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MEMORANDUM

January 18, 1988

TO: Senator Fred Zharoff

FROM: Senator Arliss Sturgulewski

RE: Oceans Policy for Canada

I had the pleasure of meeting with the Honorable Tom Siddon, Minister of Fisheries and Oceans for Canada at the November meeting of the International Pacific Fisheries Commission on which I serve as an advisory committee member. Minister Siddon presented his newly developed Oceans Policy for Canada which is an excellent framework for a coordinated approach to the many ocean issues facing Canada.

Because of the many similarities between Canada and Alaska and the fact that we on the state level are trying to develop policies for our own fisheries and oceans, I thought you would be interested in this summary of the Canadian oceans strategy.

Enclosure

Minister of
Fisheries and Oceans



Ministre
des Pêches et Océans

Canada

The Honourable L'honorable
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Oceans Policy for Canada

A Strategy to Meet
the Challenges and
Opportunities on the
Oceans Frontier



Fisheries
and Oceans

Pêches
et Océans



The oceans of Canada are a frontier which offers us challenges and opportunities in much the same way that the space frontier has stimulated economic, scientific and technological development in many countries.

The federal government has adopted as a national priority, a strategy to seize development opportunities on our oceans frontier. This federal oceans strategy has the objective of securing maximum social, economic, scientific and sovereignty benefits for Canadians from our oceans.

This strategy is the result of a process of consultation carried out throughout Canada with key players in industry, universities and the provincial/territorial governments. Their advice to the Government is based on real knowledge of conditions and challenges facing the thousands of Canadians employed in the economically important oceanic sector. I will continue this process of consultation in the future with energy and enthusiasm.

As the Minister responsible for coordinating federal oceans policies and programs and for leading the development of this oceans strategy, I am pleased to provide a summary of the overall strategy in this booklet. I invite all Canadians to share a vision of our country which extends seaward from the shorelines of the Atlantic, Arctic and Pacific oceans to the edge of the continental shelf and beyond.

A handwritten signature in black ink, appearing to read "Tom Siddon". The signature is fluid and cursive, with a long horizontal stroke at the end.

Tom Siddon, P.C., M.P.

Minister of Fisheries and Oceans

CANADA NEEDS AN OCEANS STRATEGY

There are three compelling reasons why Canada needs an oceans strategy at this time in our history.

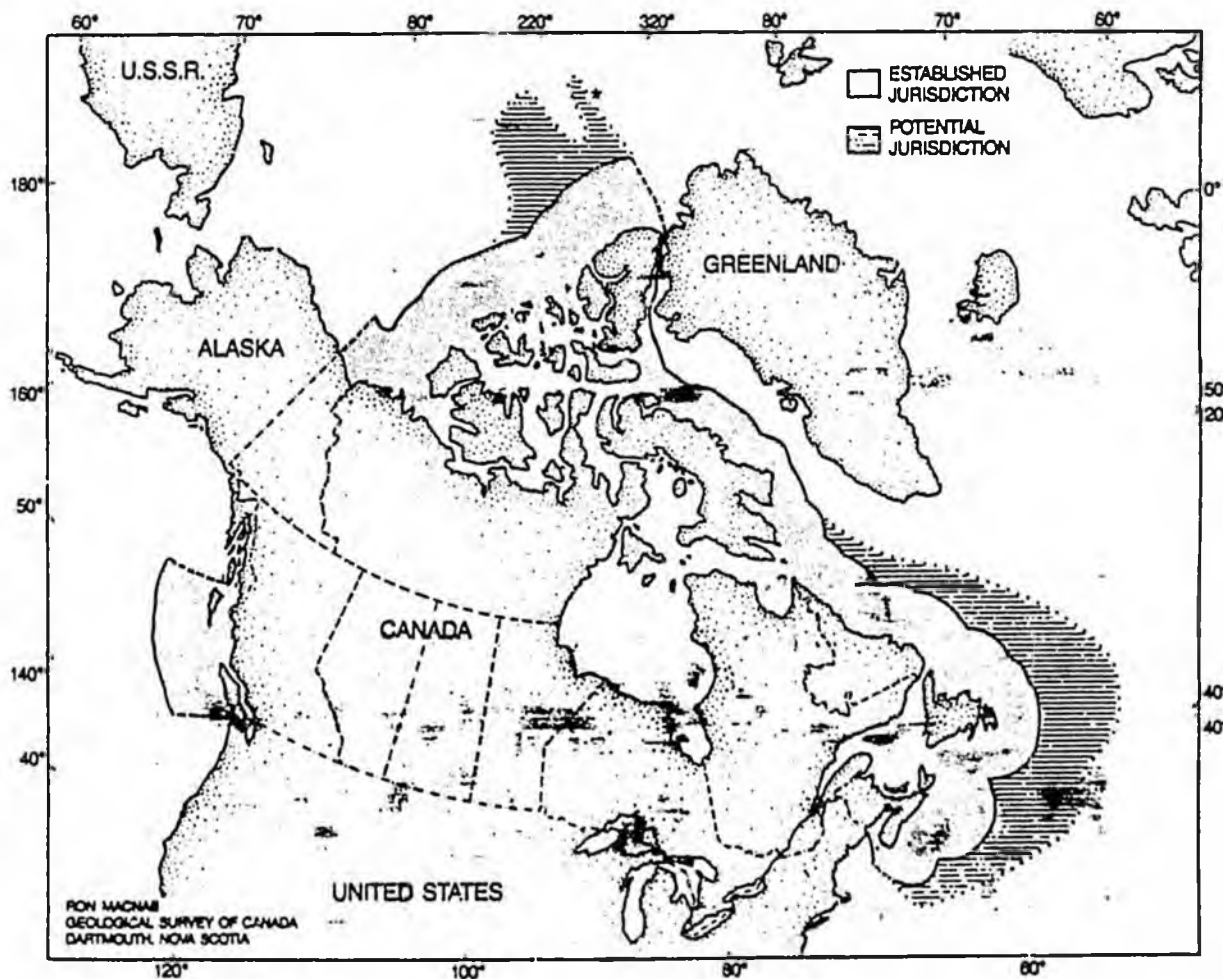
1. *Canada has extensive oceanic territories. A strategy will ensure Canadians can capitalize on the many development opportunities on this frontier, especially during the critical next five years.*

Canada is a coastal nation bordering on three oceans, with a longer coastline than any other country in the world and the second largest

continental shelf. Our huge offshore gives tremendous natural advantages. The challenge facing Canada is to build on those natural assets.

Canada's oceans sector encompasses a spectrum of industries and interests which use the oceans' resources — such as fishing, aquaculture, oil and gas exploration and development, mining, recreation, Native and Inuit traditional users. The sector also includes industries which supply ocean users with goods and services — shipping, ship-building, and a diversified range of highly specialized science and advanced technology-

Canada's 200 mile zone and continental shelf



based industries, such as coastal and ocean engineering, advanced technology manufacturing, marine systems and equipment design and fabrication, oceanographic, hydrographic and marine environmental services.

The next five years offer important development opportunities at home and particularly in export markets around the world for much of the high-tech oceanic sector.

As coastal states worldwide move to explore, identify and exploit their new Exclusive Economic Zones, an enormous market is already affecting the fortunes of those private firms with the faith to invest in export development. Export markets, however, are extremely competitive. Other nations with advanced technologies and services are selling hard too. If Canada does not capture those opportunities, other coastal countries will. Moreover, declines in recent years in domestic oil and gas exploration and development have triggered severe downturns in some segments of the oceanic sector. This strategy for sustaining development is required urgently so that Canadian industry can capture current and future export opportunities. The vital momentum of the past decade must be preserved and enhanced.

2. There is currently a broad range of federal oceans policies and programs. A framework is needed to ensure that they are coordinated, effective, and efficient.

The federal government undertakes some 75 oceans-related programs through 14 departments, involving more than 13,000 person-years and \$1.3 billion annually (excluding Maritime Command). (These programs are de-

scribed in detail in the DFO publication "Canada's Oceans: An Economic Overview and A Guide to Federal Government Activities".)

Federal oceans activities can be categorized according to seven broad functions:

- Marine transport
- Other marine services
- Resource development and management
- Sovereignty, defence, and law of the sea
- Northern development
- Industrial development, and
- Marine science and technology development.

Each program meets various departmental mandates, but coordination is required to achieve broader objectives. This strategy will enhance cooperation, promote development, and avoid fragmentation. It provides a framework for resolving conflicts and trade-offs among competing uses of our oceans, and for harmonizing activities flowing from different objectives.

3. This strategy provides a tangible means of moving forward on major federal priorities — regional development, world-class science and technology, and protection of Canadian sovereignty.

Many elements of the oceanic sector have untapped potential to apply information-age technology to the exploitation of oceanic resources, thereby generating economic wealth. The benefits will be felt not only in the Pacific and Atlantic regions, but also in other provinces whose many oceanic companies are located far from a sea-coast. Thus, regional economic development and international competitiveness will be enhanced through this strategy.

The strategy promotes science and technology as the driving force for economic activity on the oceans, and is responsive to the needs of the private sector. It is fully consistent with InnovAction, the Canadian Strategy for Science and Technology which was announced by the Government of Canada earlier this year.

Canadian sovereignty considerations are central to this strategy. Many sovereignty-related incidents occur on the oceans. This strategy signals to Canadians and foreign countries Canada's resolve to assert its sovereignty on its oceans frontier.



THE OCEANS STRATEGY FOR CANADA

Goals

The Government of Canada is committed to achieving four goals through its oceans strategy:

- prosperous, dynamic oceanic industries which offer secure, steady employment and economic development benefits, particularly for Canada's coastal regions;
- world-class expertise and capability in oceans-related science, technology, and engineering, which together form the basis for future economic development of the oceans;
- ocean resources and an ocean environment soundly managed and protected for future generations of Canadians; and
- assertion and protection of Canada's sovereignty and sovereign rights over its ocean resources.

To accomplish these goals, six overall approaches have been adopted, and these in turn involve a large number of specific initiatives. The six approaches are:

i) stimulating national awareness of Canada's oceans frontier and its importance to our sovereignty and heritage;

ii) fostering vigorous, internationally competitive oceanic industries through our industrial development, contracting-out, and procurement policies;

iii) establishing a legal framework which facilitates Canada's ability to achieve the objective and goals of this strategy;

iv) enhancing Canada's scientific and technological knowledge and capabilities relating to oceans and ocean resources;

v) conserving and managing the living resources of Canada's oceans through prudent stewardship; and

vi) promoting development and exploitation of the non-living resources of our oceans in an environmentally acceptable manner.

Taken together, the initiatives under each of these categories constitute the oceans strategy *action plan*. Several of the initiatives require joint and concerted efforts of several Ministers and departments of the Government of Canada. Carrying forward these initiatives will require ongoing consultations with industry, universities, provincial governments and other



Action Plan

- i) *Stimulating national awareness of Canada's oceans frontier and its importance to our sovereignty and heritage*



National Marine Council

In September 1986, a national conference, Oceans Forum, at the Institute of Oceanographic Sciences at Patricia Bay, B.C. had as its theme "Issues and Opportunities on the Oceans Frontier".

The interests represented at Oceans Forum included the petroleum exploration and development industry, fishing, aquaculture, shipping, advanced technology manufacturing, a wide range of science-based oceanic services, shipbuilding, oceanography and related sciences,

ocean law and federal government departments with policies and programs involving oceans. The purpose was to provide industry, academics and government an opportunity to exchange views and to begin charting a long-term plan for the development of Canada's oceans economy.

After two days of discussions, consensus was reached on the need for a review and a statement of Canadian oceans policy. While recognizing the important roles of other departments, it was concluded that the Department of Fisheries and Oceans should spearhead development of an oceans strategy. There was also a

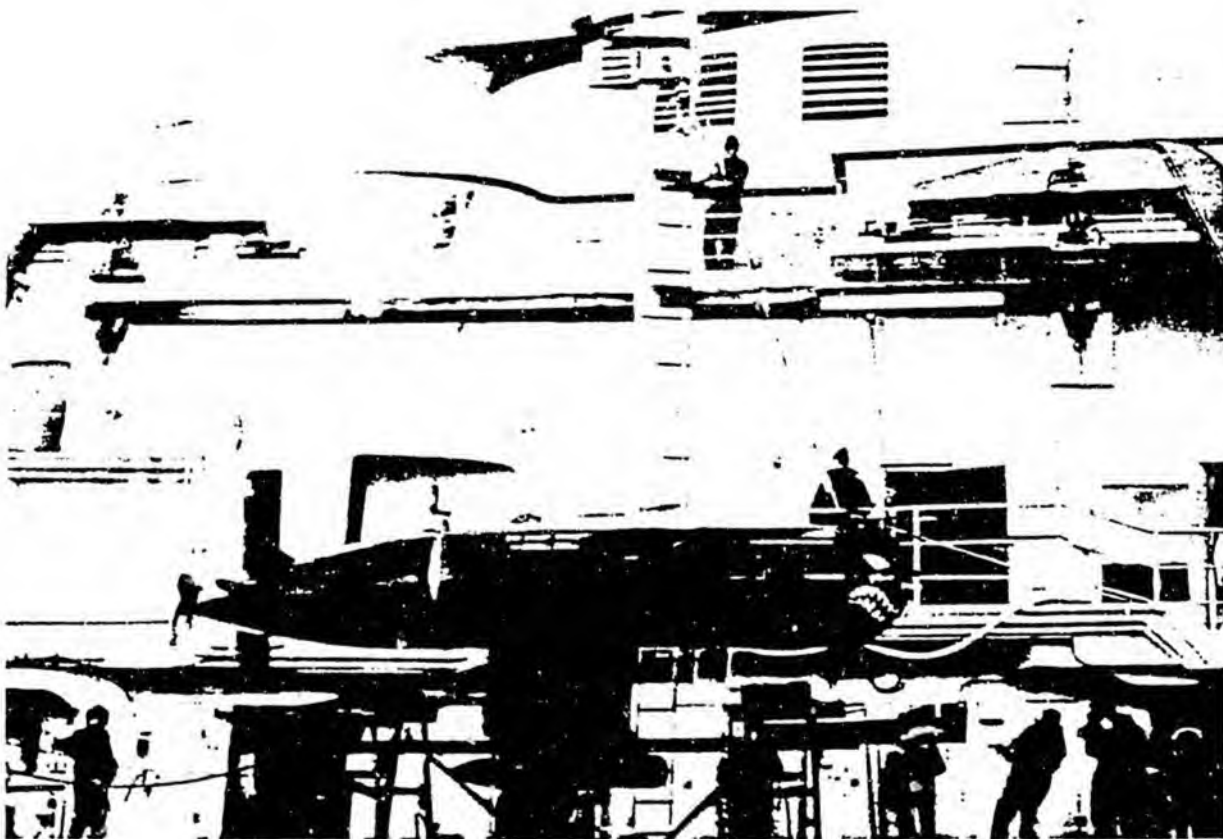
need expressed to develop a consultative mechanism to provide a voice for oceans interests to communicate with government and with each other on oceans-related policies and issues.

An interim, eight-member private-sector group, the Minister's Oceans Group, was established by the Minister of Fisheries and Oceans. It was given the task of consulting further and making recommendations on the scope, purpose, structure, composition and operation of a national oceans council.

In response to the recommendations of the Minister's Oceans Group, the Minister of Fisheries and Oceans has established a National

Marine Council. Its mandate is to inform and advise the Minister on marine issues and oceans policy, including economic development, science and technology, sovereignty, and the environment as they relate to Canada's oceans in the short and long term. The Council will examine oceans-related issues, comment on proposed policies and programs, and provide feedback and an outside perspective to the Government. The Council will serve as a useful forum for communicating and harmonizing the views of various interests in the use, development, management and protection of Canada's oceans.

ii) Fostering vigorous, internationally competitive oceanic industries through our industrial development, contracting-out, and procurement policies



Ocean Mapping, Ocean Information Infrastructure and Ocean R&D

A major initiative under this approach will involve the Ministers of Fisheries and Oceans and Energy, Mines and Resources. Industry has pointed to the need for a new comprehensive, contracted-out program of ocean mapping, ocean information infrastructure development, and ocean research and development, strengthening and building upon established departmental skills. Further consultation will be required with industry on the design and nature of such a program. Moving forward with such a program is subject to the availability of financial resources.

A concerted effort is needed to develop Canadian knowledge of our ocean territory and resources, to strengthen Canadian capability to operate in the oceans and to realize the economic potential of the oceans. The proposed program initiatives would directly create high-tech jobs in the Atlantic and Pacific coasts and would forge a competitive edge for Canada's oceanic industries to sustain employment through export opportunities. Small, dynamic, technologically-oriented firms would be the main beneficiaries.

The proposed program would have three components:

- An *ocean mapping and exploration* program to provide additional hydrographic and geoscientific information on Canada's continental shelves and deep ocean areas adjacent to Canada;
- An *ocean information infrastructure development* program to provide a more effective information service to offshore engineering and navigation, and to government for more efficient, targeted accomplishment of government missions;
- An *ocean research and development* program to improve the capability and competitiveness of Canadian industry while increasing Canada's capabilities in ocean resource exploitation and management.

Ocean Technology Promotion Office

Working together, the Department of Fisheries and Oceans and the private sector have developed and are developing leading-edge technologies for commercialization at home and abroad. However, to secure for Canada the industrial and economic benefits from continued development of these technologies, an improved focus and closer cooperation will be required.

To address the need for better focus and information sharing, an Oceans Technology Promotion Office will be established in the Department of Fisheries and Oceans to improve the effectiveness of existing assistance programs and to maximize their use by the oceanic sector. The major functions to be undertaken by the office include:

- providing the private sector with a new window of access to government for ocean technology assistance;
- promoting the use of existing assistance programs in order to improve their effectiveness with respect to ocean technology;
- providing information services for applicants, particularly where more than one federal assistance program needs to be accessed; and
- facilitating joint-venture arrangements involving either the private sector (industry and universities) exclusively, or including the public sector.

- iii) *Establishing a legal framework which facilitates Canada's ability to achieve the objective and goals of this strategy*

Canada Oceans Act

Implementation of a forward-looking oceans management regime to meet national needs for the rest of this century requires that the Government establish an appropriate legal foundation to facilitate oceans development. Oceans legislation, like the policies and programs which it supports, is contained in numerous Acts of Parliament. Administrative responsibilities are assigned to numerous departments and agencies.

A review of existing federal oceans legislation suggests that changes are required to strengthen the basis of a number of oceans-related activities such as marine research and hydrography.

The Minister of Fisheries and Oceans, the Secretary of State for External Affairs and the Minister of Justice, will give consideration to the establishment of a *Canada Oceans Act* to consolidate and clarify the legislative basis of this new oceans strategy. A clarified legal framework would consolidate a number of pieces of legislation relevant to the goals of the oceans strategy, and would simplify day-to-day operations and facilitate planning by industry.

The proposed *Canadian Laws Off-shore Application Act* aims to make Canadian law applicable to offshore areas under Canadian jurisdiction. It could eventually be consolidated into a *Canada Oceans Act* as an important instrument of the oceans strategy. The new *Act*

could also contain a part replacing the *Territorial Sea and Fishing Zones Act* and provide a legal basis for a Contiguous Zone or Exclusive Economic Zone, if required.

Action Within Canada's 200 Nautical Mile Zone

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) was signed at Montego Bay on 10 December, 1982. When the Convention closed for signature in 1984 it had 159 signatures, including that of Canada. The Convention sets out a comprehensive regime for the regulation of the world's oceans.

Canada has been identified as a major beneficiary of the Convention. Functionally, Canada exercises the full range of sovereign rights and jurisdictions accorded to a coastal state under

the Exclusive Economic Zone regime. These include:

- Fisheries
- Continental Shelf Resources
- Marine Scientific Research
- Protection of the Marine Environment.

In fisheries, fisheries protection, customs and excise, shipping, ocean dumping, pollution protection in Arctic waters, and oil and gas, inter alia, various Canadian Acts give domestic legal effect to these rights and responsibilities.

Canada is an active participant in the work of the Preparatory Commission for the Law of the Sea, which is engaged in the complex task of elaborating international rules and regulations to govern the seabed mining regime. The process of considering the merits of Canada formally proclaiming an Exclusive Economic Zone will be led by the Secretary of State for External Affairs, the Minister of Justice, and the Minister of Fisheries and Oceans.

iv) Enhancing Canada's scientific and technological knowledge and capabilities relating to oceans and ocean resources



Strengthening The International Dimension of Canada's Ocean Sciences

Over the past century, Canada has developed substantial capability in many facets of ocean research, technology and management. Canada is in a key position, both geographically and in terms of experience, to contribute significantly to international issues dealing with coastal and offshore development. Scientific research has occupied a leading place in developing Canada's strengths and capabilities in this regard. If Canada is to obtain maximum benefits from its oceans, it must be assured that its endeavours at sea do not lack the scientific understanding, support or data services needed to be successful. A solid scientific base is needed in order to maintain a stable, prosperous fishing industry, safe and efficient shipping to and from our ports, and an offshore oil and gas industry able to exploit offshore resources.

Federal marine science and technology activities have evolved considerably over the past 15 years. During that period, scientific research undertaken by the private sector has also increased significantly.

Federal involvement in technological innovation occurs through mission-oriented scientific research in federal laboratories, funding of university research, various incentive programs aimed at private sector innovation, and through procurement.

Complementary to the direct federal role in mission-oriented research and development, universities play a key role in supplying highly qualified scientific and engineering personnel and in advancing knowledge. Strengthening

existing linkages between federal agencies and universities would ensure coordinated progress on many aspects of marine science and promote specialization in marine sciences by universities in coastal areas. The federal government, and the Department of Fisheries and Oceans in particular, recognizes the need to guide and assist basic research activity related to oceans, and to play an active role in fostering the university component of such research.

In this context, a policy will be developed on Canadian involvement in international marine science, including a mechanism to bring together federal, university, and other interests, which would sustain Canadian visibility and Canada's international reputation for scientific excellence.

North Pacific Science Organization

The International Council for the Exploration of the Sea has proved an effective forum for stimulation and international coordination of marine science in the North Atlantic. A comparable government-to-government body is needed to provide a forum to catalyze and coordinate marine science in the North Pacific. Preliminary discussions with foreign governments have revealed considerable international support for such a scientific forum, independent of existing fisheries commissions. Further discussions and consultations will be undertaken with interested governments to work towards the establishment of such an international forum.

Coordination of the Oceans Strategy with the Canadian Strategy for Science and Technology

Earlier this year, the Government adopted the Canadian Strategy for Science and Technology. It recognizes the importance of science and technology as essential to economic, social and cultural development within Canada and to international competitiveness. The action plan of the oceans strategy will be fully coordinated with the Canadian Strategy for Science and Technology which responds to international competitive challenge and demonstrates federal leadership and commitment to science and technology.

The Interdepartmental Committee on Oceans

Coordination of ocean activities of the Government of Canada is facilitated through a newly established mechanism, the Interdepartmental Committee on Oceans (ICO). The ICO is chaired by the Deputy Minister of the Department of Fisheries and Oceans, and has representation from all departments with oceans programs, as well as from those departments requiring services from such programs. The importance of ensuring the coordination of federal policies and programs involving oceans was recognized by assignment of a strong mandate to the ICO. The mandate is intended to raise the profile of the government's

oceans-related efforts and to ensure achievement of the government's objectives in the following areas:

- sovereignty and sovereign rights in the offshore;
- economic viability of the fishing industry;
- conservation of living marine resources;
- offshore resource exploration and exploitation;
- the development of a viable oceanic manufacturing and services industry which is competitive in world markets;
- the protection of aquatic environments; and
- climate and weather prediction.

Marine Science Plan

A coordinated marine science effort will improve the government's ability to anticipate future oceans-related problems before they become crises. The ICO will develop a multi-year marine science plan for the federal government. The plan will organize information on existing and proposed marine science programs and relate those programs to priorities of the government and the missions of line departments. It will also consider opportunities for cooperation in the marine science activities of foreign countries and international organizations.

v) *Conserving and managing the living resources of our oceans through prudent stewardship*



Plastic Debris and Driftnets in the Oceans

Plastic trash is one of the major marine pollution problems of the 1980s. Abandoned fish netting is a major source of the problem, but plastic packing bands, synthetic ropes and a wide variety of non-degradable plastic litter also create serious hazards, particularly degradation of habitat. Fish, marine mammals and sea birds are being killed in increasingly large numbers, either by ingestion of plastic particles or by entanglement in plastic debris such as discarded fishing nets.

There are basically two problems. One is general litter coming from a variety of sources, including municipalities and the general public. The other is plastic debris from specific sources, such as fishing nets and gear from commercial and recreational fishing boats, recreational boaters, commercial shippers, etc.

An effective solution requires that offenders know the magnitude of the problem they create so that corrective measures can be implemented.

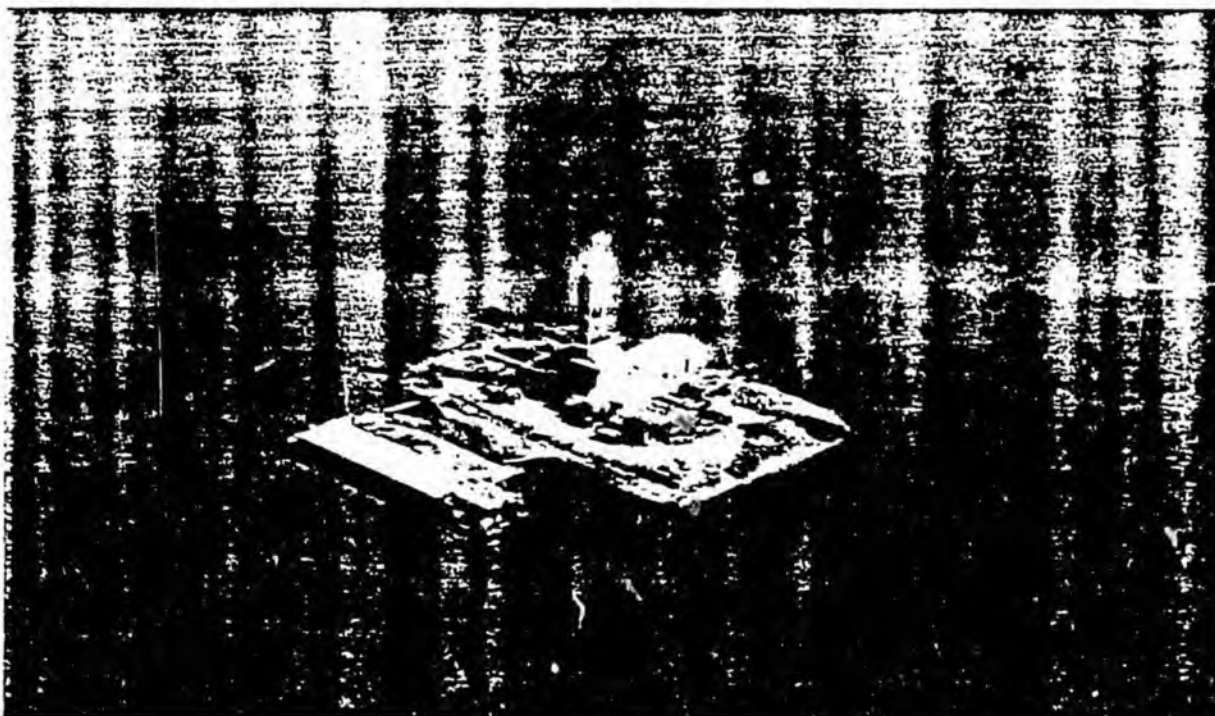
Concerted efforts led by the Ministers of Fisheries and Oceans, Transport, and the Environment, in consultation with other Ministers, will lead to the implementation of action plans to address the problem of the discard of fishing nets and gear at sea, and to deal with the more general problem of plastic debris in the oceans. Efforts may include consultations bilaterally as well as through multilateral organizations such as the International North Pacific Fisheries Commission and the London Dumping Convention.

Arctic Marine Conservation Strategy

Recognizing the uniqueness of the Arctic, and in a manner complementary to the conservation strategies currently being developed (namely, the Yukon Conservation Strategy, the NWT Conservation Strategy and the Inuit Regional Conservation Strategy), a public discussion paper with respect to an Arctic Marine Conservation Strategy will be released by the Minister of Fisheries and Oceans in the coming months.

This discussion paper will continue the extensive process of consultation with all the various interests including Native and Inuit organizations, environmental groups, industry representatives, and provincial/territorial governments which are affected by the strategy.

vi) *Promoting development and exploitation of the non-living resources of our oceans in an environmentally-acceptable manner*



The Frontier Geoscience Program

The Minister of Energy, Mines and Resources will report to Cabinet in 1989 on the accomplishments of the first five years of the long-term Frontier Geoscience Program, and review options to modify and strengthen the oceans-related components of that program.

Ocean Mining

The Minister of Energy, Mines and Resources will continue to develop, in conjunction with other Ministers and the Provinces, a regulatory framework for ocean mining.

CONCLUSION

This policy has been adopted by the Government of Canada to provide a broad framework for developing the oceans economy in an environmentally sound manner, strengthening science and technology-based oceanic industries and asserting Canadian sovereignty over our oceanic territory. This booklet has been published to inform Canadians of what the Government is doing to put such a framework in place.

The Minister of Fisheries and Oceans is charged with the responsibility of coordinating the action plan to implement the oceans strategy. The Minister will lead the process of consultation with all parties with an interest in the full development of the oceans economy.

The three oceans of Canada play a critical role in the country's economy, sovereignty, and national character. The Government is determined to work diligently with all interests to meet the boundless challenges and opportunities in Canada's oceans for the benefit of all Canadians.