantage of the significant opportunities in this decade's rapidly expanding international market. Yards also will have to be--and no doubt will be--aggressive in their own efforts.

The Administration looks forward to working with Congress and with industry in establishing a basis for the industry to enter the international marketplace. By working in partnership--labor and management, shipyards and customers, Congress and the Administration--Americans can meet this challenge as they have met others in the past.

INTRODUCTION

In the past ten years, U.S. shipbuilders built the most capable naval fleet the world has ever seen. U.S. shipyards excel in the production of complex, high-quality naval vessels. With the end of the Cold War and the reduction in defense spending, large U.S. shipyards must now translate their skills from the military to the commercial market.

The National Defense Authorization Act of 1993 (Public Law 102-484) requires the President "to establish an interagency working group for the sole purpose of developing and implementing a comprehensive plan to enable and ensure that domestic shipyards can compete effectively in the international shipbuilding market." This report describes that plan. In approving it, the President directed initiation of those actions currently within the authority of the Executive Branch. Implementing legislation for the remaining actions will be submitted to appropriate committees of the Congress.

BACKGROUND

A. Industry Structure and Employment

U.S. shipyards with the capability to construct vessels commonly are divided between "major" shipbuilding facilities and second-tier facilities. (There are other shipyards with only the capability to repair vessels.)

The Maritime Administration (MARAD) defines a "major" shipbuilding facility as one that is in operation and can construct vessels of at least 400 feet in length. There are 17 shipbuilding facilities in the United States that meet that definition. These yards vary considerably in size, facilities, and employment, the largest yards generally being the nine yards that currently are building ships for the United States Navy.

Second-tier shipbuilding facilities number approximately 100. They generally construct and repair smaller vessels such as inland waterways and coastal carriers, tug boats, supply boats, ferries, fishing vessels, barges, drill rigs, and small military and government-owned vessels. Some of these yards compete successfully in specific international markets. Most build ships for the domestic market, which is protected by the Jones Act (Section 27 of the Merchant Marine Act of 1920, 46 App. U.S.C. Sec 883). That act restricts U.S. coastwise and inland maritime traffic to U.S.-built ships sailing under the U.S. flag. These yards also vary considerably in facilities and size. They too have seen a reduction in demand for domestic shipbuilding, but they do not face conversion problems to the same degree as the major yards.

In 1992, all U.S. shipbuilding facilities employed about 123,900 workers--down from a recent high of 171,600 in 1982. Approximately two-thirds of these workers were employed in the 17 major yards, and almost 95 percent of those were employed in the nine yards currently building ships for the Navy.

B. Post-World War II Production in Major Shipyards

In the decades after World War II, large U.S. shipyards focused their efforts on producing ocean-going vessels for the U.S. flag fleet. The U.S. government supported this strategic focus with a number of direct and indirect subsidies. Among those subsidies was the construction differential subsidy (CDS), which underwrote the differential between the price of U.S.-built and foreign-built ships. When that differential rose, so too did the average subsidy. At the end of the 1970s, the level of subsidy was at the statutory limit of 50 percent of the purchase price for most types of vessels.

In 1981, the Reagan Administration stopped funding for CDS. Since U.S. prices were greater than those offered by foreign yards--often subsidized by their own governments--orders by U.S. carriers for U.S.-built, ocean-going vessels were sharply reduced. Between 1983 and 1992, only eight commercial ocean-going vessels have been built in these yards. The surge in government orders for naval vessels provided a new challenge for U.S. yards. Between 1981 and 1990, such orders averaged 17-18 ships per year. By the early 1990s. these efforts had resulted in the creation of the strongest, most capable naval fleet in the world.

The end of the Cold War and the emergence of democratic states in the former Soviet Union and Eastern Europe has brought tremendous benefits but also has led to a number of changes. U.S. national security no longer requires the high levels of naval construction of the 1980s. As a result, U.S. yards now confront the challenge, similar to that faced by many other defense contractors, of translating their skills and technologies to new markets.

C. Future Markets for the Major U.S. Shipyards

There are four possible markets for U.S. shipbuilders in the future: the commercial market (both domestic and international), U.S. naval vessels, foreign naval vessels, and non-shipbuilding markets. Of these, the international commercial market offers the most significant prospect for expanding production.

1. The Commercial Market

The commercial market consists of both the domestic market (protected by the Jones Act) and the international market.

The Jones Act market is expected to remain small through this decade. Demand for new ocean-going vessels for the Jones Act fleet is estimated to be at most 2 to 3 vessels a year. These numbers reflect a decline in demand for tankers due to a projected reduction in Alaskan oil shipments and changes in trading patterns. They take into account the requirement in the Oil Pollution Act of 1990 (Public Law 101-380) that single-hulled tankers be phased out beginning in 1995 according to a schedule based on age and capacity so that all tankers will have double hulls by 2015.

By contrast, the already-sizeable demand for new vessels in the international commercial market is expected to grow significantly in the coming decade. Drawing on a variety of analyses, MARAD estimates that 7,300 to 9,900 large ships (of which half will be tankers) will be built between 1992 and 2001. Three-quarters of this new construction is expected to occur in the second half of this period. Most will result from the need to replace aging vessels, not to accommodate trade growth. (See the Annex for details.)

2. U.S. Naval Vessels

The U.S. Navy will continue to provide a market, albeit a much smaller one, for U.S. shipbuilders. The Navy has about 100 ships on order or under construction, three quarters of which will be delivered after 1994. Although the details of the defense program for FY 1995-1999 still are under review, the Department of Defense (DoD) projects that it will order on average 8 new ships a year (including sealift ships) in those years.

In the following decade, replacement of aging military vessels may require some modest increase in construction. DoD does not now plan any additional sealift procurement, however. Thus, while the total requirements remain uncertain, DoD does not believe that its annual needs will increase significantly.

3. Foreign Military Vessels

The market for foreign military vessels probably will remain relatively small. Most countries with significant blue water fleets purchase naval vessels from their own yards, although nations with predominantly coastal fleets are likely to continue to purchase certain classes of small vessels abroad.

4. Non-Shipbuilding Markets

In slack periods, shipyards have engaged in non-shipbuilding projects, including the construction of railroad cars, under-river tunnel sections, wind tunnels, prison barges, offshore oil rigs, and marine equipment. Quasi-shipwork projects including methanol plant barges and power plant barges (about 40 of which are now in operation) also present a potential source of business.

D. <u>Competing in the International Market</u>

There are currently over 133 foreign yards capable of building ships over 400 feet. Japan and Korea together account for over half of the world production of commercial ships. Two steps will have to be taken for U.S. shipyards to compete successfully in the international market.

1. Leveling the Playing Field

Many foreign yards have benefited from substantial shipbuilding subsidies. In July of 1993, MARAD published a "Report on Foreign Shipbuilding Subsidies" describing current government programs for assistance to shipyards in 31 nations and the European Community. These subsidies include direct official support, for instance by the European Community, as well as indirect support, as exemplified by Japan's home credit schemes. Subsidies must be eliminated if there is to be a truly competitive international market in which U.S. shipbuilders can compete.

2. Adapting to the Demands of the International Commercial Market

U.S. shipyards are unsurpassed in the building of highly complex naval vessels. Many of them have invested heavily in modern facilities and technology. Additionally, industry and government sources agree that labor rates in U.S. yards are competitive, being lower than those in Germany and on par with those in Japan, although greater than those in Korea. Finally, U.S. shipyards workers are highly skilled and as productive as any in the world. Thus U.S. yards bring many strengths to the commercial marketplace.

For the past decade, however, U.S. yards have been building ships to order for the military requirements of the U.S. Navy and the sporadic demands of the Jones Act fleet. At the same time, foreign yards have been building ships in series from standard designs optimized for producibility as well as functionality, thereby benefiting from scale economies and learning efficiencies. Although the steps required to adapt to the demands of this commercial market vary among U.S. shipyards, in general yards must:

<u>Shorten the time required to develop a ship design in response to a specific demand</u> by adopting modern design procedures and developing designs in advance of need. Market research and aggressive marketing also will be necessary.

<u>Strengthen relationships with suppliers</u> to reduce the time required to procure materials and parts as well as their costs.

<u>Fully employ modern technologies in the construction of ships</u> including construction techniques such as modular construction, manufacturing processes, and process flow. The lay-out of at least some facilities may have to be revised to adopt these tools.

Government regulations sometimes impose unnecessary overhead costs on the shipbuilding industry or inhibit change. Examples include DoD procurement regulations, actual and apparent differences between international construction standards and those the U.S. Coast Guard sets for U.S.-flagged vessels, and specification-based OSHA standards.

THE ADMINISTRATION'S PLAN

Throughout the United States, shipbuilders are focusing on the challenges of entering the international market for ocean-going vessels. Individually, yards are working to improve their technologies and production processes for building commercial ships. In addition, some yards have entered joint ventures or alliances with foreign yards to develop new designs and production capabilities.

The Administration's plan is intended to assist industry efforts to compete internationally. Furthermore it is intended to be a transitional program, consistent with federal assistance to other industries seeking to convert from defense to civilian markets. The plan has five elements: ensuring fair international competition, improving commercial competitiveness with MARITECH, eliminating unnecessary government regulations, assisting with the financing of ship sales, and assisting with international marketing efforts.

A. Ensuring Fair International Competition

The U.S. Government is seeking to level the international playing field at the Organization for Economic and Cooperative Development (OECD). To this end, the Administration initiated international negotiations to end foreign subsidies. U.S. negotiators believe that there is a reasonable chance that these negotiations will be successful. (November 1993 has been set as a target date for completion.)

The OECD draft agreement that currently is under negotiation is comprehensive in its coverage. It prohibits direct and indirect subsidies to shipbuilders in the form of loans, grants, debt forgiveness, tax benefits, and research funding above defined limits. It also bans export credit financing programs with terms more generous than agreed international terms. Official regulations and practices such as those that allow anti-competitive arrangements or impose domestic build requirements and other discriminatory regimes are forbidden (although the U.S. has proposed a derogation for the Jones Act). The draft agreement also establishes an injurious pricing discipline for ships, similar to anti-dumping laws which do not apply to ships. Binding dispute settlement procedures are envisaged to enforce the agreement. A target date of January 1, 1995 has been set for the elimination of subsidies and other distortive practices.

While the Administration believes that a multilateral agreement provides the best way of dealing with the problem of foreign subsidies, it will work with Congress on legislation to bolster those efforts. Any such legislation should provide for the investigation of the policies of nations toward their shipbuilding industries in response to specific complaints and the the imposition of sanctions, at the President's discretion, where there are adverse effects on the U.S. shipbuilding industry.

B. Improving Commercial Competitiveness with MARITECH

Under MARITECH, the Department of Defense through its Advanced Research Projects Agency (ARPA) will participate in an industry-led, industry-driven program to accelerate technology transfer and process change. The principal thrust of this effort will be (1) to provide a near-term infusion of technology that would allow yards to be more cost effective in the design and construction of ocean-going vessels and to enable entry into the commercial market by improving manufacturing and information technologies for the design and production of ships and (2) to foster continuous product and process improvement through collective efforts.

ARPA will match funds from industry for research and development projects they propose in these areas. Yards will propose Focused Development Projects that determine an actual market need, develop an innovative design, and define a competitive construction approach for filling that need. They will be encouraged to initiate partnerships with customers, suppliers, and technologists. Funds will be awarded competitively, and special consideration will be given to yards engaged in both DoD and commercial work.

Overall, the goal of MARITECH is to:

> <u>Strengthen the ability to perform proactive product development and marketing</u> by encouraging firms to perform proactive market analysis and develop ready ship product designs for specific markets, thereby eliminating the need for time consuming preliminary design work prior to bid submission.
>
> <u>Develop libraries of designs</u> enabling yards to respond to customer requests, using a library of designs tailored to the specification requirements.
>
> <u>Engage in continuous process and product improvement</u>, reducing the time it takes to a produce ship. This will help further lower both direct labor costs and financing costs, thereby leading to an overall reduction in price.

MARITECH will be funded at $30 million in FY94, $40 million in FY95 and $50 million each year in FY96 through FY98--a total of $220 million over five years. With matching funds, it would thus generate $60 million in new R&D investments in FY94 and $440 million over the period. In-kind matching would be allowed. ARPA will execute the program in collaboration with the Department of Transportation.

The shipbuilding industry also will remain eligible to compete for funds in the Technology Reinvestment Program (TRP). The TRP is a collaborative inter-agency effort to support technology development and deployment and education and training under the Defense Conversion, Reinvestment, and Transition Assistance Act. All proposals require 50 percent cost sharing. Shipbuilding infrastructure is one of eleven technology focus areas identified as TRP priorities.

If an agreement is concluded in the ongoing international negotiations on subsidies, future spending under MARITECH and TRP would have to comply with its rules on the proportion of government matching funds allowed.

C. Eliminating Unnecessary Government Regulation

All government agencies having regulations that apply to the shipbuilding industry will review them and revise or eliminate any that impose unnecessary burdens on the industry. Major examples of agencies whose regulations affect this industry are the Department of Defense, the U.S. Coast Guard, the Occupational Safety and Health Administration (OSHA), and the Department of Justice.

Procurement Regulations. Acquisition reform is being given high priority within DoD and is intended to reduce or eliminate barriers to the integration of military and commercial production, which will benefit shipbuilding along with other industrial sectors. Near term efforts that will benefit this industry include (1) removing legislative impediments to the purchase of commercial items, (2) prohibiting the use of DoD specifications or process standards unless there is no practical alternative, and (3) removing the most serious impediments to doing business with the government that do not require legislative action.

Coast Guard Construction Regulations. The Secretary of Transportation will direct the Coast Guard to continue working with the International Maritime Organization to upgrade critical international standards and with U.S. carriers and standards bodies to delete or revise regulations that add costs unnecessarily.

OSHA Regulations. OSHA is currently working with the shipbuilding industry to review and revise its standards. The proposed revisions will continue to address the hazards to which workers are exposed, but will do so by replacing specification-based provisions, which limit employer innovation, with performance-oriented provisions wherever appropriate. The proposed revisions also will update, reorganize, clarify, and simplify current rules.

Anti-trust Regulations. To facilitate various forms of cooperation in the shipbuilding industry, the Department of

Justice will provide upon request an advisory opinion regarding proposed business conduct pursuant to its Business Review Procedure. Federal law enables shipyards to engage in a wide range of vertical and horizontal cooperative ventures. Existing antitrust law enables firms to form legitimate joint ventures involving some risk sharing or integration. The National Cooperative Research and Production Act (15 U.S.C. section 4301 et seq) provides anti-trust protection for firms engaging in joint research and development or production ventures. The Export Trading Company Act (15 U.S.C. section 4011 et seq) provides a limited antitrust exemption for export trade and related activities. In evaluating joint conduct under the antitrust laws, the Department of Justice will take into account efficiencies that the venture will produce as well as the existence of global competition in relevant markets.

D. Financing Ship Sales through Title XI Loan Guarantees

Title XI now provides U.S. buyers of ships built in both major and second-tier yards with guarantees for long-term loans at a fixed rates covering up to 75 percent of the loan value. In order to encourage foreign carriers to come to the United States to build ships, the Administration proposes to extend coverage to foreign buyers. Loan guarantees for foreign buyers would have to conform to OECD provisions governing export credits. While loans under these provisions also are available through the Export/Import Bank, MARAD's greater expertise in shipping and shipbuilding justifies extending its involvement to the financing of the export of ships.

MARAD now charges a fee of 0.5 to 1 percent on the outstanding balance of the loan guarantee. To gain greater leverage from federal funds in this increasingly tight budget environment, that fee would be raised to the range of 1 to 1.5 percent, reducing the federal risk exposure. That level should provide an inducement to a substantial number of carriers to buy ships in U.S. yards.

In FY93, $48 million was appropriated, of which $47 million remains available for commitment in FY94 and beyond. The Department of Transportation will support additional funding of $50 million in FY95, $30 million in FY96, and $20 million in FY97. This could guarantee an additional $2 billion in loans. Consistent with the Administration's intent to facilitate the transition to international competitiveness, any funds so appropriated and not spent within five years would expire. Consistent with the emphasis on the international commercial market, certification of military utility would no longer be required.

If an agreement is concluded in the ongoing international negotiations on subsidies, any conditions of the Title XI loan guarantee program that were inconsistent with the agreement would have to be modified or eliminated.

E. Assisting International Marketing

The Administration will use existing organizations to assist shipyards in their international marketing efforts (e.g., the U.S. Foreign Commercial Service, American embassy personnel, and MARAD) and to facilitate cooperative arrangements and alliances between U.S. and foreign yards. Organizations that previously have not devoted much effort to the shipping market will increase their level of activity.

Challenge for the Industry

Shipbuilding and repair are inherently global in nature, and shipyards face fierce competition from abroad. In the face of that reality, the Administration has developed a two-pronged plan to help American yards compete in this arena. The first prong is to insure fair treatment for the U.S. shipbuilding industry in the international marketplace. The second prong is to provide assistance to U.S. shipyards in the transition from dependence on defense contracts to commercial competitiveness.

The Administration's plan provides important assistance to U.S. shipyards as they prepare to take advantage of the significant opportunities provided by this decade's rapidly expanding international market. U.S. shipbuilders still will face serious challenges, however. Yards will have to be--and no doubt will be--aggressive in their own efforts to develop competitive designs and market them world wide; to establish a stronger relationship with their suppliers; to improve productivity in order to drive down costs and shorten delivery times; to obtain competitive labor packages and remain competitive in wages; and to seek private financing sources and joint venture partners here and abroad. Building on their recent success in military construction, there is every reason to believe that American ingenuity can meet these challenges.

The Administration looks forward to working with Congress and the industry in establishing a basis for the industry to enter the international market place. By working in partnership--labor and management, shipyards and customers, Congress and the Administration--Americans can meet this challenge as they have met others in the past.

ANNEX

The Demand for Shipbuilding for the Commercial Market 1992-2001

Demand for new vessels for the commercial shipping industry will come from two sources: replacement of existing vessels and acquisition of additional vessels in response to increased demand for the movement of goods in trade.

The task of forecasting future shipbuilding activity takes the form of 1) adjusting the "future fleet" to reflect anticipated changes in the levels of trade, 2) identifying vessels currently in each of the trades, and 3) projecting their replacement dates.

Forecasts from several independent sources (the U.S. Department of Commerce's "Industrial Outlook 1993--Shipbuilding and Repair;" DRI/McGraw-Hill; and H.P. Drewry's "World Shipbuilding" of April 1992) are in general agreement that demand for new vessels in the 1990s will result primarily from the requirement to replace existing vessels <u>not</u> from an increase in the volume of trade. The base case projection in this report is taken from Drewry's work.

<u>Replacement Demand</u>

The statistical tables in Lloyd's "Register of Shipping" show that, as of mid-1991, there were over 6,600 vessels totaling over 167 million gross registered tons (GRT) over 15 years old. Without replacement, the world fleet, including all types of ships, would have 194 million GRTs from vessels over 25 years of age by 2001. Lloyd's notes that "These vessels by and large may be considered to be the deep sea fleet, often trading in harsh environments, and, as far as the shipbuilding industry is concerned, this sector of the fleet represents the major market sector for fleet replacement."

<u>Total New Construction</u>. The base case projection is based on the assumption that existing vessels will be replaced when they reach 25 years of age. The base case projection for replacement tonnage from 1992-2001 is 153.3 million GRT.

Higher and lower projections also have been made to reflect major sources of uncertainty. Ship owners may choose to spend substantial sums on repair, maintenance, and refurbishment and, therefore, defer replacement. The lower projection is based on the assumption that replacement of ten percent of the tonnage in the base case will be so deferred. The low case projection for replacement is 138 million GRT.

Alternatively, the condition of existing vessels and pressures being placed on owners by classification societies, marine underwriters, and civil authorities (such as passage of the Oil

Pollution Act of 1990) may cause owners to replace vessels (especially single-hulled tankers) before they reach the age of 25. The higher projection is based on the assumption that an additional ten percent of the base case tonnage would be replaced by the year 2001. The high case projection for replacement is 168.6 million GRT.

Tankers and Dry Bulk Carriers. Dry bulk carriers and tankers account for approximately 80 percent of the projected replacement demand in the base case--51 and 75 GRT respectively. The age profile of tankers is heavily skewed, with about 55 percent of the total over 15 years of age and 46 percent (61 million GRT) between 15 and 19 years. Additionally, as Drewry notes, "Of the major fleets perhaps tankers are in the sorriest state of repair (along with combined carriers). Over half of those trading today were built in the 1970s. Many were left idle, poorly maintained, until they resumed trading in the mid-1980's. As a result, today's fleet is more dilapidated than usual, which should hasten replacement demand well before the vessels reach 25 years."

Trade Induced Demand

Trade-induced demand is projected to account for less than a quarter of total demand for new vessels in the base case projection. It is over half the demand for chemical carriers and containerships, however, and 80 percent of that for gas carriers.

The base case projection for trade-induced demand through the year 2001 is approximately 46 million GRT. The largest projected growth in tonnage is 21 million GRT in dry bulk carriers. This is based on an assumed growth in the demand for such ships of 20 percent--slightly less than 2 percent per year compounded. The demand for containerships is projected to increase by over 30 percent as the net effect of increased world trade and the introduction of containerships on new routes partially off set by the increase in vessel size on some existing routes. This produces a growth in containership tonnage of 8.8 million GRT.

Higher and lower projections also have been made for demand due to trade growth. The lower projection is based on the assumption that trade growth will only be 50 percent of that projected in the base case, or approximately 23 mission GRT for the period 1991 to 2001. This assumes a growth rate in world trade substantially below historical levels. The higher projection is based on the assumption that trade growth will be 10 percent higher than the base case or 51 million GRT.

Total Demand

The following tables show the three projection by ship type.

Demand for New Vessels from 1992-2001 by Type
(Number and Capacity in Gross Registered Tons (GRT))

Low Case

	Replacement		Trade Growth		Total	
	No.	GRT(mil.)	No.	GRT(mil.)	No.	GRT(mil.)
Tanker	3195	67.8	118	3.6	3313	71.4
Dry Bulk	1908	46.0	262	10.5	2170	56.5
Chemical	104	1.5	90	1.0	194	2.5
Gas (LPG/LNG)	211	1.0	136	2.2	347	3.2
Containerships	313	5.5	333	4.4	646	9.9
Other	6750	16.2	250	1.5	7000	17.7
Total	12481	138.0	1189	23.2	13670	161.2

Base Case

	Replacement		Trade Growth		Total	
	No.	GRT(mil.)	No.	GRT(mil.)	No.	GRT(mil.)
Tanker	3550	75.3	235	7.1	3735	82.4
Dry Bulk	2120	51.1	524	21.0	2644	72.1
Chemical	115	1.7	180	2.1	295	3.8
Gas (LPG/LNG)	234	1.1	273	4.4	507	5.5
Containerships	348	6.1	665	8.8	1013	14.9
Other	7500	18.0	500	3.0	8000	21.0
Total	13867	153.3	2377	46.3	16324	199.6

High Case

	Replacement		Trade Growth		Total	
	No.	GRT(mil.)	No.	GRT(mil.)	No.	GRT(mil.)
Tanker	3905	82.8	258	7.8	4163	90.6
Dry Bulk	2332	56.2	576	23.1	2908	79.3
Chemical	126	1.9	198	2.3	324	4.2
Gas (LPG/LNG)	257	1.2	300	4.8	557	6.0
Containerships	383	6.7	732	9.7	1115	16.4
Other	8250	19.8	550	3.3	8800	23.1
Total	15253	168.6	2614	51.0	17867	219.6

Numbers of Large Ships

Most of the vessels to be replaced in the "other" category are relatively small. Drewry's analysis (used here as the base case) indicates that the number of large ships (those of 6,000 GRT or greater) to be built during the period will total 9,000 vessels. The comparable figure for the lower projection is 7,270 new ships; and 9,867 for the higher projection.

The remaining "other" vessels (7,244 in the base case) include fishing vessels, offshore activity support vessels, and a variety of miscellaneous types which average only 2,500 GRT.

Demand for Large Vessels from 1992-2001 by Type

Base Case

	Replacement (Number)	Trade Growth (Number)	Total (Number)
Tanker	3550	235	3785
Dry Bulk	2120	524	2644
Chemical	115	180	295
Gas (LPG/LNG)	234	273	507
Containerships	348	665	1013
Other	256	500	756
Total	6623	2377	9000

Timing of Demand

The demand for 199.6 million GRT or approximately 158 million compensated gross registered tons (CGRT) is not expected to occur evenly throughout the period. (CGRT are gross tons adjusted by a factor reflecting the complexity of the type of ship being built.) Drewry projects that 40 million CGRT will be delivered through 1996 and the remaining 118 million CGRT will be delivered from 1997 through 2001.

THE WHITE HOUSE

WASHINGTON

September 30, 1993

MEMORANDUM FOR WORKING GROUP ON U.S. SHIPBUILDING INDUSTRY

FROM: John Goodman JG

SUBJECT: Announcement of Shipbuilding Policy

In case you have not already received it, attached is a copy of the press release on the shipbuilding policy. Also attached is a press release issued by the Shipbuilders Council. In case you are asked, the report is in production phase and should be finished and delivered very soon. Thanks for your efforts thus far. See you soon.

U.S. Department of Transportation

News:

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE
Wednesday Sept. 29, 1993

DOT 93-93
Contact: John Swank
Tel.: (202) 366-5807

SECRETARY PEÑA AND SECRETARY ASPIN ANNOUNCE PROGRAM TO STRENGTHEN AMERICA'S SHIPYARDS

Secretary of Transportation Federico Peña and Secretary of Defense Les Aspin today announced a program to restore the American shipbuilding industry to a competitive position in the world commercial shipbuilding market.

President Clinton said, "Shipbuilding is one of the keys to America's national defense, and helping our shipbuilders succeed commercially is an important goal of defense conversion. This Administration is committed to preserving highly skilled American jobs and we believe that American shipbuilding can compete -- and win in world markets."

The Administration's revitalization program will help shipyards transfer their skills from a military to a commercial market.

"Shipyards are a vital part of America's industrial base and are a major source of jobs in many communities," Peña said. "This program will help ease the transition of local economies from defense to civilian production."

"By making shipyards more competitive in the commercial arena, this program has the necessary industrial base to produce technologically advanced ships at competitive prices," Aspin added.

American shipyards and their workers are unsurpassed in producing complex naval vessels. For years, however, American shipyards have been at a competitive disadvantage in the world commercial shipbuilding market. This is largely due to foreign government shipyard subsidies and recent technological improvements in foreign shipyards.

-- more -

The President's revitalization program seeks to improve the productivity of American shipyards and ensure a fair international market in which to compete.

The plan has five major components:

One. The United States will continue to seek the elimination of foreign shipbuilding subsidies through the Organization for Economic Coordination and Development (OECD). At the same time, the Administration will work with Congress on legislation to respond to foreign subsidies in case the OECD talks do not produce timely, satisfactory remedies.

Two. The Administration will direct Executive agencies to initiate a regulatory reform program to revise, modify or eliminate regulations and acquisition practices which unfairly and unnecessarily burden shipyards and their suppliers.

Three. The Administration will use existing marketing and export promotional programs to assist U.S. shipyards in identifying and securing potential foreign orders.

Four. The Administration proposes using loan guarantees to finance up to $3 billion in ship construction, extending an existing program to cover vessels built for export. The program will be administered and controlled by the Department of Transportation.

Five. The Administration proposes an industry-led, industry-driven program to accelerate technology transfer and process change for America's shipyards. The defense conversion, national shipbuilding initiative called MARITECH (directed by the Advance Research Projects Agency at DOD) will provide funding for development projects based on actual market needs, innovative designs, and competitive construction approaches. Awards will be made competitively, on a matching basis. The Department of Defense will budget a total of $220 million over the next five years.

# # #

Shipbuilders Council of America
Suite 330
4301 N. Fairfax Drive
Arlington, Virginia 22203
Tel: 703-276-1700 Fax: 703-276-1707

Contact: John J. Stocker
President, SCA
703 276 1700

FOR RELEASE SEPTEMBER 30, 1993

THE PRESIDENT'S SHIPYARD REVITALIZATION PLAN IS A WELCOME FIRST STEP, SAYS THE SHIPBUILDERS COUNCIL OF AMERICA

The shipyard revitalization program endorsed yesterday by President Bill Clinton was welcomed by the Shipbuilders Council of America (SCA) as an encouraging first step by the Administration to address the problems American shipyards face in transitioning from the U.S. defense market to the international commercial market.

"This is the first time in 12 years that a President of the United States has acknowledged that American shipyards face a commercial market heavily distorted by foreign government interference," commented SCA President John J. Stocker. It is clear that the current Administration is concerned about the effects these market distortions have on our industry's ability to transition to global markets. We are very encouraged by the Administration's position."

In a press release outlining in general terms the Administration's proposed plan for working with American shipyards to develop commercial market alternatives, President Clinton said, "Shipbuilding is one of the keys to America's national defense, and helping our shipbuilders succeed commercially is an important goal of defense conversion. This Administration is committed to preserving highly skilled American jobs and we believe that American shipbuilding can compete--and win--in world markets."

The proposed program, announced by Transportation Secretary Federico Peña and Defense Secretary Les Aspin, is the product of an interagency working group responding to a Congressional mandate introduced into the fiscal year 1993 defense authorization bill by Representative Tom Andrews (D-Maine). While the final details of the Administration's programs have not been elucidated, the press release did outline five general principles:

1) The Administration will continue to seek elimination of foreign subsidies, both by actively participating in negotiations within the Organization for Economic Cooperation and Development (OECD), and by working with Congress on subsidy legislation "in case the OECD talks do not produce timely, satisfactory remedies."

2) The Administration will initiate a regulatory reform program that removes unfair burdens from U.S. shipyards.

3) The Administration, in contrast to the practices of the two previous Administrations, will promote U.S. shipyards in the marketplace.

4) The Administration proposes providing loan guarantees to support $3 billion in sales of new ships built in U.S. yards for both export and domestic customers. The program will be administered and controlled by the Department of Transportation.

5) The Administration proposes funding a defense conversion national shipbuilding initiative called MARITECH to promote technology transfer and process change for U.S. shipyards.

"We are grateful to President Clinton for his recognition of the difficult challenges that face us," Stocker said. "We believe the President will not abandon us to the predatory practices of Japan, Korea, and Europe as they attempt to keep us out of the marketplace. We are looking forward to continuing to work with the Administration to ensure that its proposals achieve the practical effect of bringing work into America's shipyards."

###