BREAKING THROUGH

Canadian Shipbuilding Industry

CANADIAN SHIPBUILDING INDUSTRY

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ACKNOWLEDGEMENT

The National Partnership Project Committee wishes to express its gratitude to the many individuals who participated in the committee's roundtable discussions, those who made formal presentations, and those who corresponded with us when they were unable to present in person. Their commitment and enthusiasm have enabled the committee members to appreciate the genuine value and potential of this industry.

The Committee also wishes to express its thanks to all those individuals who attended the public consultations to witness this process. Their participation is testimony to the importance of this industry to communities across the country.

Finally, the committee would like to thank Hill & Knowlton Canada for facilitating the cross-Canada consultations and, in particular, Tom MacDonald for his assistance in preparing this report and Industry Canada staff for supporting its production.

Financial support from Industry Canada is gratefully acknowledged.

The views expressed in this report are the views of the Partnership Project Committee, based upon the Committee's consultations with industry stakeholders. The report does not necessarily represent the views of the Minister of Industry or of Industry Canada.

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B R E A K I N G T H R O U G H

Shipbuilding and repair are very much a part of Canada's proud maritime tradition — three oceans, an immensely long coastline, skilled and dedicated workers and businesses, and a long-proven ability to design, build, repair and operate excellent vessels of many types. So make no mistake: shipbuilding is part of our heritage. It is not and should not be viewed as a "dying industry." We can and will compete successfully with the best, but on our terms, and in niches and areas we choose.

— The Honourable Brian Tobin
Speaking at the Marine Industrial Forum
St. John's, Newfoundland
October 20, 2000


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National Partnership Project
1502–222 Queen Street
Ottawa ON K1P 5V9

March 30, 2001

The Honourable Brian Tobin
Minister of Industry
Industry Canada
235 Queen Street
Ottawa ON K1A 0H5

Dear Minister Tobin:

The National Partnership Project Committee respectfully submits the enclosed report further to your request in October 2000 for recommendations on practical and workable solutions to revitalize the shipbuilding and marine fabrication industry in Canada.

The report details the capabilities of Canadian shipyards, future prospects for these yards, and the relevant issues that are impediments to the industry's future potential. Further, a series of recommendations, based on our cross-country consultations, is submitted for your consideration.

We, the Committee co-chairs, thank you for the opportunity to participate in this process and for your recognition of the importance of this industry to Canada.

Sincerely,

Peter Cairns Les Holloway Philippe Tremblay Peter Woodward

THE CONSULTATION PROCESS

The National Partnership Project Committee consisted of the following co-chairs:

Peter Cairns	President, The Shipbuilding Association of Canada
Les Holloway	Executive Director, Marine Workers Federation
Philippe Tremblay	Executive Director, Fédération de la métallurgie, Confédération des syndicats nationaux
Peter Woodward	Vice President Operations, Woodward Group of Companies

Stakeholders were invited to make presentations to the panel in a public setting. Consultations were held in the following cities:

Saint John, New Brunswick – December 12, 2000
St. John's, Newfoundland – December 18, 2000
Charlottetown, Prince Edward Island – January 3, 2001
Halifax, Nova Scotia – January 4, 2001
Vancouver, British Columbia – January 9, 2001
St. Catharines, Ontario – January 16, 2001
Québec City, Québec – January 23, 2001

Hundreds of people attended the sessions, and close to 80 presentations or submissions were made to the committee.

The themes of the presentations were remarkably consistent and there was solid consensus on the key issues that needed to be addressed. The following is a brief synopsis of the feedback provided through public consultations.

FEEDBACK
from Public Consultations

- Canadian shipyards and shipyard workers want to get back to work to build new ships and marine structures. They have a good appreciation of how difficult it is for the Canadian government to effect changes in the level of foreign subsidies in the industry and to immediately overcome unfair trade practices. They also understand and respect that direct subsidies to the Canadian industry are not an option.

- The existing Canadian shipbuilding policy is ineffective in countering the effects of widespread foreign subsidies and unfair trade practices. Canadian yards are suffering as a consequence. Federal government action is required to provide the tools to combat predatory practices of other countries.

- The federal government must formally recognize the national strategic importance of the industry and endeavour to effect an improvement in attitudes across government departments toward the industry.

- Injurious, subsidized pricing from foreign shipyards hides the competitiveness of Canadian shipbuilders. There needs to be a better appreciation of the true competitiveness of Canadian shipyards in terms of innovation, technology, price, quality and productivity as well as of the damage being inflicted on the Canadian economy by foreign predatory practices.

- There are excellent opportunities to better lever economic benefits from Canada's vast offshore and marine resources through a national shipbuilding policy. Applicants who wish to develop Canadian natural resources should be required to strengthen the Canadian economy through employment and industrial growth by availing themselves of goods and services in Canada.

- The existing financing mechanisms available to potential buyers of new Canadian vessels are inadequate to compete with Title XI financing from the United States. Canada should never lose business to the United States on the basis of financing.

- Extended-term financing for domestic and foreign buyers would provide a non-concessionary and immediate stimulus to the industry.

- Non-Canadian-made trucks, railway cars and aircraft benefit from tax transfer and withholding tax-exempt financing options that are not available to Canadian-made ships, yet they should be. This too would provide a non-concessionary and immediate stimulus to the industry.

- The industry is having difficulty in getting access to some government programs. Programs and incentives that are available to other Canadian industries should be made available to the shipbuilding industry as well. Specific improvements are seen as necessary in existing programs dealing with training as well as research and development.

- Exceptions to the existing shipbuilding policy regarding federal procurement and tariffs are unnecessary and are hurting the industry. Federal fleets must be procured and maintained in Canada.

EXECUTIVE SUMMARY

Primary Issues Facing the Industry:

- Widespread subsidies in the range of 20–40 percent from dozens of foreign countries have effectively shut off prospects in the export market for Canadian shipyards. Despite being competitive in key areas such as labour cost, productivity, technology and quality, Canadian yards are losing out on export bids because they receive no subsidies to match the competition.

Purpose: To provide recommendations to The Honourable Brian Tobin, Minister of Industry, on practical and workable solutions that would be fully national in scope for the Canadian shipbuilding and industrial marine sector.

Process: A project committee consisting of four co-chairs was named by the Minister in late October 2000 to conduct public consultations in shipbuilding centres across Canada. The consultations were held in December 2000 and January 2001. Hundreds of people attended the sessions, and close to 80 presentations or submissions were made.

Format: The report has four parts:

Part 1 — Capabilities of Canadian Shipyards: This section reviews past accomplishments and examines the level of technology and innovation that exists in the industry today.

Part 2 — Future Prospects for Canadian Shipyards: This section evaluates the potential business that is available in Canada and gives an overview of the amount of business that is required to sustain existing yards.

Part 3 — Issues and Recommendations: This section analyses various key issues and provides recommendations on how to turn Canadian yards and related businesses into a sustainable market.

Part 4 — Summary of Recommendations

- The *Jones Act* blocks Canadian yards from selling ships to the United States. The Act stipulates that cargo carried between U.S. ports must be carried by U.S. ships that are built, registered, owned, crewed, serviced and repaired by U.S. enterprises. No other Canadian industry suffers from such a restriction. Meanwhile, U.S. ships enter Canada duty-free under the provisions of the North American Free Trade Agreement (NAFTA).

- Efforts by the Organisation for Economic Co-operation and Development (OECD) and the World Trade Organization (WTO) to curb the subsidy and unfair pricing problems that plague the worldwide industry have failed to date. Twelve years have passed since formal negotiations started on the subject among member countries of the OECD.

- OECD agreements regarding ship financing are outdated. New terms and conditions being proposed do not adequately meet buyers' needs. In particular, the 12-year repayment period being proposed for an asset with a useful life of 25–40 years is too short.

- The existing Canadian shipbuilding policy is seen as being inadequate to combat the foreign subsidies and unfair pricing practices of other countries. In addition, there are concerns in the industry that the policy is not being strictly adhered to. For example, some exceptions are being made to the policy of procuring all of the federal fleet from Canada. Second, the 25 percent tariff program is ineffective against foreign vessels subsidized by more than 20 percent and fishing vessels over 100 feet (30.5 metres) are exempt, even though they can be built competitively in Canada. Third, there is a very attractive capital cost allowance option available to Canadian owners/operators, but few are in a financial position to take advantage of it.

- Existing financing mechanisms available to buyers of Canadian vessels are inadequate to compete with non-concessionary Title XI financing from the United States. Total export financing done

under the Title XI program since its introduction in 1994 is US$1.8 billion. Since Canadian yards are very competitive with U.S. yards in terms of price and quality, this is business that could have been won by Canadian yards if they had had equivalent financing.

- Certain tax transfer and withholding tax-exempt financing options are available to non-Canadian-made competitors of the shipping industry (trucks, rail cars and aircraft) but not to Canadian-made vessels.

- The environmental advantages of transporting by ship could be promoted more effectively.

- Economic benefits from Canada's vast offshore and marine resources could be better optimized with more concentrated effort by industry and governments. Roughly C$2 billion has been identified as prospective business for the shipbuilding industry over the next ten years. This could be much more.

- The existing Canadian shipbuilding industry requires an estimated C$500–750 million a year in contracts to be viable. There is sufficient business in Canada to meet this demand over the next 10–15 years, provided that effective policies are put in place. Subsidies are not required.

- The industry has had difficulty accessing various government programs over the years and feels that adjustments are necessary to ensure that incentives available to other Canadian industries are available to them. Specific improvements are required in programs dealing with training as well as research and development.

- Canada, with its border of three oceans, the longest coastline and greatest inland waterway in the world, should have a shipbuilding industry that is designated of national strategic importance.

- A Canadian shipbuilding policy will directly involve at least ten federal departments as well as all provincial governments. The industry requires strong federal leadership to help promote cooperation and support among all stakeholders.

Proposed Solutions: *Subsidies are not required.* Considerable improvements can be realized through a stronger partnership between industry and the federal and provincial governments, adjustments to existing policies, more effective enforcement of policies, improved focus on the key markets and issues, and better financing mechanisms, more specifically, by:

- eliminating exceptions to the existing Canadian shipbuilding policies such as tariffs and federal procurement
- strengthening industry and government partnerships (federal and provincial) to focus more on high-prospect areas such as offshore oil and gas
- improving the planning processes on federal procurement
- using non-concessionary financing mechanisms such as extended terms to better meet buyers' needs
- making tax transfer and withholding tax-exempt financing options available to Canadian-built vessels as they are for non-Canadian trucks, rail cars and aircraft
- removing the restriction in the existing policy that stipulates that the accelerated capital cost allowance can be used only by Canadian shipowners/operators and allow it to be used by either Canadian owners or Canadian operators
- pressing for elimination of foreign subsidies and unfair pricing practices by dozens of countries
- negotiating for relaxation of the restrictive conditions of the *Jones Act* (any improvement could have a significant positive impact on the Canadian shipbuilding industry)
- making federal and provincial government programs more accessible to the industry so as to assist continued innovation in the industry and improve workers' skills
- designating the industry as a national priority
- promoting marine transportation as an environmentally friendly alternative to other modes of transportation.

CONTENTS

Creative Development and Digital Production by Acart Communications.

INTRODUCTION

The National Partnership Project was established October 20, 2000, by The Honourable Brian Tobin, Minister of Industry. A National Partnership Project Committee was named and charged with the responsibility of providing recommendations to the Minister on practical and workable solutions for the shipbuilding and industrial marine industry that would be fully national in scope and consideration.

The particular challenge put to the committee by the Minister was to find ways to accomplish the following:

- anchor Canadian yards and related businesses into a real and sustainable market with long-term quality jobs for workers and decent returns for businesses
- promote and assist innovation in the industry
- improve workers' skills
- improve labour–management cooperation
- improve productivity and competitiveness
- suggest practical and sensible enhancements to existing federal programs and activities that complement the present federal shipbuilding policy.

In addition, the committee was asked to address the issue of capacity of Canadian yards. The recommendations in this report are intended to deal with the issues facing companies engaged in the building, repair, conversion and overhaul of ships as well as in the construction, repair and overhaul of platforms, structures and modules for the offshore oil and gas industry.

To put this report into context, the Canadian industry is operating in terribly skewed market conditions and is struggling to survive. Other leading shipbuilding countries are employing major subsidy programs and other incentives, whereas Canada has abandoned these many years ago. Over 30 countries pay significant amounts of direct and indirect subsidies to their shipyards to enable them to win international contracts. Subsidies in the range of 20–40 percent are not unusual. The level of subsidization is unprecedented. No other industry sector comes close to experiencing such protectionist practices on a global scale — not even the highly competitive aircraft sector. As the Minister put it when he established the committee, "The competition is brutal." This grant mentality has prevailed in the shipbuilding industry worldwide for decades — except in Canada. Subsidies have not been paid here since the early 1980s.

In addition to the subsidy problem, Canada is blocked from making sales of commercial vessels to our most important export market, the United States, by virtue of the *Jones Act*. The combined effect of these handicaps is huge.

The project team has been asked to apply a comprehensive approach that would use taxpayers' dollars prudently to find effective solutions. Subsidies are not an option.

Plasma Cutting

PART I

Capabilities of Canadian Shipyards

Canada has a proud shipbuilding history. At the end of World War II, Canada had constructed more than 500 ships for the war effort. More than 70,000 persons were employed in an industry that had grown from a small, insignificant sector to a prosperous, heavy industry. From 1945 to the 1980s, the industry went from success to success. Canadian-designed icebreakers and supply vessels assisted arctic oil exploration. In this period, Canada could claim the world's largest and most capable fleet of private sector icebreakers. The federal government's "Angel Plan" led to the construction of today's Great Lakes fleet. Canadian yards built jack-up oil rigs and one of the most modern offshore drill ships of the day. Canadian design and technology produced the Navy's St. Laurent class destroyers, which were renown for many technological firsts including nuclear citadels and the ability to operate large helicopters from small ships. The prototype tactical data system was developed in Canada, and gas turbines went to sea in Canadian naval ships, the first for a western navy.

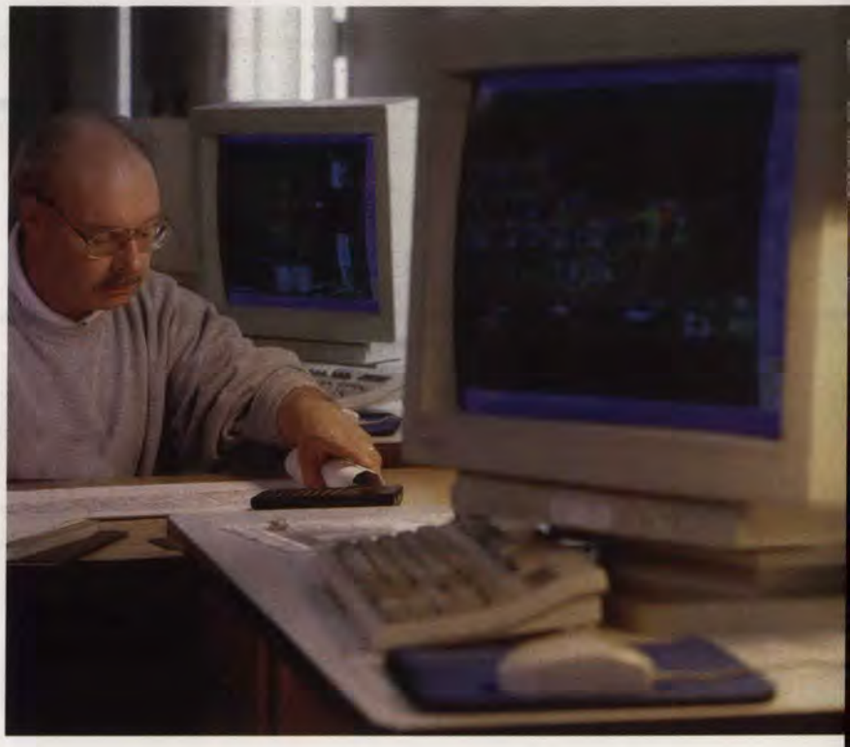
More recently, the trend to innovative solutions has not lessened. Complete fore bodies have been designed and fitted to Great Lakes vessels to take advantage of the new length and beam allowances permitted in the St. Lawrence Seaway. One of the world's largest deepwater oil platforms has had its capacity increased from 100,000 barrels per day to 180,000 barrels per day by a Canadian yard. Canadian-built tugs are being successfully marketed internationally. Canadian offshore supply vessels are considered to be the "Queens" of the Atlantic offshore industry.

British Columbia has carved out a significant niche market in luxury yachts, having recently refurbished 48 yachts in one year. Canada is a world leader in the design and development of high technology self-unloading equipment. The latest equipment is computer-controlled and can be remotely operated from a number of locations on the vessel. The Canadian-designed and -constructed Canadian Patrol Frigate is acknowledged as the technological leader of frigate-sized ships in the world today.

Canada also has a successful marine supply industry. A Canadian company is one of the world leaders in the development of automated machinery control systems. Heating, ventilation and air conditioning (HVAC) equipment, robust power conversion equipment, towing pins and shaft bearings are just some of the marine products that are successfully marketed worldwide by Canadian companies. Canadian naval architects are well respected and continue to design vessels for use around the globe.

Three-dimensional, computer-aided design.

Many of Canada's shipyards have invested heavily in technology from three-dimensional, computer-aided design systems to computer-aided manufacturing processes that cut and weld to the most exact tolerances without human intervention. Industry investment in technology upgrades in the 1990s is estimated to be in excess of C$200 million.



The industry has been clear in stating that modern technology and manufacturing processes are an essential ingredient in their strategy to combat more heavily subsidized competitors.

The quality of Canadian products and Canadian worker proficiency are not in question. It is not uncommon for new ships and structures that were built offshore for the purpose of taking advantage of subsidized prices to have their deficiencies corrected by Canadian shipyards. A case in point is the FPSO (Floating Production, Storage and Offloading Vessel) that was purchased in South Korea for the Terra Nova project. Millions of dollars have been spent on remedial work to address

design engineering and construction problems identified in several key vessel systems after arriving in Newfoundland. They include the seawater cooling system, the heat tracing system, the heating, ventilation and air conditioning (HVAC) system and the turret.

The limitation to what can be constructed in Canada is not one of technology or sophistication but one of physical size. Canadian infrastructure limits the size of ships that can be built in Canada to those of 85,000 deadweight tons (DWT) or less. Heavily subsidized foreign competitors who, with government support, have invested heavily in new capacity and now must fill this capacity have been offering ships at below cost. Despite cost competitiveness with Europe and the United States, and the high quality, skill and technological innovation of Canadian yards, they are unable to compensate for the subsidies.

Canadian shipyards have the capacity of employing 12,000 skilled tradespersons with the present infrastructure. Canadian yards are capable of building modern, advanced-technology ships of less than 85,000 DWT. The construction of oil rigs and their sophisticated components is within the capability of Canadian shipyards. It is in the arena of high-value-added ships and structures that the Canadian niche can be found.

With oceans on three sides and the greatest inland waterway in the world, the National Partnership Project Committee is convinced that Canada's wealth and future growth will continue to be dependent upon maritime trade and resources.

Shipbuilding, ship repair and offshore fabrication must be key building blocks in Canada's overall marine strategy, which will serve to lever a strong indigenous industry in on-board ship systems, including higher-end on-board systems and the life cycle maintenance support that is required for these systems.

***Kent Sprint* container vessel built at Saint John Shipbuilding, a division of Irving Shipbuilding Inc.**

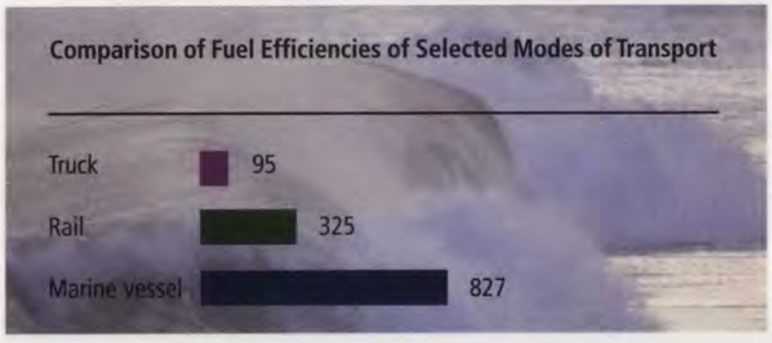
Environmental Considerations

Canadians are increasingly sensitive to the problem of greenhouse gas (GHG) emissions. The federal government has shown leadership in its commitment to helping to reduce GHG levels in our atmosphere. Canada is currently targeted to reduce emissions to 6 percent below 1990 levels by 2012, following discussions in 1997 in Kyoto, Japan. Recently, Canada's Environment Minister, David Anderson, announced Canada's commitment with the United States to act on the problem of transboundary pollution. In a publication (*Providing Cleaner Air to Canadians*, Environment Canada, Ottawa, February 2001) released in conjunction with this announcement, transportation was singled out as the largest contributor to air pollution in Canada.

The marine mode is the most environmentally friendly method of tonne-per-mile movement of goods. Support would encourage more movements by marine transport and thus provide environmental benefits.
— John Greenway,
Upper Lakes Group Inc.
St. Catharines, Ontario
January 2001

Studies on the relative energy efficiencies of different modes of transportation have pointed to marine transportation as being, by far, the most environmentally friendly means of transporting cargo. Typical of these is a U.S. Department of Transportation study (*Environmental Advantages of Inland Barge Transportation*, U.S. Department of Transportation, Washington, DC, 1994), which concludes that it is much more efficient and less pollution-causing to move cargo through water than over land. The relative fuel efficiencies are further illustrated by the fact that one U.S. gallon (3.8 litres) of fuel can transport a tonne of cargo 514 miles (827 kilometres) by barge, as opposed to 202 miles (325 kilometres) by rail and 59 miles (95 kilometres) by truck.

Comparison of Fuel Efficiencies of Selected Modes of Transport



As a Canadian example, it would take 1400 trucks with a capacity of 34 tonnes to carry the same amount of cargo that one typical laker vessel with a capacity of 48,000 tonnes could carry. The 1400 trucks would cost in the vicinity of $200 million and would have a useful life of six years. The laker would cost in the range of $50–60 million, and would have a useful life of 30–40 years. Then there is the issue of damage to highways. Groupe Maritime Verreault Inc., a shipyard in Quebec, suggests that one fully

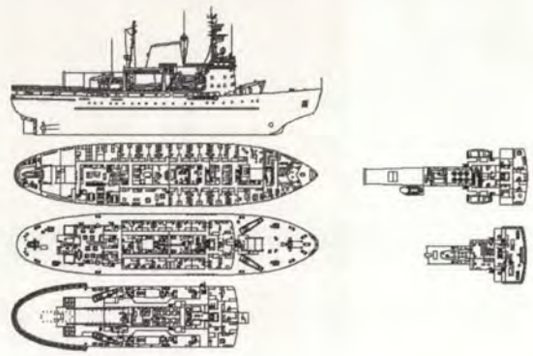
loaded transport truck does as much damage to our roads as 33,000 cars. Truckers benefit from all road maintenance services free of charge, whereas ships are subject to a user-pay system.

Verreault also quotes from a 1991 study done by the Minnesota Department of Transportation on the cost of not using marine transportation. The study examined the transportation of coal, aggregates, etc., on the Mississippi River and Lake Superior. The routes studied accounted for only 5 percent of the state's marine traffic. The study found that forgoing marine transportation for trucking would:

- increase fuel consumption by 926 percent
- raise toxic emissions by 1920 percent
- increase the probability of accidents by 610 percent
- force the state to dispose of an additional 2746 used tires each year
- force the businesses involved to use 1333 additional trucks each day.

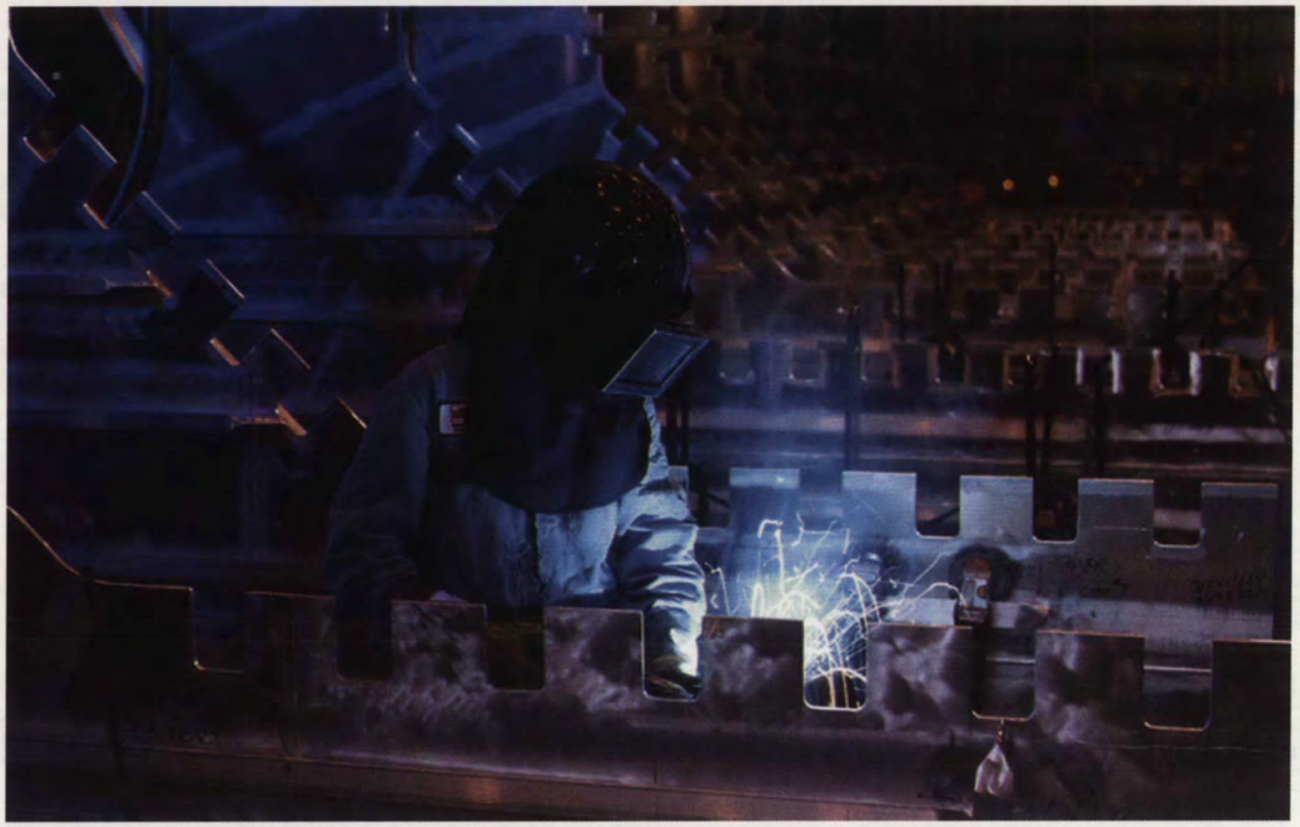
The United Kingdom's 1998 White Paper on the Future of Transport *(British Shipping: Charting a New Course*, Department of the Environment, Transport and the Regions, London, UK, 1998) endorsed shipping as being one of the most environmentally sustainable means of transport because it is environmentally less damaging than rail, truck or air transport. The White Paper also stated that the UK "has a natural interest in exploiting the potential of shipping on coastal and short sea routes to relieve pollution and congestion on the roads."

Clearly, marine transportation is recognized as providing the most environmentally friendly method of transporting goods. It should be promoted as an effective way of helping Canada meet its clean air objectives.



RECOMMENDATION

That the provincial and federal governments focus on marine transportation as the more environmentally friendly alternative to other modes of transport.



PART II

Future Prospects for Canadian Shipyards

Potential Business Available in Canada for Canadian Shipyards

There is no doubt that the global shipbuilding industry is in turmoil due to worldwide overcapacity, excessive subsidization and the failure of the national governments of large shipbuilding nations to abide by fair trade practices. Canada is not immune to this turmoil and the artificially low prices have had a severe negative effect not only on Canadian shipbuilding, but also on European and United States shipbuilding.

However, the capacity issue is not confined simply to how much oversupply there is in the world. One must also examine how competitive the Canadian industry is and can continue to be. A case in point is the automobile and aircraft industry. There is worldwide overcapacity in those industries, but Canada has managed to carve out a formidable niche because of our competitiveness in labour rates, productivity and quality of product. As shown later in this report, Canadian shipbuilders are very competitive in these same areas. As well, it is important to note that Canadian yards are not aiming at the large, low technology ships such as crude tankers and bulk carriers that feature high steel content and low outfitting needs. The focus is on high-value-added vessels with innovative and sophisticated instrumentation, communication and navigation aids.

The effect of the turmoil in the global shipbuilding industry on Canadian shipbuilding has been primarily threefold.

- Canadian owners have been attracted by low prices. Some have knowingly accepted lesser

quality because of the extraordinary price and financing arrangements being offered and, as a result, have gone offshore to have their vessels constructed.

- The ability of unsubsidized Canadian yards to compete in the international marketplace has been severely affected.
- The continued enforcement of the *Jones Act* in the United States, despite the provisions of the North American Free Trade Agreement (NAFTA), has eliminated the United States as a market. This situation is not faced by any other Canadian industry. Any policies for revival of the shipbuilding industry in Canada must recognize, accept and confront these realities.

While the situation that faces Canadian shipbuilding is extremely difficult, there are solid prospects for the industry. These prospects focus on the Canadian domestic industry in the immediate term with penetration of the international marketplace a necessary but longer-term goal. The National Partnership Project Committee believes that the fundamental principle governing domestic trade and the harvesting of Canadian resources should be one of "made in Canada." This does not mean that all ships and structures must be built in Canada exclusively. However, it does mean that policies to assist the industry should ensure economic benefits to Canada as well as technological and social benefits.

Clearly, the Canadian east coast offshore oil and gas industry offers tremendous potential for the shipbuilding industry. Investment in these resources is already in the billions, and the potential for future investment and exploration is high. Shipbuilders can participate in this industry in many ways. From the provision of complete oil rigs, to components, to anchor handling supply vessels, tugs, crew boats, heavy fabrication, engineering expertise, life cycle and logistic support, to name but a few. Prospects also appear bright for future exploration and development on Canada's Pacific coast and in the arctic.

Environmental regulations require that the Canadian domestic oil tanker fleet be double-hulled by 2010. Replacement of these vessels should be done in Canada. A close inspection of the environmental implications of an increase in marine transport over rail and trucks is most interesting. Marine transport is clearly a winner in the areas of emission control and safety per tonne-kilometre.

The Great Lakes fleet, with some 30 vessels, is aging and will have to be replaced. This replacement represents in excess of ten year's work to Canadian yards on the St. Lawrence waterway.

On the Pacific coast, in addition to the prospects for oil and gas, commercial tug and barge operators are looking to renew their aging vessels. The British Columbia Ferry Corporation is on record on the need to begin replacing its 43-vessel fleet as soon as possible.

The Canadian government fleets, particularly the Navy and the Canadian Coast Guard, have ship programs they wish to pursue. A strategic plan is needed for the replacement of these fleets. The Government of Canada would appear to be spending large sums of public money in maintaining old and obsolete ships, while the more cost-effective solution could be to replace these aging vessels with new ones. The systematic procurement of replacement vessels over the longer term would ease government cash flow and ensure that government ships are ready to meet not only the forecast requirements but also the unexpected tasks occasioned by crises both natural and human-caused. A comprehensive strategic program designed to keep government fleets modern and to provide continuing support to the shipbuilding industry could be used to form the basis upon which the shipbuilding industry could leverage its core capability to other markets and initiatives.

There are good opportunities regarding the replacement of fishing vessels. At the present time, foreign subsidized vessels over 100 feet (30 metres) in length are being imported into Canada duty-free. If this were to stop, a sizable market would open to Canadian builders. Certainly the capability exists in Canada to produce these vessels competitively.

Another potential niche market exists for the replacement of fishing vessels less than 19.8 metres (65 feet). There is some concern that the current length restriction is unreasonable and is detrimental to crew safety. One way to alleviate this problem is to introduce a new class of vessel with a length of less than 25.9 metres (85 feet), but with a comparable capacity to that of the widened vessel originally less than 65 feet in length. This increased length would not pose a conservation concern, since the quota for harvesting fish would not be increased. This would result, however, in a niche market for small shipbuilders, with a conservative estimate of new build orders in the area of 200 fishing vessels.

One area of marine transportation that is bound to receive more attention in the coming years and provide opportunities for Canadian shipbuilders is the Canadian arctic.

This northern route is considerably shorter from British Columbia to Europe or from the east coast to Asia. This passageway could be available year-round, provided that the ice pack continues to recede and adequate icebreakers are used. As well, there is renewed interest in exploring for oil and gas in that region and, if it occurs, there will be demand for latest technology icebreakers.

Atlantic Hawk (front) and *Atlantic Eagle* both built at Halifax shipyard, a division of Irving Shipbuilding Inc.

All Canadian shipbuilders participate in the ship repair market. This is a core business. Those who presented to the Marine Industrial Forum in October 2000 were unanimous that this business, while essential, was not sufficient to sustain the yards, particularly the larger ones. Canadian yards will continue to compete in this market segment, but the larger yards will not be able to remain viable on the basis of this business alone.

Finally, the shipyards have outstanding technology and assets that can be, and have been, applied to pre-build for other industries. These opportunities could be expanded upon.

In summary, the National Partnership Project Committee believes there are substantial prospects for the Canadian shipbuilding industry in the Canadian domestic shipbuilding and offshore oil and gas market that can be quickly exploited. In the longer term, the committee also believes that these domestic core competencies can be leveraged into niche market areas in the global marketplace.

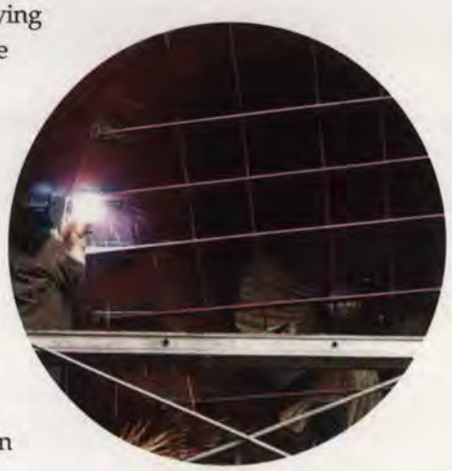
RECOMMENDATION

That the Department of Fisheries and Oceans review the licensing of vessels currently restricted to 19.8 metres (65 feet) to allow them to be replaced or converted to a vessel length of less than 25.9 metres (85 feet).

Business Required to Sustain Existing Canadian Shipyards

A rough estimate of the amount of business required annually to sustain the viability of Canada's ten largest shipyards is somewhere between half a billion and three quarters of a billion dollars. This represents slightly less than 1 percent of the annual world market (approximately 2000 ships built worldwide annually at an average price of between $25 million and $40 million).

Given a relatively level playing field at home, there should be sufficient business in replacing the aging fleets of British Columbia and the Great Lakes, along with ongoing repair business to sustain the shipyards in those provinces over the next 15 years. The volume of business required for those yards is approximately 25 percent of Canadian capacity.



The Davies yard and the Saint John yard represent almost 50 percent of the total Canadian capacity. They require mainly newbuilds to be viable. Their primary target markets are offshore oil and gas and federal government procurement.

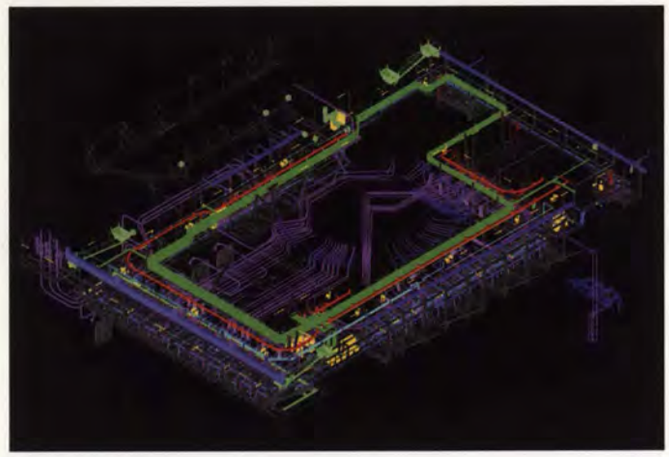
The remaining Atlantic Canada yards represent roughly 25 percent of Canadian capacity. They would rely on a combination of newbuilds and repair business to achieve the required volume.

Policies adopted by the Government of Canada will have a major effect in determining the future viability of Canadian yards. In fact, two vital areas relating to the question of whether the industry can be viable at current capacity in the domestic market are:

- the extent to which Canada can leverage its offshore resources for Canadian economic benefits
- the extent to which Canadian government fleets (Department of National Defence, the Coast Guard and the Department of Fisheries and Oceans) can plan its procurement over the next 15 years.

The issue is, Do we want a shipbuilding industry in Canada? Rationalization was a failure in the mid-1980s due to the absence of policies to deal with the chronically unequal playing field in global competition. The same holds true today.

The committee received a strong message from stakeholders across Canada: "Give us the tools to combat foreign subsidies and unfair trade practices and we will show you what we can do. If Canada does not have the resources or the will to engage in a subsidy war, then we must take stronger action at home to prevent foreign subsidies from doing further damage to our domestic shipbuilding market." The committee strongly supports a policy that gives the industry an opportunity to compete with foreign-built vessels on an equal basis — starting in Canada.



TRIBON product model of spider deck for a semi-submersible oil production platform.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PART III

Issues and Recommendations

Subsidies and Unfair Trade Practices

The worldwide shipbuilding industry is riddled with subsidization and unfair trade practices. Research conducted by the U.S. Department of Transportation, Maritime Administration (MARAD) reveals that dozens of countries provide subsidies in one form or another to their shipyards. Canada has elected to stay out of the business of handouts.

The major player in the industry is South Korea. According to a May 3, 2000, report from the Commission of the European Communities, South Korea won 33.3 percent of all new orders in 1999 (measured in compensated gross tonnage). Japan was second with 26 percent, the European Union (EU) had 17.2 percent and the rest of the world had 23.5 percent. In January 2000, South Korea secured a staggering 72 percent of all world orders with Japan at 10 percent and the EU at 7 percent. The South Koreans have been the subject of close scrutiny by the EU for allegedly providing subsidies in the range of 40 percent. The Europeans have concluded that the expansion of South Korean yards between 1994 and 1996 is the main reason for the estimated 20–25 percent overcapacity in the world today. Estimates are that South Korean capacity tripled during that period.

The Europeans announced that as of December 31, 2000, they would no longer be providing subsidies, direct and indirect, to their shipbuilding industry. These were generally believed to be in the vicinity of 20 percent. However, a press release in early February 2001 indicated that the EU is planning to increase direct subsidies to 20 percent effective immediately to stop the flow of business to South

Korean yards. This means that total direct and indirect support for some European countries could increase to approximately 30 percent.

The international competition is brutal. Subsidy-distorted markets, unfair trade practices, global overcapacity in many types of markets — all of these factors cause you and our industry tremendous problems.
— The Honourable Brian Tobin
Speaking at the Marine Industrial Forum
St. John's, Newfoundland
October 20, 2000

As long as there are perceived South Korean subsidies, the Europeans and Japanese as well as the rest of the world will provide subsidies to their yards to try to protect market share. The level of subsidization in the shipbuilding industry by so many countries is unprecedented.

On top of the subsidization issue, Canadian shipyards are effectively shut out of the United States market by virtue of the *Jones Act*. This Act is actually a collection of maritime laws that stipulates that cargo carried between U.S. ports must be carried by U.S. ships that are built, registered, owned, crewed, serviced and repaired exclusively by U.S. enterprises. This legislation was exempted from NAFTA and prevents Canadian shipbuilders from selling their vessels into the U.S. This factor by itself is a huge handicap — one can imagine the state of the Canadian automobile or aircraft industry if they were prohibited from making sales to the market that accounts for more than 80 percent of total Canadian exports. They would be out of business.

Meanwhile, U.S.-built ships enter Canada duty-free. It is readily evident that the *Jones Act* receives considerable support from U.S. lobbying groups. As such, it will be difficult to effect any material changes that would help Canadians. However, it is important that this issue is in the forefront of trade terms to be renegotiated with the U.S. — keeping in mind that even minor adjustments could significantly improve prospects for Canadian shipbuilders.

Canada's existing shipbuilding policy falls short of combating these foreign practices. The key elements of the policy as described by Industry Canada appear below. Each of these issues is dealt with again in some detail later in this report.

- **Domestic procurement of federal fleet:** This is a critical element. Unfortunately, exceptions have been made to the policy at the expense of Canadian shipbuilders.
- **Twenty-five percent tariff on non-NAFTA vessels imported into Canada:** This provision is effective against foreign subsidies of 20 percent, but it falls well short against subsidies of 40 percent (a tariff of 67 percent would be required). The policy needs to be revisited to deal with the higher-subsidy situations and tightened up to eliminate exclusions.
- **Accelerated capital cost allowance — four-year full write-off:** This very attractive option is restricted to too few Canadian investors. The present policy stipulates that this option is available to owners/operators only rather than to owners and/or operators.
- **Export financing — up to 80 percent over 12 years:** This is ineffective in battling foreign subsidies and in competing with Title XI financing from the United States. All competitors can routinely offer these same terms.
- **Access to the Institute for Marine Dynamics:** This is an excellent facility but a very high percentage of its graduates (in some cases entire classes) are being lost to United States employers.

When the question is raised about why Canadian yards are not winning more orders, the answer is simple — they are competing in a world of subsidy users without having any subsidies at their disposal. They need to overcome handouts in the range of 20–40 percent to win business. The Europeans are losing considerable market share to Asia, despite an active subsidy program. The sad part about this scenario is that business goes to the country with the highest government subsidies rather than to the one with the best product and/or the lowest costs.

The big winners in this equation are the ship owners. They are buying vessels at deep discount prices. The losers are Canadian shipbuilders, labourers and taxpayers. Every foreign vessel that is sold for less than the unsubsidized cost of labour and materials is an unfair trade practice. It is an affront to the Canadian industry, which has been trying for many years to establish itself in the world marketplace without the benefit of excessive and unfair subsidies and trade practices.

Canada needs to aggressively fight this situation if the industry is to survive. The Europeans have led the way in challenging the South Koreans, but that battle has not yet made a difference. Too many countries see their shipbuilding industry as a matter of national priority and security. The fact that the most powerful member of the World Trade Organization, the United States, continues to vigorously defend the protectionist terms of the 77-year-old *Jones Act* is testimony to the special status that the industry receives almost everywhere except Canada.

Subsidies come not only in the form of government handouts to industry. In some countries, the workers themselves are subsidizing their industry by working for low wages and in conditions that would not be tolerated in Canada. By deliberately suppressing labour and social rights, some foreign shipbuilders are effectively filling their order books at the expense of their workers. In light of this reality, the National Partnership Project Committee believes that an international social clause governing labour standards in shipbuilding should be developed and promoted by the Canadian government.

Lost in this world of subsidies and unfair trade practices is the definition of true competitiveness. **The Canadian industry is fully competitive in terms of labour costs, productivity and quality of work. Industry Canada reports that between 1988 and 1998, labour productivity in the shipbuilding and repair industry increased at a rapid 2.81 percent per year for a total growth of 31.9 percent.** Labour productivity measures gross domestic product (GDP) per employed worker. The average annual growth rate for the total manufacturing sector over the same period was 0.81 percent. By comparison, the aircraft and aircraft parts industry grew at the rate of 1.61 percent and the motor vehicle industry grew at the rate of 1.54 percent. In the category of capital productivity, which measures GDP per capital stock, the shipbuilding industry grew at an "astonishing" 4.47 percent per year. Technological progress was cited as one of the reasons for this "impressive and interesting" productivity performance.

As for labour rates, the following information demonstrates Canada's competitiveness with other developed countries.

Table 1 — Hourly Labour Rates, Shipbuilding Industry, Selected Countries

Country	Rate	Year
Germany	$ 34.04	
Norway	$ 26.19	
Finland	$ 25.49	
Japan	$ 25.09	
Denmark	$ 20.66	93
France	$ 19.99	
Netherlands	$ 19.74	94
United States	$ 18.39	
Italy	$ 17.89	
Sweden	$ 17.50	93
Canada	**$ 15.00**	
United Kingdom	$ 13.73	93
Greece	$ 13.11	
Taiwan	$ 11.81	
Korea	$ 8.03	92

Source: U.S. Bureau of Labor Statistics (1999) based on the most recent available statistics which, unless otherwise indicated, are from 1996.

Industry Canada officials acknowledge that it is generally accepted that Canadian quality is competitive with the best.

The challenge to the committee is to make recommendations to put the Canadian shipbuilding industry into a real and sustainable market without the use of subsidies. The picture is perfectly clear. We do not have much time and we do not have much room to manoeuvre.

Foreign subsidies have spoiled most of the export market. Without subsidies, it will be difficult for Canada to compete effectively in the export world. There are niches, namely the success of East Isle Shipyards of Georgetown, Prince Edward Island, on a sale to Panama, but even there some special provincial incentives were required to close the sale.

If subsidies were to cease tomorrow, the effect of the practice would carry on for some time. Countries using subsidies are securing business today that allows their industry to advance along the learning curve for a series of vessels, which makes them more competitive in the long run. Under these circumstances, Canada must look first at its own market to find solutions.

It is time for Canada, framed by three oceans and gifted with the Great Lakes and the St. Lawrence Seaway, to stand up and fight for an innovative and competitive industry that should be designated a national priority — before it is too late.

RECOMMENDATIONS

That the Government of Canada:

- press for the elimination of subsidies to the worldwide shipbuilding industry
- press the United States for amendments to the *Jones Act* to allow for greater participation of Canadian shipyards
- resist any requests from other countries to change provisions of the Canadian shipbuilding policy until such time as the Canadian industry has been able to overcome the long-term effects of the subsidy and unfair pricing policies of other countries
- develop and promote an international social clause concerning labour standards in shipbuilding.

III

Labour–Management Issues

An area where the provincial and federal governments can work with the industry is in the area of labour–management relations. Productivity is a priority and it is imperative that it be maximized while respecting the worker's right to collective bargaining. Historically, the Canadian marine industry has been largely unionized in an industrial setting (as opposed to a multiple trade union setting) where one union, that is, one certified bargaining agent, represents all production workers.

Under such an arrangement, all trades and thus all workers involved in the construction, maintenance or repair of ships, offshore structures and other marine infrastructure would be included in the same union. Issues such as industrial relations and jurisdictional disputes would be dealt with through one collective agreement.

Full labour stability guarantees are unlikely, if not impossible. However, the one industrial union setting works best to ensure the greatest possibility of achieving labour stability on any given work site. A case in point is that there is not one recorded incident of labour unrest or lost time due to jurisdictional disputes between trades in the industrial union setting.

RECOMMENDATION

That provincial and federal governments work with industry to ensure that the industrial union model is the form of union structure required for shipbuilding, offshore and other marine-related work sites.

III

International Shipbuilding Agreements

Trade-distorting subsidies and dumping practices have plagued the world shipbuilding industry for years. Problems peaked in the 1970s and 1980s prompting governments to develop policies to deal with them. An understanding on export credits for ships was first negotiated in 1969 by the Organisation for Economic Co-Operation and Development (OECD).

The United States initiated negotiations in 1989 on an Agreement Respecting Normal Competitive Conditions in the Commercial Shipbuilding and Repair Industry (ARNCC). The goal of the agreement was to establish, *in a legally binding manner*, subsidy and dumping-free competitive conditions in the shipbuilding industries of member countries of the OECD and South Korea. At the time, these countries accounted for approximately 80 percent of the world's shipbuilding industry.

In December 1994, the Commission of the European Communities and the governments of Finland, Japan, South Korea, Norway, Sweden and the United States signed the final act of the agreement. The next step was for all parties to have it officially ratified through their national processes. A target date of July 15, 1996, was set to bring it into force. Ratification never occurred. The deal fell apart, and the free-for-all with respect to subsidies and dumping has continued.

The last formally ratified international agreement on ship financing is the OECD Understanding on Ships that was signed in 1981. The provisions of that agreement have been outdated for some time. It stipulates an 8 percent interest rate and a maximum repayment term of eight and one-half years. At the time, the 8 percent interest rate was highly concessionary relative to a U.S. dollar commercial rate that was close to 14 percent. As well, the

repayment term of eight and a half years was relatively long for European lenders. By the mid-1980s, the gap between the OECD rate and the commercial rate had narrowed to approximately 100 basis points (1 percent) for U.S. dollar loans. Some European countries with a subsidy mentality were lending in high rate (double digit) currencies (e.g. pounds sterling) at the 8 percent rate to keep some subsidization of interest rates in the equation.

The ARNCC agreement contained a recommendation to go to a commercially based rate — called the commercial interest reference rate (CIRR) — and to extend the maximum repayment term to 12 years. Canada is operating on the basis that the new rates and terms are in effect. The United States is not. It has its own financing program, referred to as Title XI. It is likely that other countries are providing financing terms that best serve their interests. All in all, it is an interesting dilemma: there is no formal agreement to use ARNCC terms, and the 1981 agreement is so outdated that no one is expected to honour it.

The latest news from the OECD on the matter is that the OECD Council Working Party met on December 18 and 19, 2000, to discuss ways to bring about normal competitive conditions in the shipbuilding industry. A decision was taken to delay further consideration until the new U.S. Administration is in place and can clarify its position on the issues.

In a news release dated December 20, 2000, the Chairman of the OECD Working Party announced that agreement had been reached to update financing arrangements for ships and that "it was a matter of urgency to update the increasingly outdated 1981 Understanding on Export Credit for Ships to reflect present-day market conditions." The Working Party "expects to consider specific text for final approval at its next meeting in July 2001, if possible." So, it is 12 years and counting since the ARNCC was introduced to eliminate subsidy and dumping-free competitive conditions in the industry.

The industry can compete on a level playing field where participants are treated equally and it can compete on merit.
— Irving Group presentation
Halifax, Nova Scotia
January 2001

Shipconstructor product model for the 5000 m³ hopper dredger — *Liberty Island*

III

Financing and Investment Issues

The vision of a new shipbuilding policy should be to create "centres of excellence" throughout the country, ensuring modern, efficient shipbuilding facilities combined with well-placed incentives to shipowners to jump-start the rejuvenation of the Canadian commercial fleet.
— Combined presentation of Canadian Shipbuilding & Engineering Ltd. and The International Brotherhood of Boilermakers, Local 680
January 2001

In the absence of any subsidies directed to the Canadian shipbuilding industry, competitive financing and an attractive investment environment are critical requirements in any shipbuilding policy designed to combat predatory practices of foreign governments and their shipyards. This section of the report deals with four main areas:

- export credits
- extended-term financing
- Title XI financing
- tax transfer bareboating.

Export Credits

The existing Canadian shipbuilding policy includes export credit financing from the Export Development Corporation (EDC), a federal government Crown corporation. EDC's general financing terms and conditions are governed by the Understanding on Ships among members of the OECD. These terms and conditions are available to all members of OECD. As such, they provide no specific advantage to Canadian shipbuilders. In fact, as mentioned earlier, there is confusion over which guidelines apply.

Export credits are a bit of a hybrid. They are neither pure commercial loans nor are they soft or subsidized loans. They are somewhere in between. A fitting classification might be "commercially oriented loans." The interest rates are based on commercial reference points (e.g. U.S. Treasury bills for U.S. dollar loans), but can be fixed up-front before any disbursements are made on the loan. Under OECD guidelines, a CIRR is established every month and can be held for up to 120 days. If market conditions are such that interest rates are rising, the situation could be very advantageous for a borrower.

For instance, during 1999, interest rates were on the upswing. The CIRR rate on January 15, 1999, was 5.65 percent. By July, it reached 7.05 percent, an increase of 140 basis points. A smart buyer could have taken advantage of the situation and locked in the 5.65 percent. The rate has not been that low since. A lender would have had to fund the loan in the higher rate market conditions. This is not pure commercial lending. A pure commercial lender would protect itself against any funding risk by quoting a fixed rate at the time drawdown is made on the loan. Does it mean that the lender made a loss? Not necessarily, but it does mean that the lending margin was certainly squeezed. This type of situation presents itself from time to time in export credit situations.

Many countries that provide subsidies to their shipbuilding industry are also of the mind that they will provide the lowest possible interest rates permitted under OECD guidelines to foreign buyers. As just described above, this can result in further sizable compensation to benefit their shipbuilders and further disadvantage the Canadian industry. Based on prevailing rates, a saving of 100 basis points could reduce loan payments by close to 20 percent. Canada does not have a policy of automatically offering the lowest rate.

The subsidy mentality of foreign governments is alive and well today. Despite repeated announcements that such support would be discontinued at year-end 2000, the European Union Commission is reported in the February 2001 Schiff & Hafen Newsletter, *New Ships*, to be "considering scope for member states to give state subsidies of up to 21 percent on shipbuilding contracts to counter South Korean competition." Their existing levels of direct and indirect subsidization, often alleged to be in the range of 20 percent, have not been sufficient to stem the flow of orders to the South Koreans.

An article in the *New York Times* of February 1, 2001, titled "A Revival for Brazilian Shipyards," stated that the Brazilian government extended the repayment term on its loans for shipbuilding from 15 years to 20 years and reduced the interest rate from 6 percent to 4 percent. These are much better terms than Brazil offers in support of its well-known aircraft manufacturer, Embraer. Those terms were the subject of a much-publicized WTO dispute between Canada and Brazil that ended up ruling in Canada's favour.

Plan long-term fleet requirements and space out construction to ensure a continuum of work for a limited work force.
— Robert G. Allan, Robert Allan Ltd. Vancouver, British Columbia January 2001

Canada does not operate like many other countries. It does not have a policy of automatically providing the very best interest rates possible under OECD guidelines. EDC is expected by the Government of Canada to operate on a self-sustaining basis or, as described in the *Export Development Act*, in a "financially sound manner." As such, the Canadian export credit system is unique. As described above, many countries operate on the principal that they will provide the very best rates and terms that are allowable under the OECD arrangement notwithstanding that in some cases, support could provide very tangible extra benefits.

The shipbuilding industry needs a commitment from the Government of Canada to ensure that transactions are not lost on the basis of loan pricing or other terms and conditions prescribed by the OECD. Canada needs to be able to offer what other countries are offering — if, in fact, the borrower wants OECD terms and conditions.

The bottom line on OECD terms is that they are out of touch with the reality of the market. Ship buyers want to keep their debt-servicing costs low. This can be achieved most cost effectively by lenders extending

the terms of repayment. The OECD is not providing the type of financing terms that make capital goods affordable in their own countries. In Canada, for instance, consumers can readily access 20-year financing terms to buy recreational vehicles or boats. Such terms should be available to finance commercial vessels.

Glace Bay **— an MCDV (Maritime Coastal Defence Vessel). The series of MCDVs were built at Halifax shipyard, a division of Irving Shipbuilding Inc.**

Canadian Forces, photo by Sgt. Mike Bonin.

One of the factors working against extended-term financing in the OECD is that very few countries have a direct lending organization set up that compares to EDC. EDC has its own treasury department, which handles its funding requirements (its costs) for its lending portfolio very effectively. Most OECD countries operate loan guarantee programs that, by their nature, do not minimize funding costs. As a result, extended terms often mean extended costs to many OECD countries. Canada has the ability to lead the way in extended-term financing.

Extended-term Financing

One distinct advantage that EDC has over other export credit agencies and that it uses for the advantage of Canadian exporters is the ability to be a direct lender in commercial transactions. EDC has been very effective in helping Canadian exporters in project financing situations and in providing repayment terms that are more in sync with the useful life of a transaction. This ability has special application for the shipbuilding and industrial marine sector. Ships have a useful life of anywhere from 25 to 40 years. Repayment terms of 18 to 20 years are more in line with that expected life. The 12-year repayment term available from OECD may be attractive in situations where the selling price of the vessel has already been subsidized by 20–40 percent but it does not work in a Canadian situation where the vessel is not subsidized. Longer terms will lower the yearly debt amortization costs.

The situation is not unlike a home buyer trying to finance a new house with a 12-year amortization period. It may work for people with high incomes or with considerable equity, but it will not work for a lot of worthy buyers who have insufficient cash flow to pay off the house in 12 years but who nevertheless have good credit ratings. To demonstrate, the approximate principal and interest payment for a $150,000 mortgage at an interest rate of 6.5 percent with a 25-year amortization period is only $1000 per month. It becomes $1500 per month with a 12-year amortization. It can be argued that the shorter term is a better deal on a net present value basis because less interest is paid. The deciding factor is the required monthly payment — what counts most to the average house buyer is how much they can afford to pay. The same situation holds true in the ship-buying business. The shipowner wants to keep costs to a minimum so that the day rate will be competitive enough to produce a reasonable profit margin on an annual basis.

Extended-term financing of 18 years plus the 25 percent tariff on non-NAFTA vessels is an effective combination. The 18-year financing can reduce the front-end daily debt-servicing cost to a level that is competitive with the debt-servicing cost on the 40 percent subsidized foreign vessel that is supported by 12-year financing. Most importantly, this type of financing is classified as commercial market window financing and, as such, does not contravene OECD rules.

Table 2 — Effect of Using 18-year Financing to Combat Foreign Subsidies

	Canadian-build no subsidy	Foreign-build 40% subsidy	Foreign-build 20% subsidy
Material and labour cost	$60,000,000	$60,000,000	$60,000,000
Subtract subsidies	$0	$24,000,000	$12,000,000
Sales price	$60,000,000	$36,000,000	$48,000,000
Add: 25% Canadian tariff	$0	$ 9,000,000	$12,000,000
Final price to buyer	$60,000,000	$45,000,000	$60,000,000
Down payment (20%)	$12,000,000	$ 9,000,000	$12,000,000
Financed amount	$48,000,000	$36,000,000	$48,000,000
Loan conditions:			
Amortization period	18 years	12 years	12 years
Interest rate (OECD)	6.28%	6.28%	6.28%
Type of payment	Blended	Blended	Blended
Daily debt-servicing cost	$12,300	$11,824	$15,765
Cost disadvantage ($)	$ 476	$0	$ 3,941
Cost disadvantage (%)	4.03%	0.00%	33.33%

It is the National Partnership Project Committee's opinion that if EDC provided extended-term financing at competitive commercial rates for new builds or refurbished Canadian ships, considerable new business for Canadian shipyards would result.

The principal issues with extended-term financing are interest rates and creditworthiness of the buyer/borrower.

- **Interest rate (fees etc.):** There may be situations that in order for the Canadian debt-servicing cost to be competitive, the applicable interest rate will need to match the OECD rate (CIRR) that is available to the foreign competitor. This may be difficult for EDC to do on a strict commercial basis. An alternative is to structure the loan with a 12-year repayment term at CIRR with an 18-year amortization period. At the end of the 12-year term, the interest rate could be changed to then prevailing OECD rates. If taking such approaches causes EDC to fall outside the commercial window definition, then it would not be difficult for Canada to make a case for providing extended terms to help combat the foreign subsidies. If EDC is unable to provide the competitive financing needed, then consideration should be given to process the application on a national interest basis.

- **Creditworthiness of the buyer/borrower:** It is hoped that most potential buyers will meet EDC's lending criteria. However, much like the interest rate situation, there may be cases where the buyer may not meet EDC's basis lending criteria but it may be in Canada's national interest to consider the application.

Another situation could arise where a competitor is offering a greater amount of financing than Canada. It may be EDC's opinion that they only wish to provide financing for, say, 70 percent of the price of the vessel rather than the higher amount required by the borrower. The federal government, perhaps in cooperation with the applicable provincial government, could consider accepting the additional financing risk on a contingent liability basis.

Another alternative to optimizing the amount of financing from Canada would be for the Government of Canada to provide a residual value guarantee to a lender that would ensure a certain value on the vessel (the lender's primary piece of security) throughout the life of the loan. This would be similar in nature to the insurance provided by the Canada Mortgage and Housing Corporation (CMHC) on houses built by approved Canadian builders.

This industry must not be written off. It can and it must be revitalized to enable it to play its rightful part in contributing to the economy of this country.
— Wayne Butler, CAW/MWF, Local 20
St. John's, Newfoundland
December 2000

One proviso in the proposed ARNCC agreement of the OECD is that government-assisted loans and guarantees to domestic buyers of ships should be allowed provided they are no more favourable than permitted for foreign buyers. The principle is that domestic and foreign buyers would be treated in an equal manner. Such a proviso should be included in any financing provided by Canadian sources.

Title XI Financing

The United States government has stayed away from providing direct subsidies to its shipbuilders. Instead, it uses a very attractive financing program called Title XI, featuring repayment terms of up to 25 years as a tool to help its yards. This 25-year feature significantly reduces a borrower's daily debt-servicing cost from what it would cost under OECD terms. For instance, the daily cost of the OECD option could be 50 percent higher than the Title XI cost. Details are provided later on in this section. In a cash flow-sensitive industry like shipping, this advantage is large. Never mind that over the long run the borrower will pay more interest costs with Title XI. Given two equally competitive vessels, the borrower will take the one with the lower debt-servicing costs. This situation is no different from the one facing a consumer with limited cash flow who will always lease the vehicle with the lower monthly charge, given a choice between two similar products.

The Title XI program was originally established in 1936. It provides for a full faith and credit guarantee by the United States government for the purpose of promoting the growth and modernization of the U.S. merchant marine and U.S. shipyards. U.S. or foreign buyers are eligible for the support, as are U.S. shipyards for the purpose of financing advanced shipbuilding technology. Vessels eligible for support include the full range of commercial vessels, including offshore oil rigs and floating dry docks. The primary financing terms are as follows:

- repayment term — up to 25 years, either equal principal plus interest or equal blended payments of principal plus interest

- level of financing — up to 87.5 percent of the cost of the vessel
- interest rate — negotiated on a case-by-case basis using U.S. Treasury obligations as a benchmark
- term of interest rate — can be fixed for the entire term of the loan.

Despite the extended repayment feature, the program is essentially self-sustaining. This is because the interest rates and fees charged are commercial in nature. Following is a brief summary of applicable fees:

- interest rate — U.S. Treasuries of comparable average life plus a lending margin based on the creditworthiness of the borrower
- guarantee fee 0.25–0.5 percent during pre-delivery period — 0.5–1 percent annual fee, after delivery
- arrangement fee — 0.5 percent
- standby fee — details not available
- investigation fee — 0.5 percent on obligations up to $10 million ($50,000) plus 0.125 percent on all obligations in excess of $10 million
- agent's fee — determined case-by-case — only for transactions over $50 million.

The program was originally intended to cover U.S. domestic sales only, but was expanded in 1994 to cover export sales. There are some views from outside the shipbuilding industry that the Title XI program is not much of a threat to Canada. Proponents point to the limited number of export transactions — approximately a dozen or so — and that only two of those were to Canadian buyers. There is also the view that Title XI probably cannot compete with foreign subsidies, especially when the price competitiveness of the U.S. yards is considered. Upon further investigation, it was found that 14 export transactions were

financed between 1994 and 1999. **More importantly, the financing was tied to the sale of 30 units representing a total contract value of US$1.8 billion. This is business that Canadian yards could have won had they access to a financing program that competed with Title XI.** These results are dramatic proof that the low monthly debt-servicing cost produced by extended-term, non-subsidized financing can fight against foreign subsidies.

Canada is most vulnerable to the effects of Title XI financing because U.S. vessels enter Canada duty-free under the terms of NAFTA and because our government provides no subsidies to Canadian shipyards. Significant Canadian jobs have already been lost strictly because of Title XI financing and more are threatened. Many of the sales made with Title XI have to be considered as situations where Canada could have competed. In one situation, Secunda Atlantic Inc. and Secunda Marine Atlantic Ltd. purchased one vessel each from U.S. shipyards in 1996 and 1997 for a total cost of approximately $70 million to operate in the Atlantic offshore. Further orders and jobs would have been lost, had the Province of Nova Scotia not stepped up to provide guarantees competitive with Title XI. As a result, two supply vessels, *The Hawk* and *The Eagle* were built in Halifax. These two vessels are reputed by many to be the elite of the Atlantic offshore fleet.

The main feature of Title XI financing is the extended repayment term — up to 25 years. The actual cost of the loan is a base lending rate of a comparable U.S. Treasury rate (approximately 5.4 percent in February 2001 for 30-year Treasuries) plus a normal commercial lending margin, plus fees. The all-in lending rate is likely to be more than the prevailing OECD CIRR rate. As such, competing with Title XI is doable with existing financing mechanisms.

Table 3 compares the differences between three types of financing:

- 25-year Title XI financing
- 18-year extended-term financing
- 12-year OECD financing.

For ease of comparison, the same interest rate is used in each of the three scenarios. No fees are added. Repayment is on a blended basis — equal payment of principal plus interest. The results show that 25-year financing can produce a daily financing rate nearly 50 percent cheaper than the daily debt-servicing cost possible under OECD terms. The discrepancy between Title XI and 18-year financing is only 17 percent — if the rates are the same. In order to get the debt-servicing cost under the 18-year scenario down to the same as Title XI figures, the interest rate on Title XI financing would need to be almost 180 basis points higher than the 18-year financing.

The main points of this evaluation are as follows:

- Title XI interest rates, while relatively attractive, are not concessionary. Canada is well equipped through EDC's world-class treasury operation to fund loans at a competitive rate.
- Canadian yards are fully competitive with U.S. yards in terms of innovation, technology, labour costs, productivity and quality.

Table 3 — Daily Debt-servicing Costs: Title XI Versus 18-year Terms Versus 12-year OECD Terms

	U.S. Title XI financing 25 years	Extended terms 18 years	OECD terms 12 years to	Rate required on Title XI to be equivalent 18-year terms
Financed amount	$50,000,000	$50,000,000	$50,000,000	$50,000,000
Interest rate (OECD)	6.28%	6.28%	6.28%	8.04%
Type of payment	Blended	Blended	Blended	Blended
Daily debt-servicing cost	$11,025	$12,900	$16,507	$12,909
Additional daily cost ($)	$0	$1,875	$5,482	$9
Additional daily cost (%)	0.00%	17%	50%	0.07%

RECOMMENDATIONS

(Note: All of the following recommendations conform to OECD guidelines.)

That the Government of Canada make it practice:

- not to lose a transaction to a competitor in circumstances where the competitor is offering non-concessionary financing to a creditworthy borrower, whether they are OECD terms, extended terms or Title XI
- in the case of direct competition with Title XI financing, to provide the support necessary to EDC to enable them to provide financing equivalent to Title XI
- in those cases where EDC is unable to accept the credit risk of a proposed borrower on their own and where a competitor is likely to do so, to seriously consider approval of the application on a national interest basis
- in situations where the amount of financing being considered by EDC is less than that being considered by a competitor, to agree to consider enhancing the credit on a national interest basis, with a guarantee to fill the gap between the EDC amount and the amount being considered by the competitor; an alternative to a loan guarantee could be a residual value guarantee on the vessel.

That the Government of Canada in addition agrees to:

- provide the necessary support to EDC to enable them to offer the best possible OECD interest rates and terms in situations where the borrower requests OECD export credits
- empower EDC with the responsibility of providing extended-term financing under their commercial market window to foreign and domestic buyers of Canadian-built ships
- provide the necessary support to EDC in situations where Canada is competing against subsidized shipyards to allow EDC to offer competitive interest rates and maximum financing amounts with up to 20-year repayment terms
- advise appropriate government departments and streamline processes to facilitate prompt processing of applications and quick turnaround.

- The United States' attitude toward Title XI financing with respect to credit assessment of the borrower appears to be commercial in nature and, as such, Canada should be able to compete directly in that area.

Title XI financing is a threat to Canadian yards. Canada is in danger of losing further sales to the U.S. unless it counters with a competitive financing product. Canadian buyers will be attracted to U.S.-built vessels, even though they may cost 10–20 percent more than Canadian builds, because the 25-year term can reduce daily debt-servicing costs by up to 50 percent.

Canada takes some comfort in the U.S. position that Title XI is commercial financing. Canada does not have to fear being pulled into a quasi-subsidy war. The extensive replacement of aging fleets planned in British Columbia and on the Great Lakes represents critical business prospects to Canadian shipyards. Canada should ensure that no business is lost to the United States on the basis of financing.

Tax Transfer Bareboating

Bareboating is an age-old marine practice whereby an owner of a ship rents or charters that vessel to an operator. The practice recognizes the fact that there are two distinct groups of people in the shipping world — investors/owners and operators. Investors are interested in owning assets but not necessarily in operating them. Operators of course may not be interested in owning the assets.

Existing Canadian policy is preferential toward only one classification — the owner/operator. As such, the widespread marine practice of bareboating is discouraged, and therefore a large constituency of investors is denied an equal opportunity to purchase Canadian ships and stimulate the industry.

The change to the leasing rules will have an immediate impact on the order books of Canadian yards. We anticipate experiencing for the first time in several decades a backlog of work.
— Washington Group Presentation, Vancouver, British Columbia January 2001

The issue at hand is capital cost allowance (CCA). The existing shipbuilding policy allows straight-line depreciation of Canadian-built and Canadian-owned ships at the attractive rate of 33.33 percent over a four-year period (subject to the half-year rule in the year of acquisition). A key restriction is that the owner must also be the operator. **This is an excellent incentive that unfortunately is not being put into the hands of enough people who can use it.** Many operators in Canada are not in a financial position to take advantage of such a provision.

The nature of the shipping business is that profits are squeezed during the early years of owning a vessel because of debt-servicing costs. In Canada, there is also an issue with shipping rates. Unless these early-year debt-servicing costs are minimized, owner/operators experience tight cash flows and are not in a position to use the CCA. In addition, future purchases are often discouraged until such time, usually well into the life of the vessel, as they are generating reasonable profit margins. There are potential investors in Canada who have the financial strength to use the capital cost allowance and who are not interested in operating the vessels. The CCA allowance should be made available to those who can use it to help the shipbuilding industry.

Hand-in-hand with the above-described restriction on accelerated CCA are provisions in income tax legislation that preclude a ship owner from passing on the benefits of accelerated CCA in the form of lower debt-servicing costs to an operator through a lease arrangement.

Certain items are exempt from the above limitations:

- passenger vehicles, vans or pickup trucks, trucks or tractors that are designed for hauling freight on highways or trailers designed for hauling freight and to be hauled under normal operating conditions by such a truck or tractor
- vessel mooring spaces
- railway cars.

Direct competitors to the shipping industry (trucks and railway cars) are eligible to have CCA benefits passed on

RECOMMENDATIONS

That the Government of Canada:

- remove the restriction in the existing policy that stipulates that the accelerated CCA can be used only by Canadian owners/operators, and allow it to be used by either Canadian owners or Canadian operators; this will put the accelerated CCA in the hands of more investors who can use it and stimulate the purchase of new builds in Canada
- include ships as an exemption under subsection 1100 (1.1 and 1.2) of the *Income Tax Act* so that the benefits of accelerated CCA can be passed along to Canadian operators through bareboating arrangements as it is through leasing arrangements with its direct competitors, trucks and railway cars
- include ships as an exemption under the appropriate subsection of the *Income Tax Act* so that any lease payments made to U.S. lessors would be exempt from withholding tax.

through leasing arrangements — **without any requirement for the items to be built in Canada.** The allowable CCA for trucks is 40 percent (tractors) and 30 percent (trailers) and for rail cars is 13 percent, on a declining balance basis. Canadian-made ships should certainly be eligible for exemption. The industry is plagued by international subsidies and blocked from making sales to the United States and should not be further disadvantaged by domestic policies.

Another option that facilitates the purchase of capital goods is the U.S. leverage lease. Under this arrangement, U.S. investors (lessors) are able to pass on significant tax advantages to operators (lessees) in the form of lower debt-servicing payments. This has been a particularly effective way for Canadian operators to finance the purchase of aircraft.

It is significant to note that the federal government and provinces share a common tax regime for corporations. Subsequently, these tax initiatives with respect to CCA will be shared two thirds by the federal government and one third by the provincial governments.

Planes, trains and automobiles are benefiting from the above tax treatments. A strong argument exists to also have this same tax treatment apply to ships. In notes for remarks by Gerard Lalonde, Senior Chief, Tax Policy Branch, Department of Finance on June 15, 2000, it is stated: "The few exceptions to this provision (i.e. section 1100 1.1 and 1.2) have been provided in recognition that the CCA rate is not accelerated vis-à-vis economic depreciation or *to address problems unique to particular industries.*" The shipbuilding industry certainly qualifies on the latter count, witness the *Jones Act* and widespread subsidies.

Following is a common sense example of what the impact would be on deferring taxes under the existing rules for a foreign vessel (15 percent depreciation on a declining balance basis) and under a proposed change for one built in Canada (depreciation of 25 percent per year on a straight-line basis). Assuming a cost of $100 million for the

Canadian vessel and a labour content of 45 percent, an additional $21.2 million of taxes would be deferred under the proposed scenario. However, the benefits of creating 900 new jobs would create direct personal income tax revenues of approximately $18 million over the first two years. By adding to the benefit side the net present value of the personal taxes over the five-year period, the indirect job spinoffs, the savings in Employment Insurance and welfare payments, the benefits surely outweigh the costs of deferring tax, as shown in the accompanying table. As well, there is the added benefit of the income taxes that will be received in year six and onward.

For ease of reference, a CCA of 25 percent straight-line depreciation is used for the Canadian-build vessel so that full write-off is achieved in five years. This compares with 40 percent for tractors, 30 percent for trailers and 13 percent for rail cars, on a declining balance basis.

Table 4 — Existing CCA Rules, Foreign-built Vessels

Year	Net book value of vessel	CCA 15% declining	Federal tax deferred (0.2912)	Provincial tax deferred (0.1483)
0	$100,000,000			
1	$ 92,500,000	$ 7,500,000	$ 2,184,000	$ 1,112,250
2	$ 78,625,000	$13,875,000	$ 4,040,400	$ 2,057,663
3	$ 66,831,250	$11,793,750	$ 3,434,340	$ 1,749,013
4	$ 56,806,563	$10,024,688	$ 2,919,189	$ 1,486,661
5	$ 48,285,578	$ 8,520,984	$ 2,481,311	$ 1,263,662
			$ 15,059,240	$ 7,669,249
Total tax deferred				**$ 22,728,488**

Table 5 — Proposed Leasing Rules, Canadian-built Vessels

Year	Net book value of vessel	CCA 25% declining	Federal tax deferred (0.2912)	Provincial tax deferred (0.1483)
0	$100,000,000			
1	$ 87,500,000	$12,500,000	$ 3,640,000	$ 1,853,750
2	$ 62,500,000	$25,000,000	$ 7,280,000	$ 3,707,500
3	$ 37,500,000	$25,000,000	$ 7,280,000	$ 3,707,500
4	$ 12,500,000	$25,000,000	$ 7,280,000	$ 3,707,500
5	$0	$12,500,000	$ 3,640,000	$ 1,853,750
			$ 29,120,000	$ 14,830,000
Total tax deferred				**$ 43,950,000**

The difference in tax deferred between the above two scenarios (five years) is $21,221,512.

The estimated direct personal tax benefit from labourers ($45,000,000 x 40% over two years) is $18,000,000.

The difference between the two scenarios exclusive of savings on Employment Insurance, welfare, indirect jobs and net present value calculations on personal taxes is $3,221,512.

111

Training

Training is a critical issue in this industry. The competition for qualified engineers and tradespersons is fierce. The downturn faced by this industry in the past five years has attracted few if any new young shipbuilders to the industry. The work force in the shipbuilding industry is of an advanced age. In the next five to ten years, a significant number of planned retirements that will worsen the problem will take effect.

In the past ten years, the technological revolution dramatically impacted this industry. Increasing competitiveness and productivity cannot be done with automation alone. The in-house work force must be trained to efficiently operate the new tools. This has added a significant training burden and cost on an already burdened industry that is doing its best to battle foreign subsidies. The problem is highlighted by the fact that government assistance in training is normally available only to those without jobs and on Employment Insurance.

Canada is not without facilities for training. Canadian tax dollars have equipped some fine institutions to produce qualified tradespersons for the marine industry. The irony is that because of the lack of work in Canada, these same tax dollars are training young Canadians who provide the benefit of their skills and knowledge to our competitors in the United States. While we must accept a certain amount of "brain drain" in the marketplace, the migration of whole graduating classes south of the border is unacceptable.

While Human Resources Development Canada (HRDC) has responsibility in the training area, we understand that much of the responsibility for training in the workplace now resides with the provinces. While both will have a role, we foresee a very important role for the provinces in assisting with this problem. What is of concern is that the training issues are dealt with quickly. It would be a shame to see assistance to the industry denied over jurisdictional disputes.

RECOMMENDATIONS

That provincial governments take a strong lead in the areas of training for which they have responsibility.

That Human Resources Development Canada clearly state those areas where it can give advice and assistance.

That the industry work with Human Resources Development Canada to establish a sector council to look at skill needs and training requirements of the industry on a continuing basis.

III

Innovation and Competitiveness

The waters within and surrounding Canada present fabulous opportunities for the development and application of marine technology.
— Allied Shipbuilding Ltd.
North Vancouver,
British Columbia
January 2001

Shipbuilding in Canada is an innovative industry that uses advanced computer design and engineering technology as well as state-of-the-art automated production equipment in its yards. **There is more computer technology incorporated into the design and function of the typical ship than on the most sophisticated commercial aircraft.** By definition, shipbuilding is a high-tech industry; future successes will depend on Canada's ability to stay in the forefront. Notwithstanding, the National Partnership Project Committee was unable to find any evidence that the shipbuilding industry had been able to take advantage of federal research and development funding in the past ten years.

To be fair, there were few attempts made by the industry. On those occasions where enquiries were made, the project did not meet the program criteria. Shipbuilders who presented to the panel were unanimous in the need for a research and development program that recognizes the needs of their industry, which has a high level of innovation and technology.

The federal government provides research and development assistance to Canadian industry in two ways:

- The Scientific Research and Economic Development (SR&ED) tax credit system is available to any Canadian company that applies and meets the qualification criteria. It is designed to assist and encourage business, particularly small start-up businesses. As little as two years ago, the system appeared to be in disarray. The qualification process, as reported at the National Partnership Project presentations, was inordinately complicated, and the audit procedures were overly complex, adversarial and time consuming. This observation was corroborated by the Canadian Advanced Technology Association at meetings between Canadian industry and the Canadian Customs and Revenue Agency (CCRA) (then Revenue Canada) in Vancouver in the summer of 1999. They concluded that the system fell far short of Canadian

industry's needs and required a major overhaul. It is understood that CCRA undertook to review the program with the goal of speeding up and simplifying the application, audit and approval procedures.

- Technology Partnerships Canada (TPC) is an Industry Canada-sponsored program to provide research and development assistance targeted at aerospace and defence as well as enabling technologies in innovation and the environment. Support provided under TPC is repayable, and TPC may negotiate a royalty payment on future sales of the developed product. It is a competitive program with a lead time of some six to nine months. Approximately 60 percent of TPC funding is being spent in the aerospace and defence sector. The remainder is earmarked in two other areas: innovative technologies and environmental technologies. There is no scope for participation by the shipbuilding industry in TPC.

The purchase of a ship is a major capital outlay. Front-end design and engineering developmental costs are high. A program designed to benefit the shipbuilding industry should be directed more toward the development and industrial process side of the research and development equation. The national shipbuilding program in the United States is viewed as a good example. This program looks at product design and material technologies, shipyard production process technologies, facilities and tooling and environmental technologies.

For whatever reason, it is clear that the shipbuilding industry to date has not successfully accessed the present research and development programs of the federal government, and these programs are not suited to the requirements of the shipbuilding industry.

For reference purposes, the OECD, in its proposed ARNCC document, recognizes that research and development as well as new technologies are increasingly playing a pivotal role in the shipbuilding industry, both in the development of high performance ships and in ship construction itself. As a result, research and development activities under a new shipbuilding agreement are expected to be permitted *generously*. The following aid intensities were prescribed in the ARNCC document — expressed as a percentage of eligible costs:

- fundamental research — 100 percent
- basic industrial research related to safety and the environment — 75 percent
- basic industrial research — 50 percent
- applied research — 35 percent
- development — 25 percent.

A provision for government aid was also included to cover the cost of measures for the exclusive benefit of workers who lose their jobs or benefits as a result of shipyards closing.

RECOMMENDATION

That the Government of Canada enhance eligibility of the shipbuilding industry to participate in program areas that the federal government has identified as a leading priority, namely technological innovation. Ministerial direction should be given to sponsors of the existing programs to meet with industry and make recommendations on how present research and development programs should be modified.

There is considered to be significant scope to advance the Canadian shipbuilding through improved technology and innovation.

Offshore Resources — Optimizing Canadian Economic Benefits

We have an oil industry off the coast here . . . we should take advantage of it. We have a real opportunity. And if we miss this one, by gracious, shame on us.
— J. D. Irving
Saint John, New Brunswick
December 2000

Atlantic Canada holds outstanding potential in the offshore oil and gas industry. Close to $1 billion has been invested in the area to date. Expectations are that upward of $55 billion could be spent over the next 20 years. There are possibilities of similar development off the British Columbia coast in the coming years. This translates into tremendous opportunities for the Canadian shipbuilding and marine industry. In fact, the future success of Canadian shipyards is very much tied to Canada's ability to optimize the benefits from these resources. If Canadian shipyards are able to contract $2 billion worth of business over the next ten years at roughly $200 million per year, they will have close to one third of the total business required to keep existing yards viable.

Canadian yards have the capabilities to compete in the offshore business. They need some initial help in moving along the learning curve to be able to produce components more efficiently.

An excellent example of a country that faced the same prospects some ten years ahead of us is Norway. This country spent some time developing a revised shipbuilding policy, which was published in 1989. The policy has been very successful. The country has developed world-class expertise in the offshore oil and gas business. The Norwegian content went from approximately 20 percent in early projects to over 80 percent in later ones. It is estimated that direct employment in the industry is over 70,000 jobs.

A key to their success is the licensing process, which was used to encourage foreign investors to seriously consider the impact of their operations on the Norwegian economy.

The following excerpt from section 4.2 of their booklet titled *FACT SHEET: The Norwegian Continental Shelf 1989* is an example of how a "carrot" could similarly be used to advance Canadian interests:

> *A number of other conditions surrounding the applicant will also be ascribed weight. One important additional criterion is to what extent the applicant contributes to strengthening the Norwegian economy, industrial growth and employment, including to what extent the applicant has availed itself of Norwegian goods and services in Norway and abroad.*

RECOMMENDATIONS

That the Government of Canada, working with the provinces and industry, find ways to optimize Canadian industrial benefits through partnerships with foreign companies that are harvesting Canadian marine and offshore resources.

That the various participants in the industrial marine and shipbuilding sector combine forces and undertake initiatives to clearly demonstrate their capabilities and competitiveness to the oil and gas industry and to provincial and federal government officials.

That industry present a comprehensive plan to federal and provincial governments on the role governments can play in optimizing economic benefits to the industry.

In addition to the licensing lever, foreign investors were required to use Norwegian supply companies, provided that they were competitive in the critical areas of price, quality and delivery. The government of Norway then placed the responsibility for optimizing Norwegian participation in the offshore oil business with Statoil, the state oil company. Statoil, through the licensing process, made the final decisions regarding the supply of goods and services on those fields where they had a major interest.

With a sustainable business environment, we will work productively. We will continuously improve as we have done before.
— Irving Group presentation
Saint John, New Brunswick
December 2000

Towers at Saint John Shipbuilding Inc. for the Hibernia Project.

III

Federal Procurement

The existing policy states that any additions or replacements to the Canadian fleet will be sourced in Canada. This is a critical element in a policy designed to counter foreign subsidies and unfair trade practices. It is fully supported by the Canadian shipbuilding industry. However, there are concerns about recent exceptions to the policy and concerns that further compromises are being considered.

The industry believes that exceptions to the policy are unnecessary. The most recent example was the announcement in May 2000 that a used ferry was purchased by Marine Atlantic Ltd. for the North Sydney–Port-aux-Basques route. Federal officials purchased an 11-year-old vessel, *Stena Challenger*, from Europe for US$58 million, or approximately C$87 million. By the time the vessel is brought up to safety standards (SOLAS 94) and the docking facilities are altered to accommodate the vessel, upward of $100 million will have been spent. The 25 percent tariff applicable to foreign vessels represents another $17 million. Unfortunately, this revenue was forgone because Marine Atlantic had a remission order.

By the time this vessel gets to work, it will be 12 years old and almost halfway through its useful life. The total cost will be roughly the same as what it cost to build the *Caribou* in Canada 12 years ago. At today's cost, a brand-new ferry with a 25-year useful life could be built in Canada based on a proven design and within a two-year period for approximately $160 million. More importantly, more than $70 million of direct labour costs could have been generated. The personal taxes on that income and on the indirect jobs created would easily make up the difference between the cost of a new vessel and a used one. Factor in the savings on maintenance costs, operating costs and environmental issues and there was no justification for going offshore. The reason given for the exception was that there were time constraints — that the increase in demand for

ferry services was unforeseen and that a larger ferry was needed urgently. An alternative would have been to lease for a season or two while the new one was being built in Canada. No consultations were made with the shipbuilding industry on the issue.

The previous situation should not have happened. Subsidized foreign shipyards are taking contracts from Canadian business. Canada turns around and buys one of their used vessels at the expense of Canadian jobs. There are clearly some misperceptions in the Ottawa interdepartmental community that Canadian shipyards are not competitive. There are views that sole sourcing from Canadian yards is not the way to go. These misperceptions need to be corrected. Canadian shipbuilders are fully competitive in areas that they control — labour costs, productivity and quality. Facts support this opinion. The yards should not be judged in areas where they do not have a say — subsidies and trade policy. Strong leadership from the federal government is needed to set the record straight and to build enthusiasm and support for an industry that is battling unprecedented international obstacles.

Until the negative effects of international subsidies and the *Jones Act* can be countered, the Canadian shipbuilding industry must benefit from federal government procurement for the Canadian Navy and the Coast Guard. Government procurement therefore must remain a critical element of any future Canadian shipbuilding policy. Between federal procurement and the offshore oil and gas business, it is estimated that some $300–350 million per year of work from these sources will be required to maintain Canadian yards to a commercially viable capacity.

We will have work and we will be building ships at a relative cost as good as anywhere in the world.

— Alan Thoms, Canadian Shipbuilding & Engineering Ltd. St. Catharines, Ontario January 2001

At $150–200 million per year over a 15-year period, a total federal procurement budget of $2.25–3 billion will be required to sustain the industry. This is doable. Projects now being seriously considered by the Navy and Coast Guard are worth close to $5 billion. The challenge is to accelerate these programs and to phase them so there is a smooth annual expenditure of funds, which will have to be made in any event to sustain the Canadian government fleets. Deferring procurement with the resulting impact of a very large increase in spares, repair and overhaul costs may not save money over the longer term. The government will be moving to full accrual accounting for the management of its major capital assets effective April 1, 2001. This revised methodology of accounting should force a more balanced approach in looking at the long-term costs of vessel ownership and the advantages of maintaining a relatively modern fleet.

Computer aided plate edge cutting machine for steel.

RECOMMENDATIONS

That the Government of Canada:

- recommit to the policy of procuring, refitting and overhauling in Canada
- eliminate the peaks and valleys of procurement for the Navy and the Coast Guard through more effective forward planning and thereby keep order books and employment levels more consistent over the longer term
- bring the impact of accrual accounting to bear on long-term vessel planning and management in the federal government as a means to assisting in making cost-effective decisions in vessel acquisition and management over the longer term.

In the mid to longer term, we see that the offshore oil industry will develop in B.C.'s northwest. With this development will come a strong demand for a wide range of vessels. . . . If BC has an efficient and commercial shipbuilding industry, there should be no question that these vessels will be supplied by B.C. builders.
— John Sanderson, Point Hope Shipyard
Vancouver, British Columbia
January 2001

The difficulty in past years regarding procurement for the Navy and Coast Guard is that it has been inconsistent — more like boom-or-bust. Shipyards gear up for major contracts like the frigate program, expand their operations, modernize their facilities, invest in new equipment, and hire and train a large work force. When the contract is finished, there is not enough work to keep their expanded facilities in operation, and they have to scale back operations and lay off large numbers of employees. A more managed approach to procurement, with the needs of the industry in mind, should result in major advantages for both the government and the industry.

The Standing Committee on National Defence and Veterans Affairs (SCONDVA) made several recommendations that the National Partnership Project Committee believes are pertinent to the shipbuilding industry. SCONDVA recommended that the government acknowledge the role of industry in the procurement process. The shipbuilding industry is part of the defence industrial base. It therefore follows that the protection of this base is important to the defence of Canada. Involving industry in the federal procurement process by utilizing its resources and thereby assisting in its viability is considered a prudent role for government.

SCONDVA also recommended that the Department of National Defence should move quickly to acquire new Canadian-built supply vessels for the Navy. The National Partnership Project Committee endorses this recommendation, and goes one step further in recommending that the federal government should move quickly to fund and replace outdated government fleet vessels as well.

III

Tariffs

Existing Canadian policy stipulates that a duty of 25 percent must apply to most non-NAFTA vessels imported into the country. There is one glaring exception to this policy — fishing vessels over 30.5 metres (approximately 100 feet). There is no apparent good reason for such an exception. Most if not all of these vessels are being imported from countries that provide subsidies to their shipbuilders; these subsidies ultimately deprive Canadian shipbuilders of jobs. The playing field is not level and the tariff is there to help even things out. We should use it without exception.

To put the 25 percent tariff into perspective, it is effective against countries with subsidies of 20 percent or less. It is not effective by itself against countries with 30–40 percent subsidies. The real market threat is South Korea. That country holds the largest share of the world market. Estimates are that unfair low pricing on contracts by South Korean yards is up to 40 percent. At that level, it would take an import tariff of 67 percent to counter the subsidy.

Another exception to this policy relates to operators of foreign vessels who wish to do business in Canada on a

Table 6 — Tariff Impact of Subsidies

Subsidy	Unsubsidized cost of vessel	Subsidized sales price	Sales price with 25% tariff	Tariff required to offset subsidy
20%	$100,000,000	$80,000,000	$100,000,000	25.00%
25%	$100,000,000	$75,000,000	$ 93,750,000	33.33%
30%	$100,000,000	$70,000,000	$ 87,500,000	42.86%
35%	$100,000,000	$65,000,000	$ 81,250,000	53.85%
40%	$100,000,000	$60,000,000	$ 75,000,000	66.67%

temporary basis. There is provision in the policy to charge 1/120 of the fair market value of the vessel on a monthly basis for as long as the vessel stays in Canadian waters — up to a maximum period of ten years. A foreign operator who can extend permission for the full ten-year period will essentially get interest-free financing of duty rather than pay a 25 percent tariff before the vessel enters Canadian waters. This provision should not provide any incentives. Our recommendation is to increase the temporary rate by one half to 1/60 and to reduce the allowable period to five years.

RECOMMENDATIONS

That the Government of Canada:

- remove the exception to the 25 percent tariff on fishing vessels over 30.5 metres (100 feet)
- adjust the rate that allows foreign-flagged vessels to operate temporarily in Canadian waters from 1/120 to 1/60 and reduce the allowable period from ten years to five
- examine the possibility of increasing the 25 percent tariff against countries that provide subsidies in excess of 20 percent
- stop duty remissions on the various topside modules and subsea components that are imported into Canada and can be supplied from Canadian sources, and incorporate a base rate consistent with that applied to most imported vessels; that is, 25 percent.

III

Government–Industry Partnership

The previous sections of this report outline the serious challenges facing the Canadian marine and industrial sector and make a series of recommendations to help produce a real and sustainable market. Clearly, the challenges confronting this industry require a strong partnership between the federal and provincial governments and the industry.

Industry stakeholders are greatly encouraged by Minister Tobin's initiative to work with them to find ways to improve the fortunes of Canadian yards and related businesses. They are keen to move on to deal with the future prospects of this evolving industry.

This section sets out a series of challenges that are not necessarily addressed through government policies or initiatives. They are more qualitative in nature and require healthy working relationships to help generate success.

While the primary industry–government relationship might be between Industry Canada and the shipbuilders, many other departments and levels of government as well as suppliers to the industry will play important roles. It is estimated that at least ten federal departments will be involved *directly* in the consideration of the recommendations put forth in this report:

- Industry
- Finance
- Fisheries and Oceans
- Foreign Affairs
- Human Resources Development
- International Trade
- National Defence
- Natural Resources
- Transport
- Treasury Board Secretariat.

In addition, all provincial governments will be affected by the recommendations. Therefore, the industry needs a champion in the federal government to coordinate policy efforts and to promote support of the industry.

The National Partnership Project consultation process revealed that there are varying degrees of knowledge and opinions on the state of the industry throughout the federal interdepartmental community. In order for this industry to succeed, it is essential that all stakeholder departments have a full understanding of the issues facing the industry. In addition, they will need to have an appreciation of the need to work together to implement the proposed recommendations and to more fully understand the consequences of failing to effectively work together in the conduct of their business relations with this very important sector of the Canadian economy. It is equally essential that industry stakeholders work to educate and assist the federal and provincial governments in understanding the importance of the shipbuilding industry in this country.

Capacity: During its consultations with industry and government, the National Partnership Project Committee encountered a number of perceptions and/or practices that many industry stakeholders felt were impediments to the industry. One of the most contentious was the question of whether overcapacity exists in the Canadian shipbuilding industry. Some argue that empty or near-empty yards are evidence of this fact. Others contend that the problem is a lack of effective policies to deal with the widespread subsidies that have taken business away from Canadian yards.

The rationalization initiative undertaken by the federal government in 1985 was problematic in that insufficient tools were given to surviving yards to compete in a subsidy-spoiled market. There were remnants of a policy left in place but, as described elsewhere in this report, it has been ineffective against 20–40 percent subsidies and other unfair trade practices. The two biggest yards, Davies and Saint John, received the benefits of building high technology frigates for the Canadian Navy and so were

given a temporary reprieve from having to stay alive in the export market. However, since that program was completed in 1997, both yards have struggled with the rest of Canadian shipyards to find work. As a result, the Irving Group has taken the position that overcapacity exists. The National Partnership Project Committee is of the view that there is sufficient business in Canada to sustain existing capacity provided the right policies are in place. The keys to increasing work are offshore oil and gas, a better-managed federal government procurement policy, and meeting more of our own domestic shipbuilding needs.

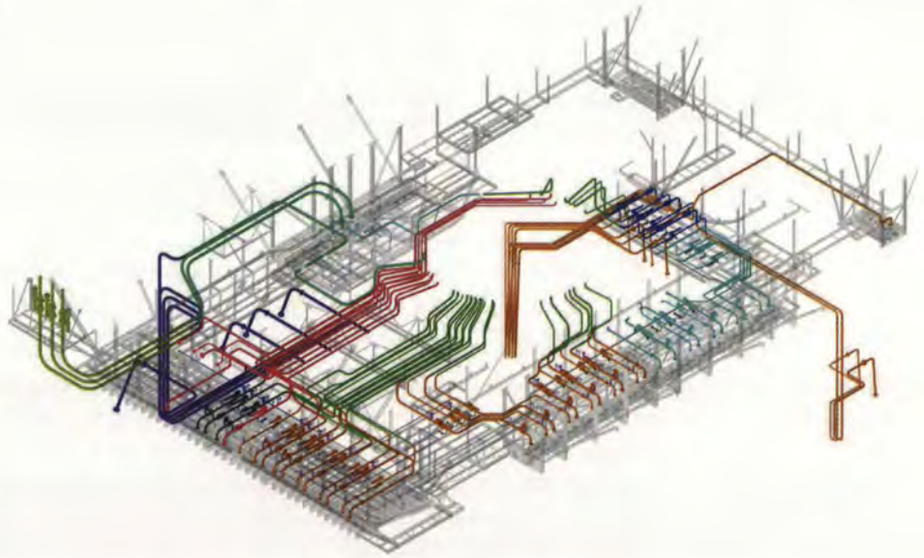
Some of the recommendations outlined in this report, such as tightening up of the tariffs and introducing competitive financing and investment programs, will have an immediate positive impact. However, two components that represent close to 50 percent of required business volumes to sustain existing capacity will rely largely on government led initiatives. Unless some C$300–400 million of business is realized annually from these sources, the current capacity of Canadian yards will be underutilized:

- optimizing Canadian economic benefits in the development of offshore oil and gas resources
- changing the planning process for procurement of Navy and Coast Guard vessels to provide a more steady and stable source of business for Canadian shipyards.

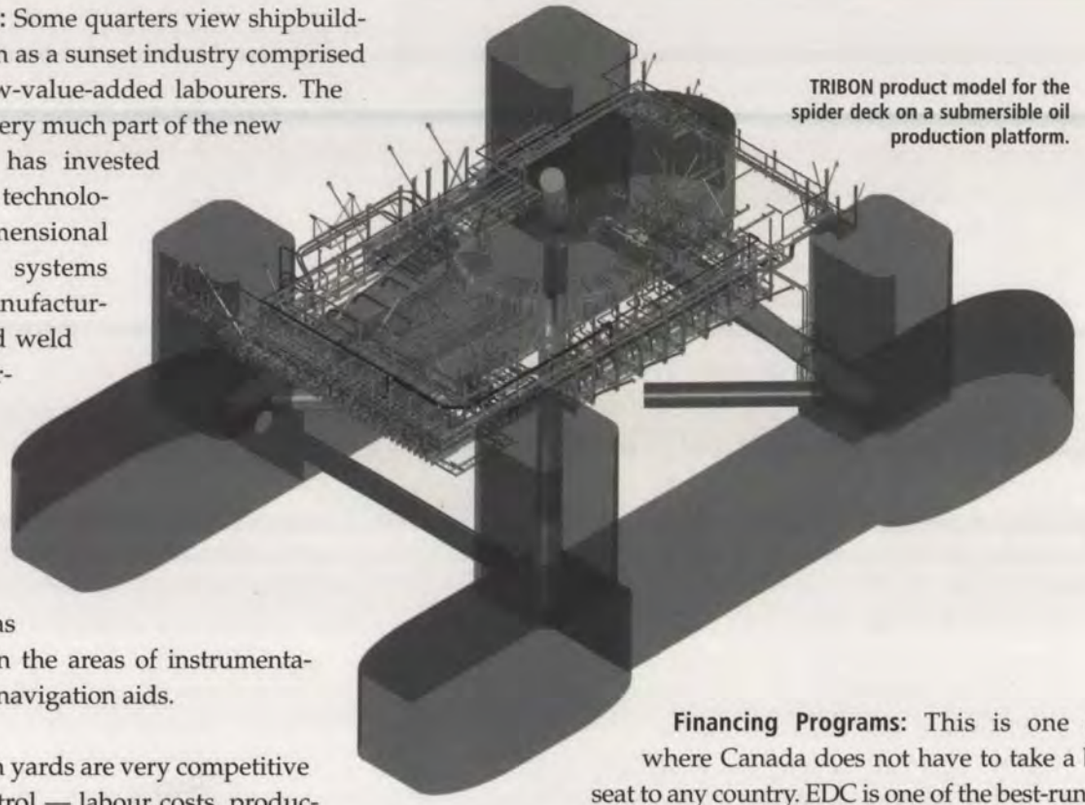
The realization of offshore oil and gas potential will require a high level of cooperation between government and industry to develop effective government policies to lever Canadian capabilities. Additional business from this source is urgently required. Regarding federal procurement, the industry needs to make efforts to reassure federal departments of their capabilities and competitiveness. For its part, the federal government needs to effect the necessary changes in the planning process to produce a better flow of business for the yards — business that is urgently required.

Another key consideration on the subject of capacity is the *Jones Act*. Success in gaining more access to the U.S. market could produce immediate and substantial benefits to the Canadian shipbuilding and marine industry.

Part view of the Spider Deck for a semi-submersible oil production platform.



Technology and Innovation: Some quarters view shipbuilding and marine fabrication as a sunset industry comprised of metal bashers and low-value-added labourers. The truth is that the sector is very much part of the new economy. The industry has invested heavily in state-of-the-art technologies such as three-dimensional computer-aided design systems and computer-aided manufacturing processes that cut and weld to the most exact tolerances. Shipyards fully recognize that their focus needs to be on high-value-added vessels with innovative and sophisticated onboard systems. Canada has outstanding capabilities in the areas of instrumentation, communication and navigation aids.



TRIBON product model for the spider deck on a submersible oil production platform.

Competitiveness: Canadian yards are very competitive in the areas that they control — labour costs, productivity and quality. Industry Canada information clearly validates that fact. However, the Canadian industry is often measured against a distorted market of subsidized prices. Canadians need to be more sensitive to the negative impact these subsidies have on Canadian jobs. As an example, four new subsidized shrimp trawlers are scheduled to enter Canada duty-free in the next couple of months. These could have been built competitively in Canada. Canadian competitiveness is often measured in terms of the degree of success an industry enjoys in the United States. The shipbuilding industry is the only industry deprived of this opportunity by virtue of the *Jones Act*.

Financing Programs: This is one area where Canada does not have to take a back seat to any country. EDC is one of the best-run and most creative export credit agencies in the world, if not the best. Canada has led the way in proposing commercial financing terms and conditions that meet the needs of foreign borrowers; that is, extended-term financing. Other OECD countries have been slow to embrace the concept primarily because they are not structured on a financially self-sustaining basis like EDC. OECD financing is currently in disarray. Even if proposed new terms are adopted later this year, as planned, they will not give borrowers what they need; that is, 18- to 20-year financing for an asset with a useful life of 30 years. Shipbuilding is one sector where Canada can safely take the lead in establishing new standards.

There are some views that loan guarantee programs or extended-term financing mean compromised credit risk assessment or subsidies. In actual fact, there is more risk of a funding loss with OECD export credits than there is with extended-term financing, because OECD rates are in between a pure commercial rate, as defined by a publicly traded bank, and a subsidized rate. Canada has the expertise in EDC to develop creative financing options, and the shipbuilding industry needs support from the federal government to ensure that this expertise is fully utilized.

In conclusion, many parts are required to make a new shipbuilding policy succeed. The clear objective is to create a whole that is greater than the sum of the parts. The key to this is building an effective partnership between industry and various levels of government.

RECOMMENDATIONS

That the federal government formally recognize the national strategic importance of the shipbuilding and industrial marine sector.

That the federal and provincial governments work with industry to promote cooperation and support for the industry, and help convey consistent key messages regarding the industry.

That the Minister of Industry take the lead in coordinating the federal government's role in championing the industry.

That the federal government establish an advisory committee made up of industry and government stakeholders to review, on an ongoing basis, the state of the industry, policy directives and initiatives.

PART IV

Summary of Recommendations

Part 1
Capabilities of Canadian Shipyards

RECOMMENDATION

That the provincial and federal governments focus on marine transportation as the more environmentally friendly alternative to other modes of transport.

Part 2
Future Prospects for Canadian Shipyards

RECOMMENDATION

That the Department of Fisheries and Oceans review the licensing of vessels currently restricted to 19.8 metres (65 feet) to allow them to be replaced or converted to a vessel length of less than 25.9 metres (85 feet).

Part 3
Issues and Recommendations

Subsidies and Unfair Trade Practices

RECOMMENDATIONS

That the Government of Canada:

- press for the elimination of subsidies to the worldwide shipbuilding industry
- press the United States for amendments to the *Jones Act* to allow for greater participation of Canadian shipyards
- resist any requests from other countries to change provisions of the Canadian shipbuilding policy until such time as the Canadian industry has been able to overcome the long-term effects of the subsidy and unfair pricing policies of other countries
- develop and promote an international social clause concerning labour standards in shipbuilding.

Labour–Management Issues

RECOMMENDATION

That provincial and federal governments work with industry to ensure that the industrial union model is the form of union structure required for shipbuilding, offshore and other marine-related work sites.

Financing and Investment Issues
(Export Credits, Extended-term Financing and Title XI Financing)

RECOMMENDATIONS
(Note: All of the following recommendations conform to OECD guidelines.)

That the Government of Canada make it practice:

- not to lose a transaction to a competitor in circumstances where the competitor is offering non-concessionary financing to a creditworthy borrower, whether they are OECD terms, extended terms or Title XI
- in the case of direct competition with Title XI financing, to provide the support necessary to EDC to enable them to provide financing equivalent to Title XI
- in those cases where EDC is unable to accept the credit risk of a proposed borrower on their own and where a competitor is likely to do so, to seriously consider approval of the application on a national interest basis

- in situations where the amount of financing being considered by EDC is less than that being considered by a competitor, to agree to consider enhancing the credit on a national interest basis, with a guarantee to fill the gap between the EDC amount and the amount being considered by the competitor; an alternative to a loan guarantee could be a residual value guarantee on the vessel.

That the Government of Canada in addition agrees to:

- provide the necessary support to EDC to enable them to offer the best possible OECD interest rates and terms in situations where the borrower requests OECD export credits
- empower EDC with the responsibility of providing extended-term financing under their commercial market window to foreign and domestic buyers of Canadian-built ships
- provide the necessary support to EDC in situations where Canada is competing against subsidized shipyards to allow EDC to offer competitive interest rates and maximum financing amounts with up to 20-year repayment terms
- advise appropriate government departments and streamline processes to facilitate prompt processing of applications and quick turnaround.

Financing and Investment Issues (Tax Transfer Bareboating)

RECOMMENDATIONS

That the Government of Canada:

- remove the restriction in the existing policy that stipulates that the accelerated CCA can be used only by Canadian owners/operators, and allow it to be used by either Canadian owners or Canadian operators; this will put the accelerated CCA in the hands of more investors who can use it and stimulate the purchase of new builds in Canada
- include ships as an exemption under subsection 1100 (1.1 and 1.2) of the *Income Tax Act* so that the benefits of accelerated CCA can be passed along to Canadian operators through bareboating arrangements as it is through leasing arrangements with its direct competitors, trucks and railway cars
- include ships as an exemption under the appropriate subsection of the *Income Tax Act* so that any lease payments made to U.S. lessors would be exempt from withholding tax.

Training

RECOMMENDATIONS

That provincial governments take a strong lead in the areas of training for which they have responsibility.

That Human Resources Development Canada clearly state those areas where it can give advice and assistance.

That the industry work with Human Resources Development Canada to establish a sector council to look at skill needs and training requirements of the industry on a continuing basis.

Innovation and Competitiveness

RECOMMENDATION

That the Government of Canada enhance eligibility of the shipbuilding industry to participate in program areas that the federal government has identified as a leading priority, namely technological innovation. Ministerial direction should be given to sponsors of the existing programs to meet with industry and make recommendations on how present research and development programs should be modified.

Offshore Resources — Optimizing Canadian Economic Benefits

RECOMMENDATIONS

That the Government of Canada, working with the provinces and industry, find ways to optimize Canadian industrial benefits through partnerships with foreign companies that are harvesting Canadian marine and offshore resources.

That the various participants in the industrial marine and shipbuilding sector combine forces and undertake initiatives to clearly demonstrate their capabilities and competitiveness to the oil and gas industry and to provincial and federal government officials.

That industry present a comprehensive plan to federal and provincial governments on the role governments can play in optimizing economic benefits to the industry.

Federal Procurement

RECOMMENDATIONS

That the Government of Canada:

- recommit to the policy of procuring, refitting and overhauling in Canada
- eliminate the peaks and valleys of procurement for the Navy and the Coast Guard through more effective forward planning and thereby keep order books and employment levels more consistent over the longer term
- bring the impact of accrual accounting to bear on long-term vessel planning and management in the federal government as a means to assisting in making cost-effective decisions in vessel acquisition and management over the long term.

Tariffs

RECOMMENDATIONS

That the Government of Canada:

- remove the exception to the 25 percent tariff on fishing vessels over 30.5 metres (100 feet)
- adjust the rate that allows foreign-flagged vessels to operate temporarily in Canadian waters from 1/120 to 1/60 and reduce the allowable period from ten years to five
- examine the possibility of increasing the 25 percent tariff against countries that provide subsidies in excess of 20 percent
- stop duty remissions on the various topside modules and subsea components that are imported into Canada and can be supplied from Canadian sources, and incorporate a base rate consistent with that applied to most imported vessels; that is, 25 percent.

Government–Industry Partnership

RECOMMENDATIONS

That the federal government formally recognize the national strategic importance of the shipbuilding and industrial marine sector.

That the federal and provincial governments work with industry to promote cooperation and support for the industry, and help convey consistent key messages regarding the industry.

That the Minister of Industry take the lead in coordinating the federal government's role in championing the industry.

That the federal government establish an advisory committee made up of industry and government stakeholders to review, on an ongoing basis, the state of the industry, policy directives and initiatives.