Committee on Resources

Witness Testimony

Testimony of
DIANA JOSEPHSON
Deputy Under Secretary for Oceans and Atmosphere
National Oceanic and Atmospheric Administration, U.S. Department of Commerce
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Wildlife, and Oceans
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INTRODUCTION

Mr. Chairman and Members of the Subcommittee, I appreciate this opportunity to testify about the new directions that the National Oceanic and Atmospheric Administration (NOAA) has taken with respect to fleet services and the elimination of the NOAA Commissioned Corps. I am accompanied by Rear Admiral William Stubblefield, Director Office of NOAA Corps Operations. This office manages and operates NOAA's ships and aircraft. John Carey, Associate Deputy Under Secretary, is also with us today.

FLEET ISSUES

Speaking first on the ships, I would like to address the following points: the need for ships in meeting NOAA's missions, greater utilization of the university (UNOLS) and commercial sector vessels in meeting these needs, and considerations for using these resources.

Need for ships The core program elements in the NOAA Strategic Plan depend heavily upon ships for collection of data critical to the accomplishment of its mission. For example: Build Sustainable Fisheries--the stock assessment surveys and fishery research carried out at sea are the primary source of data for the development of fisheries management plans by the Regional Fisheries Management Councils; Recover Protected Species--to prevent depleted status designation for species and to develop new approaches to reduce conflicts between protected species management and other users of marine resources require data collected primarily by ships at sea using observers and ship-launched helicopters; Sustain Healthy Coasts--coastal observations and research conducted by ships provide the data for assessing the status and trends in the long-term health of our coastal waters and habitats; Promote Safe Navigation--the nautical charts of the U. S. coastal waters are based on ship-collected hydrographic survey data; Implement Seasonal and Interannual Climate Forecasts--collection of ocean observations from the equatorial Pacific on a routine basis, as well as ocean research data from other ocean basins are critical to the ability to model and forecast events such as El Nino, with its resultant impact on global weather; and Predict and Assess Decadal to Centennial Change--oceanographic data, collected by ships at sea, is one of the important elements in developing and refining global models of the earth's environment and its reaction to natural and human-induced changes. Thus the question is not one of the importance of ships to meeting NOAA's mission but rather the most cost effective and efficient means of acquiring this ship support.

NOAA currently maintains and operates 16 ships. During the past year NOAA has removed two hydrographic vessels from service. With the lay-up of the MT. MITCHELL and the HECK, NOAA has reduced its hydrographic fleet by over 60 percent in the past 10 years. Also during the past year the SURVEYOR was decommissioned. This ship, which was built as a blue-water survey ship most recently supported the National Marine Fisheries Service's (NMFS) research in the Antarctic. During this year NOAA intends to deactivate its two other Class I vessels, the MALCOLM BALDRIGE and the DISCOVERER. To compensate for these five ship deactivations, NOAA intends to commission two ships. A T-AGOS vessel acquired from the Navy has been undergoing a conversion and is expected to commence operations within the next few weeks. This vessel, the KA'IMIMOANA, will operate out of Hawaii and will support the TAO buoy array in the equatorial Pacific. Under construction in Pascagoula, Mississippi is a new AGOR-24 class vessel. This ship, the RESEARCHER, is expected to be in operation in mid 1997.

As mentioned previously, vessel support is critical to a vast array of NOAA's programs. To illustrate a few examples of how the NOAA vessels support these programs, the NOAA Ship ALBATROSS IV supports the fisheries program for stock assessment and management of New England fisheries. The ship was also recently redirected to assist in assessing the impact of the oil spill off the coast of Rhode Island. The data collected by the ALBATROSS IV scientists were key in determining whether to close Rhode Island's fishery. The NOAA Ship RAINIER supports NOAA's Alaskan charting effort to improve charts, which in many cases are sorely inadequate, to ensure the safety of oil tanker, fishery, cargo, and cruise line commerce. The NOAA Ship McARTHUR supports NOAA's coastal and deep water environmental research and marine mammal assessment. Within the past month the McARTHUR responded to an urgent request to assess an undersea eruption off the coast of Oregon. The fact that this ship was able to adjust its repair and personnel leave schedule on a 3-day notice attests to the responsiveness and capability of the NOAA ships. A final example of the utilization of these ships is the MALCOLM BALDRIGE recently returned home from a year-long deployment to the Indian

Ocean in support of an international oceanographic research program.

The NOAA ships are safe and well maintained. The safety record is outstanding; these ships have never contributed to environmental damage, been involved in a collision at sea, or had an accident-related fatality even though they operate under the harshest of conditions. These ships, though older than some other oceanographic vessels, in 1995 lost less than 1 percent of the allocated sea days due to mechanical or electrical problems. In addition, the NOAA ships and their crews have a long and proud record of meeting the needs of the NOAA ocean programs. The cruise evaluations prepared by chief scientists give very high marks to all aspects of the shipboard and shore support. Increased Utilization of University and Commercial Vessels

In the light of guidance received from the National Research Council's Marine Board and the Department of Commerce's Oceanographic and Atmospheric Management Advisory Committee, plus others, NOAA has significantly revised its approach to meeting ship service needs. We have adjusted our mix of NOAA and outsourced vessels. By Fiscal 1997, we will have diverted over $8 million of our ship operations budget to outsourcing. We have taken our most inefficient vessels out of service and replaced them with either outsourced or modern NOAA vessels. We intend to explore with UNOLS new approaches to joint oceanographic research ship utilization and scheduling. We have benchmarked, reengineered and downsized our ship operations organization; by fiscal year 1997, we will have reduced our personnel by one third and our budget by $6 million. These savings are being used to increase the days at sea on the NOAA vessels, for increased outsourcing, and to reduce the marine services budget.

We, in NOAA, see the advantages of increased partnerships with the UNOLS and commercial fleet. I am committed to seeing this trend of increased utilization continue and expand. I am conscious, however, that there are varying levels of capability outside of NOAA for meeting our ocean mission needs. The university community has vessels which are very capable in conducting both the deep ocean and coastal oceanographic research. Within the university fleet are several new large oceanographic vessels of the AGOR-24 class and others which have recently received a major repair and upgrade. The UNOLS fleet has some excess capacity which the NOAA programs can use. For example with the lay-up and planned lay-up of three Class I vessels (SURVEYOR, MALCOLM BALDRIGE, and DISCOVERER) and their replacement with only two large vessels (RESEARCHER and KA'IMIMOANA) NOAA will turn to UNOLS for the balance of its oceanographic blue-water ship needs. This is expected to be at least one-half ship-year annually. This large-ship charter usage is in addition to the historical arrangement for coastal oceanography vessels with UNOLS and with the private sector vessels for fishery charters.

Likewise the private sector's ability to conduct hydrographic surveys has matured a great deal during the last decade. This community has much to offer NOAA in the way of up-to-date surveying technology and cost effective surveying ships. The reason that NOAA laid up the MT. MITCHELL and HECK was to make available fiscal resources to foster greater partnerships with the private sector by contracting for hydrographic data acquisition. Our first contract was a hydrographic survey in Long Island Sound. Additional hydrographic contracts are scheduled to be awarded in fiscal year 1996 for the Gulf of Mexico and southern California coast.

There are other areas, however, where an alternative to the NOAA fleet is less certain. Of greatest concern to NOAA is the availability of vessels which are capable of conducting: 1) combined bottom and large mid-water trawls and

fishery oceanography; and 2) hydrography in remote areas through the use of both ships and launches. As fishery research increasingly utilizes hydroacoustics as a tool for estimating pelagic fish stock, vessel quieting and improvements in transducers and signal processing become progressively important. Even within these areas there are opportunities to increase NOAA's use of outsourcing options and NOAA intends to proceed in this direction where appropriate at a pace which allows the private sector to build its capability for NOAA's specific needs while not exposing NOAA's data collection programs to an unacceptably high level of risk. Ignoring the significant uncertainties of capability, availability, and cost, the acquisition process time required to put in place appropriate outsourcing contracts argues against immediate decommissioning of NOAA ships as proposed by some.

Considerations in using university and commercial vessels

As NOAA seeks to modify its fleet mix to effectively use UNOLS and private sector vessels, three considerations are paramount to maintain effective service so as not to compromise the data acquisition for NOAA's programs. These are vessel capability, availability, and the relative cost to NOAA for acquiring ship services. Though not specifically addressed in this testimony, safety is also a consideration. In the late 1970s, the very sudden sinking of a commercial vessel chartered by a university resulted in the death of several NOAA scientists. This is an experience which we can not afford to repeat.

Vessel Capability: It goes without saying that the quality, quantity, and continuity of our data must be preserved. Our experience with fisheries charters shows that vessels with combined trawling and oceanographic capabilities do not now exist either in UNOLS or the private sector and that data integrity is extremely difficult to maintain if two ships are used for such missions. Standardization is lost if data are collected at varying times and conditions.

UNOLS vessels cannot conduct bottom trawling operations, and domestic commercial fishery vessels do not have sufficient laboratory space, adequate scientific berthing, or the required scientific deck equipment to support the oceanographic operations of the fishery research. Without this dual capability, the assessment of the fishery stocks is severely weakened. Recently, NOAA's attempt to backfill for the NOAA Ship DELAWARE II's fisheries research, while the vessel was in the shipyard, was disappointing. Only two potential bidders could meet the requirements of the initial solicitation which reflected the DELAWARE II's capability. These two bidders were foreign and more expensive than in-house costs. The initial solicitation had to be adjusted to find contractors who could come close to meeting the scientific requirements. The resulting contracts utilized multiple commercial and UNOLS vessels. The environmental and marine mammal surveys were successfully conducted on UNOLS vessels.

With the commercial vessels, however, difficulties were experienced. Some of the commercial vessels required crew and scientists to sleep in converted fish holds, had decks and laboratories awash in sea water, and raised concerns for safety, especially during rough weather. Extensive time and resources were also required on the part of NOAA to provide these commercial vessels with appropriate electronic instrumentation to meet the fishery research needs. Various program objectives were sacrificed to adjust to the limited capabilities of the vessels. Even with the program modifications, there was a loss of standardization between cruises. The limited berthing for scientific staff resulted in a reduction in the number of biological samples collected per station, and the capability to deploy a larger sized sampler for juvenile fish while in the pelagic stage of their life history was lost. The latter limitation required the estimation of the abundance of juveniles to be based on the results from surveys from other ships at different times. In addition, these multiple cruises with limited vessel capability and repeated mobilization and demobilization of equipment was neither people efficient nor cost effective.

Recently NOAA solicited through the Commerce Business Daily, various trade journals, and direct mailings for a vessel to support the Antarctic Marine Living Resources (AMLR) program. The specification for this charter required that a vessel be ice-strengthened with extensive wet and dry laboratory space with berthing for a minimum of seventeen scientists. The vessel was also required to be able to conduct bottom trawling. Bidders to this solicitation meeting the required specifications were all foreign.

These difficulties in identifying suitable vessels to support our fishery research needs were substantiated in the NOAA review of alternative ship resources in response to a request from the Senate Appropriations Committee, Subcommittee on Commerce, Justice, and State. Jensen Maritime Consultants Inc. conducted a survey on the west coast. This was

conducted through a telephone contact followed by a three page fax. Over 30 owners representing at least 140 vessels were contacted. The results of this survey indicated that there is little likelihood of finding a single vessel which will meet NOAA's requirements for conducting all of its necessary scientific fisheries research. John W. Gilbert Associates conducted a similar survey for the east coast. Their survey suggested that the east coast vessels have neither the berthing or endurance to meet the requirements specified by fishery scientists to meet their program needs. Neither of these surveys are definitive in that a very short time was available to conduct the study. A more complete picture of current capability and of the private sector's interest in building and providing modern fishery research vessels could be accomplished by a solicitation in the Commerce Business Daily. Unfortunately, Federal Acquisition Regulations prohibit such a solicitation.

For hydrographic survey operations, we are increasing our reliance on the private sector, but with the goal of retaining sufficient in-house expertise to ensure that quality and standards are retained. This goal is particularly important because the U.S. Navy and maritime commerce place great reliance on the accuracy of NOAA's charts. The in-house quality control is critical for deciding whether to accept government liability for chart data that contractors produce, to encourage research and development of new hydrographic technology, and to enable the responsible solicitation and monitoring of contracts. The U.S. Army Corps of Engineers, which is responsible for U.S. navigation channels, contracts out a portion of its channel surveys as does the British Royal Navy Hydrographic Office and Canadian Hydrographic Service. All have concluded that a mix of in-house and private sector hydrographic capability is necessary to provide safeguards and flexibility. Each of these hydrographic agencies also have found that complex surveys pose unexpected difficulties to the contractors.

For the United States, the Alaskan coast presents a challenge that can best be met through in-house resources. Recently, approval has been granted whereby Alaskan oil can be sold to far eastern countries. Moving oil to these western Pacific countries requires that the seafloor adjacent to the Alaskan peninsula be surveyed with up-to-date standards and equipment to ensure safe passage for deep-draft tankers. Presently, a significant portion of the Alaskan coast is charted from sparse, reconnaissance data which does not meet International Hydrographic Office (IHO) standards. In general, the Alaskan coast is remote, with large areas surveyed with only rudimentary tools, and significant distances from major ports. The rocky nature of this coast represents a danger to vessels and is an extremely complex survey area. Therefore, to survey this area safely and efficiently, a large hydrographic survey ship fully-equipped with hydrographic survey launches is needed. Such a ship is able to provide a safe base in the remote areas where severe weather can develop rapidly. The dangerous nature of the coast preempts using a hydrographic survey ship without launches due to the possibility of catastrophic grounding on uncharted rocks.

In response to the Senate's request, NOAA sought to identify possible alternative vessels for remote hydrographic surveys. This study utilized existing NOAA National Ocean Survey contract experiences, research conducted by Resource Consultants Incorporated (RCI), experiences recounted by the Canadian Hydrographic Service, the United Kingdom's Directorate of Naval Surveying, and data from the Military Sealift Command on its hydrographic work for the U. S. Navy. The RCI called numerous U. S. and international entities to gather vessel and cost data. In the time available, they were unable to obtain price and capability data for any vessels able to address the mission requirements. FUGRO, a large geophysical and hydrographic vessel and services company was also queried, but no response was received. The fact that no suitable and available vessels have been identified does not mean that a vessel could not be modified or converted, at some cost, to perform the necessary missions but whether a cost effective commercial venture would result still needs to be assessed.

Availability: Of great concern to NOAA is the availability of fishery vessels. Fundamental to stock management is the acquisition of unbiased and comparable data over time. This requires standardization and calibration between vessels. The NMFS believes that charter contracts for at least 10 years on a particular vessel are required to ensure data quality. A survey of west coast owners and operators of commercial fishery vessels were conducted by Jensen Maritime Consultants. None of the three written responses to the survey would consider an intermediate-term (1 to 7 years) exclusive charter. This suggests a desire on the part of the vessel owners to maintain the commercial fishing capability of the vessel. The Jensen report states that "...vessel owners are focusing on existing fisheries and could consider a research charter primarily between fishing seasons and with minimal vessel modification".

Relative Costs: Over the past year, NOAA has taken major steps to reduce its cost of operating ships. These cost

savings are the result of the lay-up of several older expensive ships, a reduction of personnel on the ships and the shore side infrastructure, and merging certain functions of the Seattle and Norfolk marine centers. Due to earlier fleet modernization funding, our ships are in better material condition than they were a few years ago, thus requiring fewer major repairs. As a consequence, we believe that even our oldest ships have another 7 to 10 years of useful life remaining. Where costs are available for vessels with similar capability, the NOAA ships appear to be at least comparable, if not cheaper, than the university operated vessels and significantly cheaper than the commercial vessels. For example, our projected costs for operating the new AGOR, with all overhead costs included, is slightly less than the costs incurred by the University of Washington for operating its AGOR, the THOMPSON. For the DELAWARE II backfill, using the results of the solicitation for a vessel capable of performing both bottom trawl and fishery oceanography, the foreign commercial vessels were approximately 33 percent more expensive for the same type of work. When the recent major repair costs, amortized over a 10 year period are included, the commercial vessel is still approximately 10 percent more expensive than the DELAWARE II. Similarly, for the Long Island Sound charting work, the commercial contractor was approximately 18 percent more expensive than NOAA in doing the work. Furthermore, the contractor has stated that they lost significant money on this contract, and future bids would be more reflective of incurred costs.

Partnerships and Other Opportunities

There are many places where NOAA can very profitably benefit from partnerships with the university community and the private sector. Some of these I have already mentioned. We are using UNOLS vessels for those requirements in excess of NOAA's capability in lieu of NOAA replacing each of its ships as they are taken from service. There will be increasing requirements for coastal oceanographic vessels from sources other than NOAA. We envision progressively more use of the private sector for hydrographic surveys, especially in the coastal waters of the Gulf of Mexico and the Atlantic coast. In these areas we anticipate that outsourcing will be cost effective.

To further foster partnerships with the commercial sector, NOAA has recently released a notice in the Commerce Business Daily to offer one of its two non-operating four launch hydrographic vessels to a private company. The company would then operate the vessel to collect hydrographic data for NOAA in remote areas such as the Alaskan coasts. To do this, however, will require additional funds in NOAA's budget, which are not requested in FY 97, or the lay-up of additional NOAA vessels. If a serious proposal develops and we were able to fund such an operation, one side benefit would be the availability of very meaningful cost and performance comparison data.

Another area for increased partnering is in replacement of NOAA vessels as they reach the end of their useful life. We intend to take a hard look at each vessel to determine which is the most cost effective, and the most achievable, means of replacing it and maintaining the capability to meet NOAA's mission needs. Our remaining unresolved long term need is for a few modern, acoustically quiet, fisheries research vessels that will allow the U. S. to maintain equity in fishery management and research with our foreign competitors. The most reasonable approach for acquiring this capability appears to be long-term agreements with the private sector.

NOAA CORPS ISSUE

Mr. Chairman, I would now like to speak to the issue of the elimination of the NOAA Corps. The downsizing of NOAA Corps has been accelerated from our original plan to reduce to 285 officers by FY 99; within the past year, the NOAA Corps has reduced from 406 to 350 and expects to reduce to 315 by the end of FY 96. We have accomplished this downsizing through simultaneous reduction of personnel aboard ships and in the NOAA program offices, and by terminating recruitment. A few of the junior officers have transferred to branches of the Department of Defense. With the downsizing of the other uniformed services this opportunity, however, is available only to a small number of the NOAA Corps officers.

In response to a recommendation of Vice President Gore's National Performance Review (NPR), I requested that a transition plan be drafted to convert the NOAA Corps to a civil service work force. The expertise, skills, and flexibility offered by the NOAA Corps are important factors to the success of NOAA's programs and must be retained in the new work force component. Once enabling legislation is signed by the President, within a 6-month period from commencement, the transition will be completed. The officers cannot simply be converted; all NOAA Corps officers

must first be separated or retired. Those individuals electing to accept civil service appointments with NOAA will be placed in new positions within the existing General Schedule or wage marine work force, performing duties comparable to those they now perform. These newly created positions will provide technical, operational, and management support to NOAA programs to meet our ship, aircraft, and program requirements. Employees within the General Schedule will be appointed subject to mobility agreements, ensuring maximum flexibility in their assignments.

As the first elimination of one of the uniformed services, proposals for legislative changes must be drafted and submitted for congressional action and Presidential approval. A mechanism will be set in place to protect the earned benefits and entitlements for retired and separated officers. The transition process to be utilized in officer termination, selection, and

placement in civil service positions while minimizing impacts on NOAA programs is now being developed.

SUMMARY

Mr. Chairman, I appreciate the opportunity to describe how NOAA is working towards obtaining more cost-effective fleet services and the elimination of the NOAA Commissioned Corps. I plan to continue developing partnerships with the university fleet and private sector research and survey fleets. NOAA's work requires ship services, and I continue to seek the best and most cost-effective combination of in-house and private sector capabilities to meet our research needs. I believe that our progress to date has been substantial and I intend to build upon this progress.

As we transition the NOAA Corps to a civil service status we must exercise caution to ensure that earned benefits are preserved and that the vital services provided by these capable personnel continue in the least disruptive manner.

Thank you, Mr. Chairman. This concludes my testimony. I will be pleased to answer any questions you may have.

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