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FEDERAL COUNCIL FOR SCIENCE AND TECHNOLOGY
Interagency Committee on Marine Science and Engineering
U.S. DEPARTMENT OF COMMERCE
6010 Executive Boulevard
Rockville, Maryland 20852

SELECT COMMITTEE FOR THE OCEAN POLICY STUDY

In order to provide effective and comprehensive policy consideration, interaction, and information support to the Senate's National Ocean Policy Study, ICMSE has established its Select Committee for the Ocean Policy Study (SCOPS) comprised of the ICMSE members themselves, in essence, a committee-of-the-whole. The activities with which SCOPS will be concerned, as stated in its Charter, will be with issues being examined by the National Ocean Policy Study as they relate to the Federal Ocean Program. Basically, it will be the function of SCOPS to review the issues and, based on information and study requests from the Senate or the determinations of SCOPS itself, to initiate the necessary studies it determines to be appropriate. Depending on the nature and scope of the issue, studies may be undertaken by SCOPS or assigned to a "lead agency." SCOPS will review and clear the finished study products before transmission to the Senate.

SCOPS is organized for these purposes as indicated in the attached diagram.

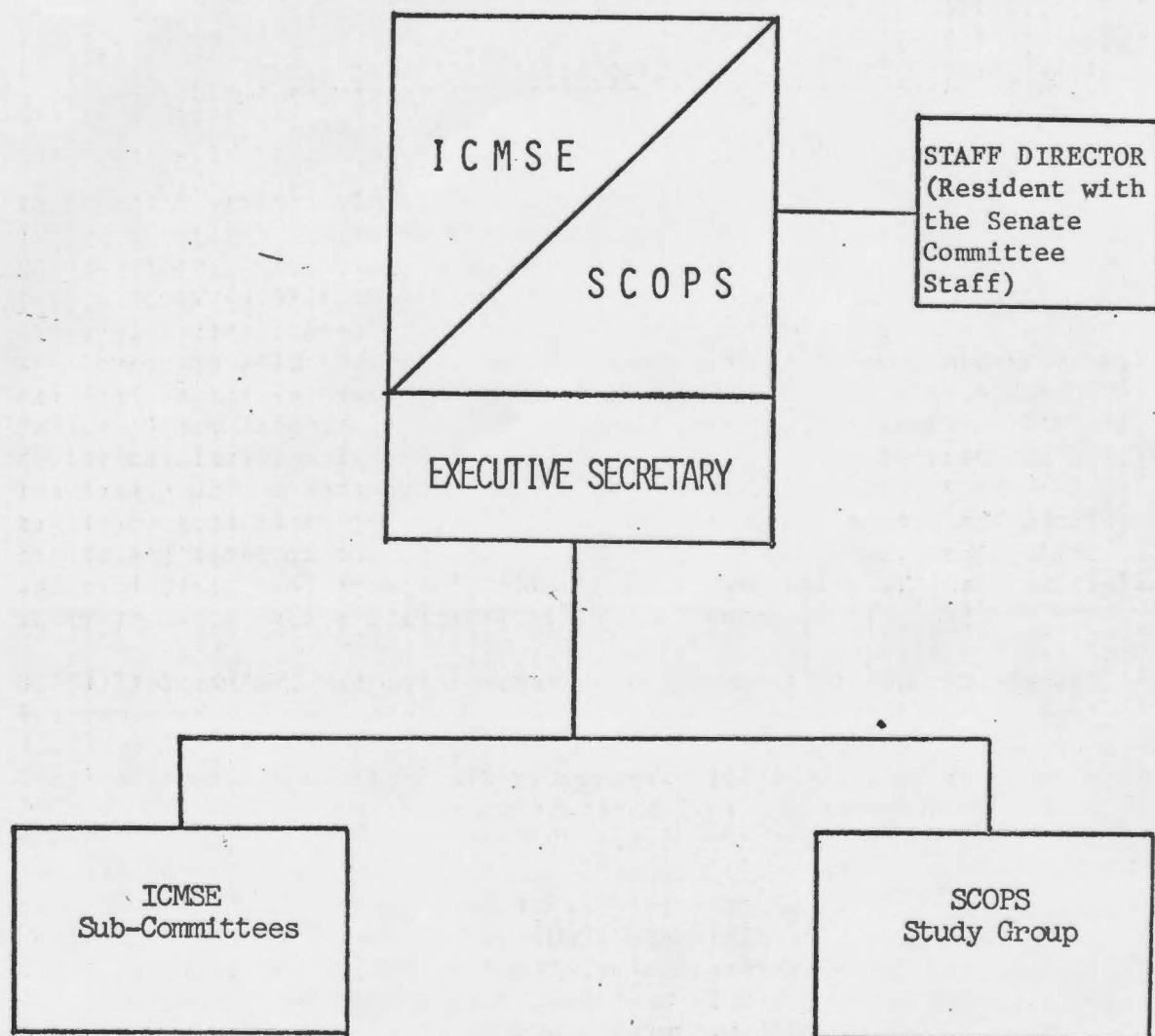
There will be a Study Staff Director reporting to the full Committee (SCOPS) through the Chairman and who will be resident with the Senate Committee Staff. The Study Staff Director will be responsible for representing Administration policy on behalf of SCOPS. In addition, he will assist the Senate staff on a day-to-day basis in the formulation of problems and issues for which input will be required from the Executive Branch. In this respect, he will work closely with the ICMSE Executive Secretary. The Study Staff Director will also be directly available to the Senate staff for quick response inputs from the Executive Branch.

There will be appointed a SCOPS Study Director who will directly supervise a staff assembled from the various agencies to carry out assigned studies responsive to SCOPS and requests from the Senate staff.

In order to insure the necessary coordination and availability of resources to accomplish the various study tasks, the SCOPS Study Director will work through and report directly to the ICMSE Executive Secretary.

5/20/74





FEDERAL COUNCIL FOR SCIENCE AND TECHNOLOGY
INTERAGENCY COMMITTEE ON MARINE SCIENCE AND ENGINEERING
SELECT COMMITTEE FOR THE OCEAN POLICY STUDY

CHARTER

I. ESTABLISHMENT

In recognition of the need to provide the necessary interagency consideration and support to the Ocean Policy Study initiated by Senate Resolution 222, the Interagency Committee on Marine Science and Engineering hereby establishes the Select Committee for the Ocean Policy Study.

II. PURPOSE

The purpose of the Select Committee will be to serve as ^athe communications link between the Senate Committee on Commerce and the collective agencies represented on ICMSE. It will provide a policy level forum to consider information requirements from the Senate Committee on Commerce and to develop, as appropriate, common positions which can be the basis for individual agency actions or for comprehensive Executive Department views of the combined agencies. These activities do not preclude individual agencies from dealing directly with the Senate Committee on Commerce in matters concerning the Ocean Policy Study.

III. SCOPE

The Select Committee will be concerned with issues being examined in the Senate's Ocean Policy Study as they relate to the Federal Ocean Program.

IV. ORGANIZATION

A. Chairmanship. The Select Committee will be chaired by Dr. Robert M. White, Chairman of ICMSE.

B. Membership. Each Federal agency represented on ICMSE may have membership on the Select Committee. For participating agencies, members will generally be those designated as ICMSE members.

V. ADMINISTRATIVE PROCEDURES

A. Meetings. The Select Committee will determine its schedule of meetings as required. It will also meet at the call of the Chairman or at the request of a Committee member. Unless otherwise indicated, meetings will be held in executive session.

B. Staff. Staff will be provided by ICMSE.

VI. DURATION

Unless otherwise discontinued by ICMSE, the Select Committee will function until the termination of the Ocean Policy Study.



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Interagency Committee on Marine Science and Engineering
U.S. DEPARTMENT OF COMMERCE
6010 Executive Boulevard
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ICMSE MEETING 17

AGENDA

May 28, 1974

9:00 a.m., Room 5230
Department of Commerce Building

Agenda Items

I. Record of Actions of the 16th ICMSE meeting

II. National Ocean Policy Study (NOPS)

1. Review of NOPS

Mr. John Hussey

2. Executive Branch Interests

Dr. R. M. White

- Review Major Areas of NOPS

3. Executive Branch - Senate Study Interaction

- Specific Information Relating to Activities of a Single Agency
- Information and Study Needs Crossing Agency Boundaries
- Executive Department Positions on Issues and Information Needs of Senate Study
- Special Interagency Studies on Broad Issues

4. Arrangements for Interaction

- An ICMSE Alternative
- Select Committee for the Ocean Policy Study (SCOPS)
(draft charter distributed)
- Other



5. Procedures for Information Gathering and Studies

- Review, Acceptance and Guidance from SCOPS
- Conduct

Full Time Study Group - Interagency

- Review of Product; Clearance

SCOPS
Higher Authority

6. Requests Received for Interagency Studies

- Ocean Data
- Instrumentation

7. Other Business

- ICMSE Meetings



AGENDA ITEM #1

Record of Actions - 16th ICMSE Meeting

On page 5, lines 1 and 2, paragraph 2 under Agenda Item #3 (Great Lakes), have been corrected by NSF to read:

"Since the ICMSE Great Lakes conference, university ship requirements for the upper Great Lakes have been assembled. The summary of these needs,"

On page 5, line 10, paragraph 3 under Agenda Item #3 (Great Lakes), has been corrected by NSF to read:

"since NSF has no major program there. Shiptime for other agencies' university programs out--"



TESTIMONY OF THE HONORABLE JARED G. CARTER,
DEPUTY UNDER SECRETARY OF THE INTERIOR.
BEFORE THE NATIONAL OCEAN POLICY STUDY GROUP OF THE
SENATE COMMERCE COMMITTEE, PURSUANT TO S.RES. 222
APRIL 23, 1974

Mr. Chairman, the Department is pleased to participate in these hearings. In response to your letter of April 4, I will discuss the following topics:

1. The Department's role in OCS oil and gas development.
2. The potential impact of OCS oil and gas development along the Atlantic, Pacific and Gulf of Alaska.
3. CEQ's recommendations to the President for the establishment of a Department of Energy and Natural Resources to centralize the Federal Government's authority.
4. Our ideas for strengthening management system in the optimal development of OCS oil and gas.

National Oil and Gas Picture

First, Mr. Chairman, I would like to comment on the point in your April 4 letter that "The energy crisis has forced us to make a decision as to whether we should become progressively more dependent on oil and gas imports or whether we should tap our ocean resources." You have put the issue well. To attain the goal of Project Independence -- to avoid dependence upon insecure foreign sources of oil and gas -- a goal shared by almost all Americans, it is clear that we are going to have to rely greatly on our OCS resources.



From 1950 to 1972 our average total energy consumption growth rate increased despite a decline in the average population growth rate. Despite conservation measures, all predictions indicate we must prepare for further increases in demand. Estimates are that by 1985 our demand will be from 22 to 70 percent above current consumption.

Today's demand is met primarily by petroleum, 46 percent; gas, 32 percent; and coal, 17 percent. Over the next decade we have no alternative but to assume that oil and gas will continue to be our principal fuel resources, though their percentage contribution of the total energy supply may decrease with increases in coal production and development of nuclear energy. Geothermal energy will become commercially important in certain areas but not significant on the national scale. Solar energy is unlikely to contribute significantly to the national scene prior to the end of the century.

In 1972 our demand for petroleum (oil and natural gas liquids) was 17.0 million barrels per day (MBD). We produced only 11.0 MBD. The difference, 6.0 MBD, had to be imported. Very little gas was imported in 1972 because it wasn't practical to do so.

Because it is clear that in the absence of new actions and programs on our part our dependence on foreign sources would increase, a key element of Project Independence is to increase domestic oil and gas production.



There are two general sources for substantially increased production in the near term. The first is the North Slope. Production there will probably reach 2.0 MBD by 1980. Hopefully gas can be delivered from that area in large quantities in a similar time frame; and, again hopefully, new discoveries in northern Alaska may further increase the amount of oil and gas we can get from that area. The second, and even more promising area for increased production of oil and gas, is the Outer Continental Shelf.

The Department's Geological Survey estimates undiscovered recoverable oil resources offshore totalling 65 to 130 billion barrels of petroleum (7-14 State and 58-116 Federal) and 395 to 790 trillion cubic feet of gas (40-80 State and 355-710 Federal).

Our problem -- and it's everybody's problem -- is how best to prove up these reserves and produce them in the shortest practicable time frame and without incurring unacceptable environmental and other costs.

We believe this can be done. In 1972 wells in the Gulf of Mexico produced about 1.4 MBD and another .6 MBD came from wells offshore of California and Alaska combined. Gas production on the Gulf OCS was 8.9 billion cubic feet per day (BCFD) and on submerged lands of Alaska and California, 1.9 BCFD. This production resulted in some damage, but we and industry are constantly learning, and I will explain later our plans for assuring that new development is sensibly planned and executed.



I am about to turn to the specific points you asked us to comment on, but I want to emphasize a couple of other background facts important to our general subject: First, even if we are very successful in our OCS program we are going to have to continue importing oil and gas for the next several years -- particularly into the East Coast; and if we are to do this at the least economic and environmental costs we will have to build deepwater ports to facilitate such importation. Second, we are short of refineries in this country -- particularly on the East Coast -- and if we want to decrease our vulnerability to a cutoff of foreign supplies and obtain our energy at the lowest possible cost we are somehow going to have to build some refineries.

OCS Oil and Gas Development

Against this backdrop, let me outline the Department's role in the development of OCS oil and gas.

The Department of the Interior is responsible for management and development of the submerged lands and mineral resources of the Outer Continental Shelf (OCS) pursuant to the Outer Continental Shelf Lands Act, 43 U.S.C. Secs. 1331-1343. ^{1/} includes This /

1/ Those submerged lands beyond the limit of state jurisdiction. More formally, the Outer Continental Shelf as defined in Section 2(a) of the OCS Lands Act (67 Stat. 462) means "all submerged lands lying seaward and outside of lands beneath navigable waters as defined in Section 2 of the Submerged Lands Act and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control."



responsibility for preparation of proposed lease sale scheduling, environmental evaluation pursuant to the National Environmental Policy Act, preparation and sale of mineral leases, issuance of pipeline rights-of-way, supervision of lease operations, and environmental and pollution monitoring. These actions are taken in close cooperation with all affected Federal agencies including EPA, the Coast Guard, NOAA, the Office of Pipeline Safety and the Coastal States concerned. Our leasing goals are to achieve orderly and timely resource development, protection of the environment, and the receipt of fair market value for leased mineral resources. The OCS oil and gas leasing program has been underway since 1953. In this period, oil and gas leasing has been conducted in the Gulf of Mexico and off California. About 12 percent of the Nation's hydrocarbon requirements come from the OCS.

To assure that the most promising offshore areas are made available for development first and the environment receives the maximum protection achievable, we have recently initiated a two tier request for views on OCS leasing. Under this system, the first tier includes a regional approach in which industry, states, and other groups are invited to rank the regions they think are most favorable for development from the standpoint of geologic potential and time to reach peak production and to identify environmental conditions and problems in these regions. The Interior Department will use the rankings of regions, along with its own evaluations of resource potential and need to protect environmental values,

the CEQ Atlantic and Gulf of Alaska reports, and the views of other Federal agencies to develop a revised and updated 5-year proposed leasing schedule. Subsequently, in the second phase of the two tier system, industry and other groups are asked to provide their views on individual tracts within regions as has been done in the past. A NEPA statement will be prepared, the tracts selected for sale, the terms of the leases established, and the sale held.

The Department has authority and responsibility to inspect and regulate all operations on a lease and to issue orders and rules as necessary for oil and gas drilling and production operations to prevent damage to, or waste of, any natural resource, or injury to life or property. In the conduct of lease operations, the lessee has the responsibility to comply promptly and diligently with the regulations, lease terms, and any orders, oral or written, from the supervisor.

Management of a lease begins when the lease is issued. Usually the operator will want to commence drilling within the first year, but prior to this, he must submit exploratory drilling plans to the Department for the geological area of interest. Regulations require that these plans must include the geophysical and geological data and mapping, drilling rig specifications, and well procedures. Following approval of the plan, a form application for a permit to drill must be submitted for each well showing details on casing setting and cementing practices, blowout preventor hook-ups and the mud program.



Following a discovery and the probability of commercial production, the operator submits development plans for drilling, which include platform specifications, geological mapping, well locations and reservoir completions, and the procedures in general for drilling and completion. Then an application to drill each proposed well is submitted for final approval.

Before commencing production, each well must be production tested under Department guidelines and then an application must be made for a maximum production rate. All safety equipment as stipulated under the applicable OCS orders must be installed and operative by this time.

During the course of production, the operator is required to report monthly production and status by well and monthly sales for royalty purposes; and to submit completion reports and new production tests, and applications for any new work and abandonment upon depletion.

OCS lease management also includes unitization of lands and reservoirs, the valuation of all production, approvals for commingling and measurement of production, and cooperation with adjoining states where authority may be in dispute.

The Department has responsibility for approval of pipeline rights-of-way from the point of production to the boundary of the states' submerged lands. It works with the Office of Pipeline Safety in the Department of Transportation in maintenance of pipeline safety and related monitoring of operations. The



Department also conducts related environmental and baseline monitoring efforts in actual pipeline corridors, works closely with effected states in new leasing areas in establishing optimal pipeline corridors, maintains a central record keeping system of existing pipelines and, as necessary, prepares environmental analyses or statements on pipeline right-of-way applications. In addition, it reviews and comments upon Section 10 permits of the U.S. Army Corps of Engineers under the 1899 Rivers and Harbors Act where such pipelines come ashore through navigable water regardless of ownership.

Impact of OCS Development

Let me now turn to the potential impact of OCS oil and gas development along the Atlantic, Pacific, and Gulf of Alaska. The CEQ study, published April 18, dealt extensively with this very question. We believe that this was a very good study based on the general information available at this stage and that it correctly identifies the kinds of issues for concern and the approaches that should be taken to assure that OCS development is in fact conducted at acceptable environmental and socio-economic costs.

The major conclusion of the CEQ report is that OCS development will encounter high risks in some frontier areas, low in others, and leasing undertaken must take these risks into account. Some areas are much more subject than others to the risk of an oil spill occurring, the risk of any spill reaching the shore,



and to adverse impacts from shore-side development resulting from OCS production. The Committee is familiar with the report's rankings of the specific areas.

I would emphasize a few points:

A. Without more specific information about the oil and gas that can be produced and about the specific environmental and socio-economic effects of development in a particular area, it is not possible to rank the frontier areas in terms of desirability for early leasing. As I will discuss in more detail in a moment, we are engaged in efforts to obtain information necessary to make those decisions.

B. On the basis of the CEQ report and our experience in the Gulf, it does not appear that substantial conflicts with other uses of the marine environment and Coastal Zone are inevitable. Sensible planning can avoid such results.

C. The CEQ report talks in terms of probabilities of oil spills. It recognizes that adequate lease terms and regulations, coupled with a good management system, can reduce these probabilities to acceptable levels. Our experience bears this out and we certainly intend to assure that leasing in frontier areas is subject to maximum practicable efforts to minimize the probabilities of spills or other adverse impacts.

Department of Energy and Natural Resources

As requested in your letter, I would now like to briefly comment on the CEQ's recommendation for creation of a Department



of Energy and Natural Resources. We strongly support that recommendation. The report's reasoning is persuasive. In order to make sensible governmental decisions, it is imperative that all the relevant facts be brought to the attention of the decision-makers and that all major interest groups affected by the decision have an opportunity to express their views to him. At the present time the relevant facts are accessible only from several different federal agencies as well as state and public groups. It would facilitate matters a great deal-- by avoiding overlapping and increasing the speed of communication-- if all the federal agencies were under one roof.

Creation of a Department of Energy and Natural Resources would not increase the likelihood of any substantial interest being ignored in the decision-making process--a risk which the CEQ report commendably recognized head-on. Given our system of checks and balances and the requirements of NEPA, among other laws, no major decision about where to lease on the OCS or how to supply this Nation's increasing energy demands can be made in secret. If even one such decision can be made in secret, several committees of the Congress would quite capably assure that no others were made in that fashion. Moreover, it is even more likely that all relevant points of view will be presented to the ultimate decision-maker in a disputed case where the disputants all work for the decision-maker on a day-to-day basis than when they don't. If a dispute about



whether to develop a particular area must be referred to a higher level to change a disputed decision, this referral does not assure it will receive more time in consideration. In fact, the converse is probably true. If more of the agencies now concerned with OCS decisions--parts of the Corps of Engineers, NOAA, the Office of Pipeline Safety, as well as parts of Interior--all worked for one Secretary, that Secretary would have a continuing interest in maintaining the loyalty and cooperation of each agency for an extended period of time and would be, of necessity, conscious to assure that each of their points of view receive consideration in important energy-related decisions.

Optimal Development of the OCS

I would like to turn now to the last point you asked us to address, recommendations for an effective management system in the optimal development of OCS oil and gas.

I have earlier outlined how our system works. We believe it is basically sound and that it in fact produces decisions that optimize our potential for oil and gas production at acceptable environmental and socio-economic costs and with a fair return to the public for the leasing of public land. But we are not content to merely extend past practices into leasing of frontier areas. We have instituted steps to further help us in selecting the areas to lease and we fully agree with



the points in the CEQ report that further changes in our regulations and lease forms may be necessary to deal with the specific problems that may be encountered in any leasing area.

We are now engaged in two general efforts that I believe will be of interest to this Committee:

A. I have earlier mentioned our recently initiated two tier system. We expect that the responses from industry, the states, and other groups will be extremely helpful in locating the most desirable frontier leasing areas and the environmental risks that must be dealt with. Concomitantly with this request for information, we have been conducting consultations with industry and environmental representatives about the advisability of an OCS exploratory program that would further help us to pinpoint the areas of the greatest potential production of much needed oil and gas. Very briefly we have been discussing five alternative plans:

1. In conjunction with continuing lease sales in areas of current development, we would offer for lease on a competitive basis a limited number of tracts on the more promising structures. ^{in frontier areas} We would require prompt exploration on a unitized basis in order to obtain at the earliest time as much information as possible about the area's potential and at the lowest feasible cost in terms of rig and manpower utilization.



2. Institute a new program of exploratory leases on selected promising structures with all information obtained by the lessee immediately being made public. If the lessee made a discovery, he would be entitled to a development lease if, as, and when general leasing was conducted in that area.

3. The third alternative we have considered is a federal exploratory drilling program under contracts issued by the Department of the Interior, with all information immediately being made public.

4. The fourth alternative would involve federally conducted stratigraphic drilling, that is drilling off-structure as opposed to exploratory drilling which is drilling on-structure, with all the data immediately being made public.

5. The fifth alternative, which certainly is not conditioned upon acceptance or rejection of any of the preceding four, is to issue regulations authorizing privately conducted stratigraphic drilling under existing statutory authority.

Thus far we do not have a clear picture whether any of these programs would be likely to produce positive or negative information that would come on a timely basis to help us decide where the first lease sales should be held in frontier areas. One problem is that a limited number of holes in the OCS does not necessarily tell very much--apparently some 200 holes were drilled in the North Sea before oil was found. Another problem is that



all of these options, except the first and the fifth, involve Congressional as well as Executive action and it may not be practicable to obtain such action in the time frame we should follow in adding to our domestic energy resources by developing the OCS.

B. On the environmental front, we are actively pursuing the program suggested by the National Academy of Sciences-- National Academy of Engineering. The NAE recommended three sequential levels of effort:

1. An inventory and analysis of existing environmental and socio-economic data. The CEQ report represents a significant contribution to the accomplishment of this level of effort. As stated earlier, we are contracting with universities for more specific analyses of frontier areas such as the North Atlantic, from the Bay of Fundy to Sandy Hook, New Jersey; the mid-Atlantic, from Sandy Hook to Cape Hatteras; the Gulf of Alaska, from Cook Inlet to Unimak Island. We also requested studies of southern California and our broadening and updating our information concerning the Gulf of Mexico.

2. The second phase is special field studies to fill short term non-recurring data gaps pointed up by the inventories conducted on Phase 1.

3. The third level of effort is continuing ecological base-line and monitoring studies concerned with oceanographic-geologic and biologic data in areas where leases have occurred



or where pipeline corridors are established. An example is our approach in the recently conducted sale in the MAFLA area. Very shortly we will issue contracts for base-line studies after receiving advice from the OCS Research Advisory Board recently established by the Secretary. This federal-state advisory board contains not only federal members but also representatives from state governments off whose shores leasing will occur.

This effort is longer term. It will provide information on changes that occur and will serve as the basis for amending our orders and regulations controlling production in the area under lease.

Additionally, of course, before any lease sales are actually held on these frontier areas, we will conduct environmental analysis and prepare Environmental Impact Statements concerning the proposed actions. The NEPA process provides a formalized method for complementing the consultation presently underway with other federal agencies, the states, industry, and the public about where to lease. We firmly believe that with the information obtained from the consultative process I have described, and from the studies I have listed, and from the detailed environmental statement, that we will be in a position, with sufficient authority under existing law, to impose lease terms and regulations that will optimize development of OCS oil and gas and deal effectively with the environmental risks



that have been identified in the process. We are also confident that by working within the framework of the Coastal Zone Management Act and, if it should pass, the Land Use Policy and Planning Assistance Act, that the states can make informed and intelligent decisions regarding shore-side projects related to OCS development.

In short, Mr. Chairman, we are convinced that increased OCS development is in the national interest, that it can occur in frontier areas under acceptable conditions, and that we are proceeding reasonably to bring about this result.



Statement by
Robert M. White
Administrator, National Oceanic and Atmospheric Administration
Department of Commerce

before the

Senate Commerce Committee - National Ocean Policy Study

April 23, 1974

Mr. Chairman, I welcome the opportunity to comment on the ocean policy issues before the Committee as they relate to oil and gas development on our continental shelves and the impact on the management of the coastal zone. The Department of Commerce, through the National Oceanic & Atmospheric Administration and other agencies, such as the Maritime Administration has broad responsibilities which are affected by, and which in turn affect our national policies which govern how, when and in what manner this Nation will make use of its ocean heritage in the national interest.

It is appropriate that your Committee is focusing on the outer continental shelf oil and gas development. There is today no more urgent issue on the Nation's agenda. But, for all of its urgency, we must deal with it within the broader context of all the other uses we may wish to make of the seas around us. Some of these other uses are no less important than the national need for additional energy resources. Our ocean policy perspective must of necessity be multifaceted. It must take the long as well as the short view. It must be concerned with



the maintenance and the management of renewable resources as well as the extraction of non-renewable resources. It must be concerned with the stimulation of private industry to develop these resources as well as with adequate management of the ocean environment to assure its rational use in the national interest.

Whatever policies we eventually adopt, or however we modify our present policies for the use of our ocean resources and the ocean environment, they will be only as sound as the scientific knowledge of the oceans on which they are based. For it is only such knowledge that can illuminate the consequences of our proposed actions before we take them.

NOAA was formed three years ago to provide a central focus within the Federal Government where many key aspects of the Nation's ocean activities could be administered in a unified way and in recognition of the complexity and diversity of interests in the oceans which require their treatment in a comprehensive manner. Nevertheless, the ocean responsibilities of NOAA are not all encompassing and you will hear from representatives of other agencies and departments who have responsibilities for aspects of the Nation's ocean efforts which do not fall within the purview of NOAA. In my testimony today, I would like to focus on a number of ocean questions for which we in NOAA have special responsibility and which will not be covered in detail by other witnesses. I particularly would like to address two types of issues, first, those involved in the management of the ocean environment and the coastal zone to



accommodate conflicting uses, and second those relating to the need for the establishment of the scientific and factual base of knowledge which must form the basis of any policy decisions to be taken. I know you will hear in great detail from the Chairman of the Council on Environmental Quality Governor Russell Peterson on the report issued by that council just last week on Outer Continental Shelf Oil and Gas - An Environmental Assessment, which resulted from President Nixon's request that such a study be completed before undertaking any drilling on the Atlantic Outer Continental Shelf and in the Gulf of Alaska. You will also be hearing in some detail from Mr. Jared Carter, Deputy Under Secretary of Interior and Dr. Vincent McKelvey, Director of the Geological Survey on the details of the potential energy resources of the shelf.

It seems to me, Mr. Chairman, that the central problem we are concerned with here today is easily stated. It is simply "what will be the impact of the development of the oil and gas resources of the continental shelves on the super adjacent fisheries and other resources and upon the adjacent coastal environment?" If we can answer this question it should then be possible to decide whether the anticipated impacts are acceptable or desirable from a social, economic or environmental view. When I say decide, I mean decide through the political processes and the institutions our political processes have established as for example, through the Coastal Zone Management Act.

It is clear that it is in the national interest to develop additional supplies of domestically controlled oil and gas. Even with the best of success in our national efforts at energy conservation,



it is clear that our national energy requirements will continue to grow, and the recent oil embargo underlines the need to retain a large fraction of our oil and gas supply under domestic control. It is also clear that one of the major remaining sources of untapped supplies of gas and oil lie beneath the continental shelves and in the shallow enclosed seas of our planet. Most of the important new gas and oil discoveries are being made in coastal and offshore locations. However, these same coastal and offshore areas are valuable to us in many other ways as well. While the rock and sediment underlying the seafloor may provide a reservoir for oil, the water above provides both habitat and sustenance for valuable fisheries and the sea surface itself provides a medium for recreation and transportation. While the landward side of the coastal zone may provide the locus for the storage facilities, tanks, refineries, and other industrial support needed for the development of our offshore oil and gas resources, these same areas are also the focus for intensive industrial development for the provision of recreational facilities for the bulk of our population located in the large metropolitan areas along our coasts, and for spawning and nursery grounds for 70% of our fisheries resources.

We are not without experience in dealing with the problems that are created by these conflicting uses. Offshore oil and gas development has been with us for more than a quarter of a century and a valuable store of experience has been obtained. It is largely as a result of such experience, that over the past five years the President and the Congress have adopted extensive legislation and established institutions to deal with the wide range of coastal issues. Certainly the passage



of the National Environmental Policy Act, the establishment of the Council on Environmental Quality, as well as the Environmental Protection Agency and the National Oceanic and Atmospheric Administration attest to the national drive to achieve a balance between industrial development and environmental quality. More recently, we have had the passage of the amendments to the Federal Water Pollution Control Act and the Marine Protection, Research and Sanctuaries Act of 1972. But the Congress and the President first came to grips on a national basis with the problems of balanced management of conflicting uses thru the Coastal Zone Management Act. We now have in place, as a result of the foresight of this Committee, a mechanism which offers promise of dealing effectively with many energy-related ocean policy issues that are now being raised.

Most of our offshore experience to date has been adjacent to the coasts of Texas and Louisiana in the Gulf of Mexico and off the coast of California. We are now, however, considering a different kind of offshore oil and gas development along the Atlantic and Alaskan coasts, and we may not be able to extrapolate our experience in the Gulf of Mexico and California totally to these other areas. Nevertheless, there are many lessons to be learned from our experience. First, our experience in the Gulf of Mexico and off the California coast leaves no doubt that offshore petroleum drilling, production, transportation, storage, and refining operations can pose risks to other coastal resources.

The risks are of many kinds, the most dramatic being associated with large oil spills or blow-outs. Fortunately, these occurrences are infrequent.



Less spectacular, but perhaps of greater importance are possible problems associated with the chronic exposure to low levels of oil released as a part of daily operations. It is the near shore parts of our coastal zone, however, that must absorb a major part of the impacts. In the Gulf of Mexico, by far the greatest environmental impacts have been those resulting from pipeline construction, dredge and fill activities, navigation and access channels, and the onshore construction of crew boat basins, wharves, equipment storage depots, tank farms, and refineries.

The impact of these activities on coastal lands are many and varied. There is, clearly, a loss of wetlands. Pipelines plus required navigation channels and onshore support facilities can cause loss of wetlands which serve as fisheries habitats and they can also affect circulation conditions of nearshore areas. There is no question that the base of the economies of coastal communities directly affected by onshore oil developments can be changed from fishing and tourism to petroleum and petro-chemicals. In such changes there can be a displacement of people, losses to certain sectors of a regional economy, and gains to others. There is also no question that there is potential for degradation of air and water quality as a result of increased petroleum-related operations in coastal areas.

Now, it is obvious that we would all like our oil without harmful impacts. The real question we as a nation have to address, is how we keep such impacts reduced at least to acceptable levels, and having done this deciding



who will bear the brunt of them. One thing we can learn from our past experiences, is that detrimental effects have resulted in part because there has been a lack of adequate planning for use of our coastal environment.

Now, we face a future in which it is clear that we will increase the rate of lease sales in existing oil and gas areas in the Gulf and off California, and we are considering entry into virgin areas off the Atlantic Coast and in the Gulf of Alaska. We are facing the certainty of a quantum jump in the level of our offshore operations. We no longer can excuse a lack of planning and its consequences. It is this anticipated quantum jump that makes the kind of policy assessment this Committee is now undertaking of great significance. The potential for all types of impacts are now materially heightened by the rapid rate of expansion that is being called for. The kinds of problems that were encountered in the past will be encountered more frequently because of the more intense present and future competition for uses of the coastal zone.

In one sense, we are fortunate that this new stage in offshore oil and gas activity arrives at a time when our awareness of what can happen is heightened. We are also fortunate that they arrive when, as I have indicated, we do have in place mechanisms for dealing with many of the major policy issues that will arise.



If I were to single out an event which has more than any other placed us in a position to provide the necessary rational and balanced management of this new enterprise, it would be the passage in 1972 of the Coastal Zone Management Act. That Act now provides us with a means of establishing, with the cooperation of the coastal states, a suitable management system. It is an outstanding example of the concept of the New Federalism in action that the President has advocated so strongly. It establishes and clarifies the roles of Federal, State and local governments in the planning and management of our coastal zone, placing the principal responsibilities for the planning and management with the states. It ensures that Federal actions are consistent with state plans and provides a means whereby a concerned public can have an opportunity to become involved in the planning and decision-making processes.

I can report to this Committee that the Coastal Zone Management Program is moving ahead rapidly. It is a complex undertaking which involves the closest interactions between the states and the Federal Government. We have been encouraging states to begin the management program development process as soon as possible. It has been gratifying that almost all of the coastal states have moved to take advantage of the Act.

Last month we made the first three grants to the States of Rhode Island, Maine and Oregon. I can announce today three additional



awards to the states of Mississippi, California and Michigan. These six grants total \$1.78 million in Federal funding. In process of preparation are applications from the states of Washington, South Carolina, Alaska, Hawaii, New Hampshire, Maryland, Louisiana, Illinois and many others. We expect to have almost all of the coastal states involved in the grants phase of the program within the next several months.

We believe that the Coastal Zone Management Act provides a framework into which our oil and gas activities on the outer continental shelf can fit with minimum social cost. We believe that, through the Coastal Zone Management programs, state and local governments will, with Federal assistance, do the kind of comprehensive advance planning necessary to anticipate onshore problems that can be expected to come with this increased outer continental shelf activity. We are encouraging states to do this and they are responding. When these plans have been completed and approved, the Federal Government, through grants for implementation, will provide funding to the coastal states to help ensure that they are adequately prepared to handle the kinds of secondary and supporting activities that will be associated with increased off-shore oil and gas production. We also intend to ensure, by coordination at the Federal level, that other Federal agencies involved in planning and managing outer continental shelf related activities work closely with the affected states and the coastal zone managers from the earliest moment. In other words, we



APPENDIX XI TO ANNEX P

PROJECT INSTRUCTIONS FOR VANGUARD

Draft

- 1.0 INTRODUCTION
- 1.1 RELATIONSHIP BETWEEN COMMANDING OFFICER AND CHIEF SCIENTIST
- 2.0 DEPLOYMENT
- 2.1 CALENDAR OF EVENTS
- 2.2 OBSERVATION PERIOD I
- 2.3 OBSERVATION PERIOD II
- 2.4 OBSERVATION PERIOD III
- 3.0 SCHEDULE OF OBSERVATIONS
- 3.1 OBSERVATION PERIODS I, II, III
- 3.1.1 Surface Observations
- 3.1.2 Rawinsonde Observations
- 3.1.3 Balloon Observations
- 3.1.4 Oceanographic Observations
- 4.0 DATA TRANSMISSION REQUIREMENTS
- 5.0 OPERATIONAL REPORTING
- 6.0 NAVIGATION AND STATIONKEEPING
- 7.0 SCIENTIFIC AND TECHNICAL COMPLEMENT



shall make an effort to see that the full potential of the Coastal Zone Management Program is realized in all of its aspects.

Inbedded in the policy statements of the Coastal Zone Management Act, and becoming more critical with each passing day, are certain major issues which we are only beginning to resolve.

For example, the Act calls for a balance between the need for a quality environment on the one hand, and the economic development of the coastal zone on the other. There is no question in anybody's mind that the States will not tolerate today the destruction of their coastal environment that unfortunately has frequently typified so much of our activity in the past. Similarly, however, economic developments in the coastal zone will be of vital importance to the coastal states and to the Nation.

How is this balance to be struck and these conflicts resolved?

Basically, I think this will call for improvements along two important lines. First, we must have adequate scientific and technical information so we can understand, anticipate and wherever possible minimize the environmental impacts of economic development. Second, in accordance with the mandate of the Coastal Zone Management Act we must develop appropriate institutions and procedures, to assure that the consequences and trade-offs of various development patterns are clearly displayed so that choices are made in a systematic manner. Only then, will we be able to arrive at the balance called for in the Act.



Then there is the issue of how we will handle problems of national interest in the coastal zone in cases where there is a clear and overriding national interest which must be accommodated. The Coastal Zone Management Act provides for consistency of Federal activities with approved state coastal zone management plans. On the other hand, such plans must give adequate consideration to the national interest involved in the siting of facilities necessary to meet national or regional requirements. NOAA recently sponsored a meeting of state officials and other interested parties to discuss the meaning of this national interest requirement, and I can report that, based on the evidence so far, the states are taking a most responsible attitude toward this obligation in developing their management programs.

Another aspect of the resolution of this issue might very well involve the provision of additional incentives to the states of a financial or other nature to provide within their coastal zone management plans adequate provision for facilities which are more directly related to national as contrasted with state or local needs. One method would be to emphasize through the Coastal Zone Management Program, Federal advice and assistance to states on problems of siting special types of national facilities, especially in the area of energy production.

Establishing the mechanisms for management of the coastal zone is of course important, but it is only part of what needs be done.



Management and the decision-making process requires a base of adequate information, research and studies, which illuminates choices and consequences.

A major reason for the assignment of the responsibility for implementation of Coastal Zone Management Act to the National Oceanic and Atmospheric Administration is because NOAA also is responsible for a wide range of ocean and ocean-related research and services. NOAA does this through a diverse series of programs, each of which generates key information needed for management of our coastal zone and related ocean resources. Each major element of NOAA is intimately and deeply involved in developing needed information and carrying out essential research. For example, our National Marine Fisheries Service (NMFS) is responsible for the management and conservation of our fisheries resources and has over many years assessed the abundance, distribution and population dynamics of many species of fish which occur in those areas currently under consideration for oil and gas leasing. These studies have lead to a growing catalogue of information on such areas as Georges Bank and the Gulf of Alaska. Our National Ocean Survey (NOS) does the surveys and provides the maps and charts, helps set boundaries and provides information on near shore currents and tides, all of which are essential to both sound coastal zone management and to the safety of operations at sea. A major factor in the safe conduct of any ocean operation is the availability of timely forecasts of weather.



and sea-state information. This is provided by the National Weather Service (NWS). Our Environmental Research Laboratories (ERL) are responsible for the research programs that lead to a fuller understanding of the basic dynamics of the ocean as well as to technological development which will lead to greater understanding, such as the use of newly developed radar techniques for measuring sea state at great distances. The important new information on the short term perturbations and meanderings of the Gulf Stream came from the remote sensing capabilities of our National Environmental Satellite Service (NESS). These kinds of knowledge are essential for meaningful predictions regarding the distribution of waste materials at sea, whether their source is the sewage discharge from cities, or the results of an accidental oil spill. The ability to realistically predict the potential of severe damage from infrequent major storms and to understand the long term variability in both ocean and weather conditions is dependent on the extensive data base available through our Environmental Data Service. Of particular importance is our National Sea Grant College Program, which brings to bear upon the diverse problems of the coastal zone, the full talents of the universities of our coastal states. One of the interesting studies carried out by the Massachusetts Institute of Technology under our Sea Grant Program, was directed at the issue of petroleum development on George's Bank. This work provided the basis for subsequent studies by MIT, as part of the recent CEQ report.



It is not my intent to catalog our work, or the full scope of the research program of NOAA. However, the assessment of the environmental risks inherent in outer continental shelf development as described in the CEQ report could never have been made without the essential data and knowledge provided by NOAA's ocean and atmospheric efforts.

As indicated in the CEQ report much additional knowledge and research is required in many areas. I would like to highlight some that I believe will contribute significantly to our rational management of the coastal zone, and can contribute to the resolution of related policy issues as well.

Together with other agencies we are compiling information on the effect and fate of oil introduced into the oceans either as a result of dramatic spills or over long periods of time in low concentration. NOAA has studies underway on the effects of oil on marine organisms including the effects on the fin fish, crabs, disease resistance, as well as studies of the dispersion and motions of such oil masses. While our knowledge of these matters is increasing, much work remains to be done. In particular, we must find ways of applying the results of our experimental laboratory studies to actual conditions in the field, if we are to understand the real ecological impacts of oil. We intend to continue such studies bearing on the consequences of oil development on the fisheries.

In this connection, while our knowledge of fish stocks along our coasts is much improved, it tends to be highly concentrated on specific species that happen to be of immediate commercial and recreational value.



I am convinced that as we develop the oil and gas resources of our shelf areas more broadly, there will be a continuing need for more systematic assessments of fisheries stocks. NOAA's Marine Resource Monitoring, Assessment and Prediction program (MARMAP) is directed at this problem.

I have indicated that the greatest environmental impacts will occur along the onshore areas. It is here also that we encounter some of the most difficult scientific and technical problems. Much of the needed information on the nature of the physical, chemical and biological characteristics of these waters is not available. We have tended to treat our near-shore ocean problems on an ad hoc basis. Each time there has been a need for ocean information for a specific outfall, a specific dumping site, a specific power plant, we have, on a crash basis, initiated specific studies to give specific pieces of information. It is my view that this kind of approach is costly for the nation and does not, because of its crash nature, yield the kinds of information that is really needed. We must turn to a more comprehensive and long-range view of what we need to do with respect to research in our near-shore and coastal waters.

It was for this reason and especially in conjunction with our responsibilities in ocean dumping research, that the National Oceanic and Atmospheric Administration established its Marine Ecosystems Analysis Program. This program takes a comprehensive view of ocean phenomena as they relate to the specific management problems of the political entities along the affected coast. As you know we are well into the Marine



Ecosystems Analysis Program for the New York Bight area, south of Long Island and to the east of the coast of New Jersey and Delaware. The multitudinous and intensive uses of this coastline places it under the most intensive pressure of any part of our coastal waters. Given the enormous human population surrounding the New York Bight, given the need to use the Bight as a dump site, given the prospective oil developments along our continental shelf and the recreational and fisheries importance of the area, the critical nature of this study is obvious. Already, the program has demonstrated the value of approaching these problems in a comprehensive way.

In studying problems such as the movement of sediments, the details of ocean current systems, and the baseline information on the chemistry and biology of the area, we are working with a number of groups who require this kind of information. The requests for help have been diversified indeed. They have come from Nassau/Suffolk County in Long Island, which has been developing a detailed coastal zone management plan which depends upon the kind of information coming out of our New York Bight study. We have been advising the Environmental Protection Agency with respect to the best locations for moving the present dump sites in the New York Bight, so that they would have the least environmental impact. We have been able to provide information on the actual movement of sludge toward the beaches of the New York Bight area. We are actively involved in studies relating to siting of floating nuclear power plants off the New Jersey coast. A further bonus



from the New York Bight studies will occur if indeed the oil and gas resources of the Baltimore Canyon at the southern edge of the New York Bight undergo development.

Through a program such as MESA we can have the methodology to go about acquiring the information from our coastal waters which can serve the complex purposes of coastal zone management. We should approach critical coastal areas in a similar systematic way related to pertinent problems to provide the necessary comprehensive information to help solve these problems. At the present time, we are requesting money within the President's budget now before the Congress for the planning activities for a similar undertaking in Puget Sound.

In addition, we are cooperating closely with other agencies concerned with the need to develop marine environmental baseline information of this type for other coastal regions. We are working with the Bureau of Land Management, the Environmental Protection Agency, the Atomic Energy Commission, the Geological Survey and others.

I should point out that our efforts to gain a comprehensive understanding of this complex marine environment, and to reach the stage where we can confidently predict the outcome of contemplated man-induced changes, are supportive of and in cooperation with a variety of other governmental agencies. An excellent example is our contribution to the just-published CEQ Environmental Assessment of OCS oil and gas development which will be discussed by Mr. Peterson.



It is clear that the pressures which result from the combination of increased populations and their growing affluence will bear heavily on our coastal zone and ocean waters. As we look down the road, we must be somewhat grateful that the public attention to our coasts and seas which has resulted from the energy crunch highlighted the problem. To minimize these pressures, to assure the maintenance of both a high quality of life and the necessary supplies of food and raw materials, careful planning is needed. This planning must be built on a firm and comprehensive data base. We must be in a position to move ahead with the development of our energy resources with minimal risk of damage to a region that has provided a major source of food, recreation and esthetic value to millions of our people. In my judgment, the groundwork has now been laid for national and state policies which will enable us to avoid both of these undesirable extremes.



93d CONGRESS
2d SESSION

S. RES. 222

[Report No. 93-685]

IN THE SENATE OF THE UNITED STATES

DECEMBER 19, 1973

Mr. MAGNUSON (for himself, Mr. HOLLINGS, Mr. EASTLAND, Mr. McCLELLAN, Mr. FULBRIGHT, Mr. SPARKMAN, Mr. STENNIS, Mr. LONG, Mr. PASTORE, Mr. JACKSON, Mr. MANSFIELD, Mr. ERVIN, Mr. COTTON, Mr. HUGH SCOTT, Mr. BIBLE, Mr. TALMADGE, Mr. RANDOLPH, Mr. CANNON, Mr. HARTKE, Mr. McGEE, Mr. MOSS, Mr. WILLIAMS, Mr. BENTSEN, Mr. EAGLETON, Mr. RHICOFF, Mr. ROBERT C. BYRD, Mr. HUMPHREY, Mr. STEVENS, Mr. KENNEDY, Mr. METCALF, Mr. STEVENSON, Mr. MCGOVERN, Mr. MCINTYRE, Mr. NUNN, Mr. ALLEN, Mr. GURNEY, Mr. HART, Mr. BUCKLEY, Mr. FONG, Mr. GRAVEL, Mr. ABDOUREZK, Mr. DOMENICI, Mr. DOMINICK, Mr. PELL, Mr. CHILES, Mr. BURDICK, Mr. WEICKER, Mr. BIDEN, Mr. TUNNEY, Mr. DOLE, Mr. HATFIELD, Mr. JOHNSTON, Mr. CRANSTON, Mr. MATHIAS, Mr. MUSKIE, Mr. BEALL, Mr. INOUE, Mr. HRUSKA, and Mr. MONDALE) submitted the following resolution; which was referred to the Committee on Commerce

FEBRUARY 8, 1974

Reported by Mr. MAGNUSON, with amendments

FEBRUARY 19, 1974

Considered, amended, and agreed to; preamble agreed to (as amended)

RESOLUTION

To authorize a National Ocean Policy Study.

Whereas the oceans offer the potential for major contribution to world peace and to the quality of life, and the future of mankind may be dependent upon his knowledge and wise use of the sea; and

Whereas the oceans are of enormous present and potential benefit to all citizens of the United States owing to their extensive supply of living and nonliving resources and because of their utilization as a pathway for maritime commerce and as a continuing source of impact upon the

national security, balanced growth, technology, scientific understanding, and the quality of the world environment; and

Whereas the depletable living and nonliving resources of the oceans will necessarily be utilized increasingly in future years as a principal source of protein, raw materials, and energy; and

Whereas the coastal margin of the United States, as one of the Nation's prime resources, is under ever-expanding pressure due to its desirability for siting of commerce, industry, and habitation, and due to increasing needs for recreation, transportation, urbanization, and biological reproduction; and

Whereas serious national and global problems exist and are growing in ocean contamination as a result of land- and vessel-source pollution; and

Whereas the Marine Resources and Engineering Development Act of 1966 (33 U.S.C. 2 et seq.) was enacted to develop a comprehensive, long-range national ocean policy, but such Act has been neither fully implemented nor completely successful in achieving that goal; and

Whereas the utilization of ocean resources and solving ocean-related problems depend directly upon developing oceanic knowledge and technology, resolving conflicts of national and international jurisdiction over the ocean, protecting the quality of the marine environment, and, foremost, upon establishing a clear and comprehensive national ocean policy: Now, therefore, be it

- 1 *Resolved*, That the Committee on Commerce is author-
- 2 ized under sections 134 (a) and 136 (a) of the Legislative
- 3 Reorganization Act of 1916, as amended, and in accordance

1 with its jurisdiction under rule XXV of the Standing Rules
2 of the Senate, as amended, to make a full and complete
3 investigation and study of national ocean policy for the
4 purpose of—

5 (1) determining current and prospective national
6 capabilities in the oceans, including marine sciences and
7 their application, oceanic research, advancement of oce-
8 anic enterprise and marine technology, interdisciplinary
9 education, policy planning, professional career and em-
10 ployment needs, and overall requirements of the United
11 States consistent with the attainment of long-range na-
12 tional goals;

14 (2) determining the adequacy of current Federal
15 programs relating to the oceans and recommending im-
16 provements in agency structure and effectiveness to meet
17 national needs and achieve oceans capabilities, and
18 assessing existing policies and laws affecting the oceans
19 for the purpose of determining what changes might be
20 necessary to assure a strong and internationally competi-
21 tive ocean policy and program for the United States;

22 (3) establishing policies to achieve the goal of full
23 utilization and conservation of living resources of the
24 oceans and recommending solutions to problems in
25 marine fisheries and their management, rehabilitation of

1 United States fisheries, current and future international
2 negotiations on fisheries, as well as aquaculture and the
3 extraction of drugs from the sea;

4 (4) assessing the needs for new policies for the
5 development and utilization of the nonliving resources
6 of the oceans, including the mineral resources of the
7 Outer Continental Shelf and the deep seabed so that
8 the national mineral needs can be met in an econom-
9 ically and environmentally sound manner;

10 (5) encouraging implementation of coastal zone
11 management through the Coastal Zone Management
12 Act of 1972 by assessing national growth policy needs,
13 regional and interstate problems, State functions and
14 powers in coastal zone management, information sources,
15 recreation needs, pollution problems, population trends
16 and future pressures in the coastal zone;

17 (6) establishing comprehensive national policy for
18 the purpose of understanding and protecting the global
19 ocean environment through education, exploration,
20 research, and international cooperation; and

21 (7) making an assesment of proposals for, and
22 current negotiations with respect to, achieving adequate
23 national and international jurisdiction over the oceans,
24 developing an understanding of the relationship of the

1 oceans to world order, and examining United States
2 policy with respect thereto.

3 SEC. 2. In order that other standing committees of the
4 Senate with a jurisdictional interest over specific elements
5 of this study under rule XXV of the Standing Rules of the
6 Senate, as amended, may participate in that study, the chair-
7 man and ranking minority member of each of the Commit-
8 tees on Appropriations, Interior and Insular Affairs, Public
9 Works, Foreign Relations, Government Operations, and
10 Labor and Public Welfare, Armed Services, or a member
11 of such committees designated by each such chairman or
12 ranking minority member to serve in his place, shall partic-
13 ipate in the study authorized by this resolution as an ex
14 officio member of the Committee on Commerce for the pur-
15 poses of this study. In addition, the President pro tempore of
16 the Senate shall name three majority and three minority
17 Members of the Senate who represent coastal States, without
18 regard to committee membership, to serve as additional ex
19 officio members of the Committee on Commerce for purposes
20 of this study.

21 SEC. 3. The committee shall report its findings, together
22 with its recommendations for such legislation as it deems
23 advisable, to the Senate.



[Report No. 93-685]

RESOLUTION

To authorize a National Ocean Policy Study.

By Mr. MAGNUSON, Mr. HOLLINGS, Mr. EASTLAND, Mr. McCIALLAN, Mr. FULBRIGHT, Mr. SPARKMAN, Mr. STENNIS, Mr. LONG, Mr. PASTORE, Mr. JACKSON, Mr. MANSFIELD, Mr. ERVIN, Mr. COTTON, Mr. HUGH SCOTT, Mr. BIBLE, Mr. TALMADGE, Mr. RANDOLPH, Mr. CANNON, Mr. HARTKE, Mr. MCGEE, Mr. MOSS, Mr. WILLIAMS, Mr. BENTSEN, Mr. EAGLETON, Mr. IRICOFF, Mr. ROBERT C. BYRD, Mr. HUMPHREY, Mr. STEVENS, Mr. KENNEDY, Mr. METCALF, Mr. STEVENSON, Mr. MCGOVERN, Mr. MCINTYRE, Mr. NUNN, Mr. ALLEN, Mr. GURNEY, Mr. HART, Mr. BUCKLEY, Mr. FONG, Mr. GRAVEL, Mr. ABOUREZK, Mr. DOMENICI, Mr. DOMINICK, Mr. PELL, Mr. CHILES, Mr. BURDICK, Mr. WEICKER, Mr. BIDEN, Mr. TUNNEY, Mr. DOLE, Mr. HATFIELD, Mr. JOHNSTON, Mr. CRANSTON, Mr. MATTHIAS, Mr. MUSKIE, Mr. BEALL, Mr. INOUE, Mr. HRUSKA, and Mr. MONDALE

DECEMBER 19, 1973

Referred to the Committee on Commerce

FEBRUARY 8, 1974

Reported with amendments

FEBRUARY 19, 1974

Considered, amended, and agreed to; preamble agreed to (as amended)



AUTHORIZING A NATIONAL OCEAN POLICY STUDY

FEBRUARY 8, 1974.—Ordered to be printed

Mr. MAGNUSON, from the Committee on Commerce,
submitted the following

REPORT

[To accompany S. Res. 222]

The Committee on Commerce, to which was referred the resolution (S. Res. 222), authorizing a National Ocean Policy Study, having considered the same, reports favorably thereon with amendments and recommends that the resolution, as amended, do pass.

PURPOSE AND SUMMARY

The purpose of S. Res. 222 is to authorize the Committee on Commerce to make a full and complete National Ocean Policy Study (hereafter referred to as "the Study"). The Study by the Committee on Commerce is to be undertaken with representative ex officio membership from other Standing Committees of the Senate with a jurisdictional interest over the elements of the Study. Such ex officio representation will be from the Committees on Appropriations, Interior and Insular Affairs, Public Works, Foreign Relations, Government Operations, Labor and Public Welfare, and Armed Services, as well as six members from coastal States selected by the President Pro Tempore of the Senate without regard to Committee membership. In undertaking this National Ocean Policy Study, the Committee on Commerce is mandated to report its findings, together with recommendations for such legislation as it deems advisable, to the Senate.

S. Res. 222 recognizes the importance of an adequate and coordinated national ocean policy and an effective program to implement such a policy. It acknowledges the importance of the oceans to all mankind, especially the United States in its role as a major ocean user and its quest for peace and self-sufficiency in mineral and energy resources.

As pointed out in the 1969 report of the Commission on Marine Science, Engineering and Resources entitled, *Our Nation and the Sea*,

How fully and wisely the United States uses the sea in the decades ahead will affect profoundly its security, its economy, its ability to meet increasing demands for food and raw materials, its position and influence in the world community, and the quality of the environment in which its people live.

COMMITTEE ACTION

S. Res. 222 was introduced on December 19, 1973, by Senator Magnuson, and is cosponsored by the following 58 Senators: Mr. Hollings, Mr. Eastland, Mr. McClellan, Mr. Fulbright, Mr. Sparkman, Mr. Stennis, Mr. Long, Mr. Pastore, Mr. Jackson, Mr. Mansfield, Mr. Ervin, Mr. Cotton, Mr. Hugh Scott, Mr. Bible, Mr. Talmadge, Mr. Randolph, Mr. Cannon, Mr. Hartke, Mr. McGee, Mr. Moss, Mr. Williams, Mr. Bentsen, Mr. Eagleton, Mr. Ribicoff, Mr. Robert C. Byrd, Mr. Humphrey, Mr. Stevens, Mr. Kennedy, Mr. Metcalf, Mr. Stevenson, Mr. McGovern, Mr. McIntyre, Mr. Nunn, Mr. Allen, Mr. Gurney, Mr. Hart, Mr. Buckley, Mr. Pong, Mr. Gravel, Mr. Abourezk, Mr. Domenici, Mr. Dominick, Mr. Pell, Mr. Chiles, Mr. Burdick, Mr. Weicker, Mr. Biden, Mr. Tunney, Mr. Dole, Mr. Hatfield, Mr. Johnston, Mr. Cranston, Mr. Mathias, Mr. Muskie, Mr. Beall, Mr. Inouye, Mr. Hruska and Mr. Mondale.

Recognizing the importance of and need for timely action with respect to the proposed National Ocean Policy Study, S. Res. 222 was the first order of business for the Committee after the 2nd Session of the 93rd Congress convened, and thus on January 31, 1974, the Committee ordered reported S. Res. 222 with several technical amendments.

BACKGROUND

1. The History of National Ocean Policy

National interest in the oceans has been cyclical. The first and only ocean-related declared national policy was a Congressional initiative, and is in the Marine Resources and Engineering Development Act of 1966 concerning marine science and 8 enumerated objectives in seeking the attainment of that policy. The efficacy of this policy and the implementation of the Congressionally-declared objectives should be re-examined, and S. Res. 222 will provide the necessary forum for such an encompassing review. For the third time in 15 years, the Congress will be the stimulus to challenge the Federal Government and the nation to respond to our country's needs which can be served by the sea.

In 1959, the Senate adopted S. Res. 136 to focus attention on the oceans. Authored by Senator Magnuson, the resolution stated, in part:

Whereas expanded studies of the oceans and the ocean bottoms at all depths are vital * * * to the rehabilitation of our commercial fisheries and utilization of other present or potential ocean resources, to facilitating commerce and navigation and to expand our scientific knowledge * * *



That resolution in 1959 marked the beginning of a comprehensive Congressional study in response to the release of the initial report prepared by the Committee on Oceanography of the National Academy of Sciences. National Research Council entitled, *Oceanography 1960 to 1970*. S. Res. 100 passed the Senate unanimously.

It was again the legislative branch, in 1965, which pointed the way toward a national ocean program. Senator Magnuson in that year introduced the Marine Resources and Engineering Development Act, which became law in 1966. It was that Act which, more than any other development, forced the United States to turn the corner toward establishing a policy "to develop, encourage and maintain a coordinated, comprehensive and long-range national program in marine science for the benefit of mankind."

The Act established the cabinet-level National Council on Marine Resources and Engineering Development, chaired by then Vice President Humphrey. It also created a 15-member Commission on Marine Science, Engineering, and Resources chaired by Dr. Julius Stratton with the task of undertaking a two year study with a report to the Congress and the President. The work of the Council and the Commission helped the United States government move from a narrowly oriented scientific approach to the oceans to a broad-based program of activities blending engineering, educational, legal, economic and political considerations.

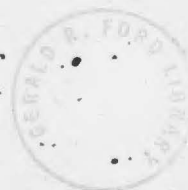
In partial response to one of the recommendations of the Stratton Commission report, *Our Nation and the Sea*, the current Administration, through reorganization plan No. 4 of 1970, established the National Oceanic and Atmospheric Administration in the Department of Commerce. But, this new organization fell short of the independent agency envisioned by the Stratton Commission. Moreover, there has been growing concern over an evident erosion of ocean priorities. The coordinated national approach necessary for the utilization and wise management of all the resources and benefits of the sea sought to be attained through the Marine Resources and Engineering Development Act of 1966 has eluded our grasp.

2. *The Importance of the Oceans to the United States*

It is not possible to catalog accurately the vast importance of the oceans to the citizens of the United States. However a recent statement by Senator Ernest F. Hollings of South Carolina, Chairman of the Subcommittee on Oceans and Atmosphere, outlines the minimum goals of a national ocean policy:

*** a large, modern merchant marine; a healthy, growing fishing industry; a dynamic ocean research program; leadership in ocean technology; ocean policy positions that represent national self-interest in international negotiations; progressive, intelligent coastal zone management; and an ocean business climate that encourages industry to tap all of the potential resources of the sea. ***

It could be added that the economic wealth of the sea also is reflected by the vast number of Americans who have been drawn to work, live, play and retire near the ocean. Fishing, boating, camping,



hunting, swimming and other forms of recreation in or near the ocean environment result in a multi-billion-dollar infusion into the American economy and provide livelihood for hundreds of thousands of wage-earning citizens.

The economic well-being of the United States and its future generations of citizens will be further and significantly impacted by any multi-lateral agreements arising out of the Third Law of the Sea Conference scheduled to convene in the summer of 1974, as called for by a United Nations General Assembly resolution of March 16, 1973. For example, the deep seabed contains the commercially important minerals of manganese, copper, nickel, and cobalt, in addition to being a significant source of the world's oil and gas production to meet the ever-growing resource demands of our nation. Peaceful and prudent exploitation of the oceans' mineral resources is an issue of major economic importance, as is insuring the continuing use of the oceans for transportation and scientific research. S. Res. 222 should provide a forum for a thorough examination of our national interest in such major economic issues.

Concomitant with the Committee's concern over the resources of the ocean is the need to protect and preserve the marine environment. It has been clearly demonstrated that the ocean ecosystem is fragile and because of 20th century technology, dependent to an ever-increasing extent on man's own protective consideration for its health and well-being.

Therefore, the Committee views S. Res. 222 as a logical vehicle to consider both environmental protection and intelligent use of the oceans' resources, and to make a determination of the center ground where rational men can make a policy decision between the extremes of absolute preservation of the environment on the one hand and unrestrained exploitation on the other.

3. Areas of Examination by the Study

The National Ocean Policy Study would include, but not be limited to, a thorough examination of the issues involved in the following areas:

- A. Marine Fisheries and Other Living Resources.
- B. Mineral Resources of the Seabed and Subsoil.
- C. Coastal Zone Management.
- D. Ocean Transportation.
- E. Research and Technology.
- F. Law of the Sea.
- G. Government Organization.
- H. Pollution.
- I. Federal Budget.
- J. Education.

COMMITTEE AMENDMENTS

The Committee agreed, unanimously, to report the resolution with the amendments shown in *italic* and *linetype*:



TEXT OF S. RES. 222

RESOLUTION To authorize a National Ocean Policy Study

Whereas the oceans offer the potential for major contribution to world peace and to the quality of life, and the future of mankind at least in part may well be dependent upon his knowledge and wise use of the sea; and

Whereas the oceans are of enormous present and potential benefit to all citizens of the United States owing to their extensive supply of living and nonliving resources and because of their utilization as a pathway for maritime commerce and as a continuing source of impact upon the national security, balanced growth, technology, scientific understanding, and the quality of the world environment; and

Whereas the depletable living and nonliving resources of the oceans will necessarily be utilized increasingly in future years as a principal source of protein, raw materials, and energy; and

Whereas the coastal margin of the United States, as one of the Nation's prime resources, is under ever-expanding pressure due to its desirability for siting of commerce, industry, and habitation, and due to increasing needs for recreation, transportation, urbanization, and biological reproduction; and

Whereas serious national and global problems exist and are growing in ocean contamination as a result of land- and vessel-source pollution; and

Whereas the Marine Resources and Engineering Development Act of 1966 (33 U.S.C. 2 et seq.) was enacted to develop a comprehensive, long-range national oceans ocean policy, but such Act has been neither fully implemented nor completely successful in achieving that goal; and

Whereas the utilization of ocean resources and solving ocean-related problems depend directly upon developing oceanic knowledge and technology, resolving conflicts of national and international jurisdiction over the ocean, protecting the quality of the marine environment, and, foremost, upon establishing a clear and comprehensive national oceans ocean policy: Now, therefore, be it

Resolved, That the Committee on Commerce is authorized under sections 134(a) and 136(a) of the Legislative Reorganization Act of 1946, as amended, and in accordance with its jurisdiction under rule XXV of the Standing Rules of the Senate, as amended, to make a full and complete investigation and study of national oceans ocean policy for the purpose of—

(1) determining current and prospective national capabilities in the oceans, including marine sciences and their application, oceanic research, advancement of oceanic enterprise and marine technology, interdisciplinary education, policy planning, professional career and employment needs, and overall requirements of the United States consistent with the attainment of long-range national goals;



(2) determining the adequacy of current Federal programs relating to the oceans and recommending improvements in agency structure and effectiveness to meet national needs and achieve oceans capabilities, and assessing existing policies and laws affecting the oceans for the purpose of determining what changes might be necessary to assure a strong and internationally competitive oceans policy and program for the United States;

(3) establishing policies to achieve the goal of full utilization and conservation of living resources of the oceans and recommending solutions to problems in marine fisheries and their management, rehabilitation of United States fisheries, current and future international negotiations on fisheries, as well as aquaculture and the extraction of drugs from the sea;

(4) assessing the needs for new policies for the development and utilization of the nonliving resources of the oceans, including the mineral resources of the Outer Continental Shelf and the deep seabed so that the national mineral needs can be met in an economically and environmentally sound manner;

(5) encouraging implementation of coastal zone management through the Coastal Zone Management Act of 1972 by assessing national growth policy needs, regional and interstate problems, State functions and powers in coastal zone management, information sources, recreation needs, pollution problems, population trends, and future pressures in the coastal zone;

(6) establishing comprehensive national policy for the purpose of understanding and protecting the global ocean environment through education, exploration, research, and international co-operation; and

(7) making an assessment of proposals for, and current negotiations with respect to, achieving adequate national and international jurisdiction over the oceans, developing an understanding of the relationship of the oceans to world order, and examining United States policy with respect thereto.

SEC. 2. In order that other standing committees of the Senate having jurisdiction with a jurisdictional interest over specific elements of this study under Rule XXV of the Standing Rules of the Senate, as amended, over specific elements of the study authorized in section 1, may participate in that study, the chairman and ranking minority member of each of the Committees on Appropriations, Interior and Insular Affairs, Public Works, Foreign Relations, Government Operations, and Labor and Public Welfare, Armed Services, or a member of such committees designated by each such chairman and or ranking minority member to serve in his place, shall participate in the study authorized by this resolution as an ex officio member of the Committee on Commerce for the purposes of this study. In addition, the President pro tempore of the Senate shall name three majority and three minority Members of the Senate who represent coastal States, without regard to committee membership, to serve as additional ex officio members of the Committee on Commerce for purposes of this resolution study.

Sec. 3. The committee shall report its findings, together with its recommendations for such legislation as it deems advisable, to the Senate.

Sec. 4. For the purpose of this resolution the Committee on Commerce is authorized to expend through February 28, 1975, from the contingent fund of the Senate, a sum not to exceed \$200,000.

O





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Rockville, Md. 20852

Date : 17 MAY 1974

Reply to Attn. of: MR1

To : RADM Alan Powell
Director, National Ocean Survey

From : Robert M. White
Administrator

Rmw

Subject: National Ocean Policy Study

As part of the important National Ocean Policy Study recently initiated by the Senate, I have received a request from Senator Hollings to provide him with a report on ocean data related instrumentation. Specifically, the requirement is for a report treating "the subject of instrumentation, sensor accuracy, measurement capability among systems, physical parameters defined from multi-sensory data, data flow formats, and a host of other subjects addressing in-situ, remote, and satellite instrument-derived data."

I expect to have such studies in the future run through an ICMSE mechanism which will be set up in a few weeks. In the meantime, however, I want to start action on this one and would like to have Bill Nicholson lead it. If he has any questions, please have him contact Steve Anastasion.

The due date requested for this report is late August 1974. Since there will be a requirement for some sort of review before it can be released to the Senate Committee, I suggest that the report be available for review early in August.





U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Rockville, Md. 20852

Date : 17 MAY 1974

Reply to Attn. of: MRL

To : Dr. Thomas Austin
Director, Environmental Data Service

From : Robert M. White *RWW*
Administrator

Subject: National Ocean Policy Study

As part of the important National Ocean Policy Study recently initiated by the Senate, I have received a request from Senator Hollings to provide him with a report on various aspects of ocean data. Included is a requirement "to list locations, principal contacts, capabilities, and resources of the facilities involved with ocean data."

I expect to have such studies in the future run through an ICMSE mechanism which will be set up in a few weeks. In the meantime, however, I want to start action on this one and would like to have you lead it. If you have any questions, please contact Steve Anastasion.

The due date requested for this report is late June 1974. Since there will be a requirement for some sort of review before it can be released to the Senate Committee, I suggest that you target completion a week or so earlier.



ERNEST F. HOLLINGS
SOUTH CAROLINA

OFFICES:

SENATE OFFICE BUILDING
202-225-6121

FEDERAL BUILDING, COLUMBIA, S.C.
803-765-5731

FEDERAL BUILDING, SPARTANBURG, S.C.
803-585-8271

141 EAST BAY, CHARLESTON, S.C.
803-723-5211

United States Senate

WASHINGTON, D.C. 20510

May 10, 1974

COMMITTEES:

APPROPRIATIONS

SUBCOMMITTEES:

LEGISLATIVE: CHAIRMAN
LABOR, HEALTH, EDUCATION, AND WELFARE
MILITARY CONSTRUCTION
STATE, JUSTICE, COMMERCE, AND
THE JUDICIARY
AGRICULTURE

COMMERCE

SUBCOMMITTEES:

OCEANS AND ATMOSPHERE: CHAIRMAN
AVIATION
MERCHANT MARINE
SURFACE TRANSPORTATION
COMMUNICATIONS

POST OFFICE AND CIVIL SERVICE

SUBCOMMITTEES:

POSTAL OPERATIONS: CHAIRMAN
COMPENSATION AND UNEMPLOYMENT
BENEFITS

Dr. Robert M. White, Administrator
NOAA - Department of Commerce
Room 5128
Washington, D.C. 20230

Dear Bob:

MR 5/10
The National Ocean Policy Study, authorized by Senate Resolution 222, was adopted on February 19, 1974, and is unanimously supported by the chairmen of the seventeen standing committees. To date, testimonies have been given to the National Ocean Policy Study which have treated environmental impacts, extractive resources, and fisheries. Each of the people testifying in these areas addressed a requirement for ocean data; therefore, as Chairman, I am initiating requests to federal, state, and local government offices, colleges and universities, and industry, for reports which will define the national capability and budgets approved for collecting, analyzing, interpreting, storing and disseminating ocean data.

The membership of the Interagency Committee on Marine Science and Engineering and its observers represent an excellent source for much of the needed information. I would appreciate the Committee's participation--first, to list locations, principal contacts, capabilities, and resources of the facilities involved with ocean data; and second, to prepare a detailed report on all aspects of ocean data activities. This report would treat the subject of instrumentation, sensory accuracy, measurement capability among systems, physical parameters defined from multi-sensory data, data flow formats, and a host of other subjects addressing in-situ, remote, and satellite instrument-derived data.

Hopefully your committee will respond by forwarding the listing by late June and completing the detailed report by late August. Mr. John Hussey and his assistant, Mr. Richard Sprince, are available from the Ocean Policy Study staff to interface with your committee members as may be required.

Sincerely,

Ernest F. Hollings
ERNEST F. HOLLINGS, Chairman
Ocean Policy Study

A-3069

EFH:jm



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Rockville, Md. 20852

MAY 15 1974

Honorable Ernest F. Hollings
Chairman, Ocean Policy Study
United States Senate
Washington, D. C. 20510

Dear Fritz:

I have received your May 10, 1974 letter stating that ICMSE would be an excellent source of information to the National Ocean Policy Study and requesting the Committee's participation through preparation of a list of ocean data facilities and a report on various instrumentation characteristics. I am most anxious to assist in this important Study and will see to it that the necessary actions to provide the requested information are taken.

I am holding a special meeting of ICMSE on May 28, 1974 to organize a Select ICMSE Ocean Policy Study Committee and to initiate action on the items requested in your letter. The meeting will review the National Ocean Policy Study and examine the ways in which we can most beneficially interact with your Study Group. The meeting will commence at 9:00 A.M. in Room 5230, Department of Commerce. You, Mr. John Hussey and Mr. Richard Sprince are most cordially invited to be with us.

Sincerely,

Robert M. White
Administrator

