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Testimony

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Committee on Merchant Marine and Fisheries  
House of Representatives

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OCEAN RESEARCH  
VESSELS

NOAA Fleet Modernization  
Plan

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Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss the preliminary results of our ongoing review of the National Oceanographic and Atmospheric Administration's (NOAA) \$1.9 billion (in fiscal year 1995 dollars) fleet modernization plan. The plan calls for acquiring 24 new or refurbished vessels over a 15-year period. In response to legislation enacted last year<sup>1</sup> and pursuant to subsequent discussions with Committee and Subcommittee staff, we are reviewing NOAA's modernization plan and the extent to which NOAA is considering alternatives to procuring new vessels, such as contracting, chartering, and leasing ships or services, to meet its program missions.

In summary, reports from GAO and the Department of Commerce's Office of Inspector General, as well as studies commissioned by the Department have all encouraged NOAA to experiment with greater use of private sector vessel services as potentially cost-effective alternatives to continued reliance on NOAA vessels. However, to date, the Office of NOAA Corps Operations, which operates NOAA's 18 active vessels, has used contracting on a very limited basis, and its fleet modernization plan contains only a small provision for vessel contracting. It will be important for NOAA to experiment with contracting and leasing options as part of its modernization planning effort in order to determine whether the private sector can cost effectively contribute to meeting NOAA's mission requirements. In experimenting with contracting, NOAA will need to allow contractors flexibility in how they perform the work so that NOAA obtains the cost and operational data it needs to determine the extent that contracting can meet mission needs.

#### BACKGROUND

The Office of NOAA Corps Operations operates a fleet of 18 active ships providing support for NOAA's programs in fisheries research, oceanographic research, and hydrographic charting and mapping. Operating at an annual cost of around \$60 million, NOAA's fleet currently provides about 3,500 days at sea annually of vessel support.

Over the past several years, a number of studies have examined NOAA's fleet operations and fleet modernization needs. In response, NOAA conducted a fleet modernization study in 1990, and in 1991 completed a fleet replacement and modernization plan. At that time the plan set out a strategy and chronology for constructing a fleet of 20 new vessels over a 15-year period to provide 5,000 days at sea annually of vessel support for NOAA programs.

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<sup>1</sup>Public Law 102-567.

This summer, NOAA completed an agency-wide strategic plan which discussed the need for additional days at sea to support NOAA programs. For fiscal year 1995 budgeting purposes NOAA received departmental approval for a plan to provide 5,760 days at sea. To meet this higher level of vessel support, NOAA envisions the need for 24 vessels, including the acquisition and conversion of 6 surplus U.S. Navy vessels to supplement the construction of 18 new vessels. NOAA estimates that the program will cost \$1.9 billion. The strategic plan does not contain any specific estimates for contracting for vessel chartering but notes that limited chartering will occur, using vessels from the commercial sector and from the University-National Oceanographic Laboratory System (UNOLS)<sup>2</sup> to provide services when NOAA vessels are out of service.

PRIOR STUDIES RECOMMEND EXPERIMENTING  
WITH VESSEL CONTRACTING AND CHARTERING

The issue of NOAA's contracting for vessel support as an alternative to purchasing vessels has been the subject of a number of studies over the years. A common message of the studies is that NOAA needs to actually perform some vessel contracting and chartering to obtain necessary financial and operational data to better guide future decisions on vessel support for NOAA's program missions. In 1986, we reported to the House Committee on Merchant Marine and Fisheries<sup>3</sup> that NOAA needed to develop more definitive information on private vessels' availability, capability, and cost, before taking any action to deactivate NOAA vessels. Further, in 1989, we reported to the former House Oceanography Subcommittee<sup>4</sup> that NOAA needed a fleet modernization plan with multiyear contracting authority to allow it to experiment with long-term chartering arrangements and, in 1992, the Congress authorized NOAA to use multiyear leasing.

NOAA responded to the recommendations in our 1986 report by requesting that the Marine Board of the National Research Council examine the issues associated with vessel chartering. In a 1988 report, the Board found that other governmental and private sector organizations have used vessel chartering successfully and that

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<sup>2</sup>UNOLS, an association of universities and ocean science institutions, has a fleet of 26 oceanographic research vessels. These ships, some of which are federally owned, perform research funded mainly by federal agencies, including the National Science Foundation, the U.S. Navy, and NOAA.

<sup>3</sup>Deactivating Research Vessels: National Oceanic and Atmospheric Administration's Use of Private Ships (GAO/RCED-86-133, June 11, 1986).

<sup>4</sup>Ocean Research Fleet: NOAA Needs to Plan for Long-Term Fleet Requirements (GAO/RCED-90-42, Nov. 13, 1989).

NOAA, under the appropriate circumstances, could use chartering effectively. One of the Board's recommendations was that NOAA, in order to gain chartering experience, prepare a request for proposal for chartering ships to service one or more mission areas. NOAA agreed and planned to do this in fiscal year 1993. However, NOAA cancelled its plans due to funding limitations. NOAA currently has plans to spend \$2 million to contract for charting and mapping services this year.

In 1992, the Department of Commerce's Oceanic and Atmospheric Management Advisory Committee<sup>5</sup> evaluated NOAA's modernization plan. When testifying last year before the House Oceanography Subcommittee, the Committee's vice chairman said that NOAA should make greater use of commonly available contracting options to augment its core fleet capability. He also said that NOAA needed to determine the best mix of NOAA-owned vessels and contracted vessels to meet its mission requirements. In particular, the Committee concluded that many of NOAA's mission requirements could be accomplished cost effectively without requiring that NOAA build its own special purpose ships. In addition, contracting options offered flexibility to respond to future changes in either program funding or technical mission requirements. In response, NOAA stated that it would continue to explore contracting options as well as develop an economic model to assist in evaluating these options, and would revise its fleet modernization plan accordingly.

Recent reports of Vice President Gore's National Performance Review<sup>6</sup> and the Department of Commerce's Office of Inspector General<sup>7</sup> have also echoed the need for NOAA to consider contracting as a viable option to purchasing new ships.

#### NOAA HAS TAKEN LIMITED ACTION IN RESPONSE TO PRIOR STUDIES

While NOAA has generally agreed with prior findings that it give greater consideration to vessel chartering and leasing options, NOAA's response has been limited. In fiscal years 1992 and 1993, the Office of NOAA Corps Operations funded an average of about 160 days at sea annually for vessel charters in addition to the 3,500 days at sea provided by NOAA's fleet. The cost of the

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<sup>5</sup>The Committee was established in 1990 by the Secretary of Commerce and serves as the Secretary's principal outside advisory council on NOAA matters.

<sup>6</sup>Creating A Government That Works Better & Costs Less, Report of the National Performance Review (September 7, 1993).

<sup>7</sup>Semiannual Review of Fleet Replacement and Modernization Program, National Oceanic and Atmospheric Administration (EAD-5656-3-0001, September 1993).

vessel charters totaled about \$3 million, which the Office of NOAA Corps Operations made available from the \$63 million it received during these two years for the fleet modernization program. Previously, funds for vessel charters generally had to come from individual NOAA program budgets. By making fleet modernization funds available to program offices for chartering, NOAA has taken some initial steps to gain needed experience in using chartered vessels to accomplish program missions.

Further, in response to recommendations contained in the 1992 report of the Department's Oceanic and Atmospheric Management Advisory Committee, NOAA's fleet modernization plan includes an economic model component which was developed to assess the cost effectiveness of obtaining vessels through either purchase or lease. More specifically, for each vessel identified in the modernization plan, the model identifies vessel specifications to meet program requirements and then estimates the cost of the vessel under four scenarios depicting government versus contractor ownership and operation.

#### THE COST EFFECTIVENESS OF USING NON-NOAA VESSELS NEEDS TO BE FULLY EXAMINED

Our preliminary work indicates that a broader approach for evaluating the role of non-NOAA vessels is needed and could result in a better determination of the most cost effective mix of NOAA and non-NOAA vessels--one which experiments with contracting for mission outputs rather than NOAA's current approach which examines options for acquiring specific vessels.

NOAA's economic model defines what type of vessel is needed to perform the desired mission, then evaluates whether it is more cost effective to own and operate or lease the vessel. NOAA has only applied its model in one instance--evaluating a replacement for its 43-year old wooden fishing trawler John N. Cobb which has been used for fisheries research. The results showed that a NOAA-owned and operated vessel would be more cost effective than a contractor-owned or operated vessel. However, this type of evaluation is limited in that NOAA is specifying the type of ship needed to perform the mission without allowing contractors to demonstrate whether they can successfully perform the mission more cost effectively.

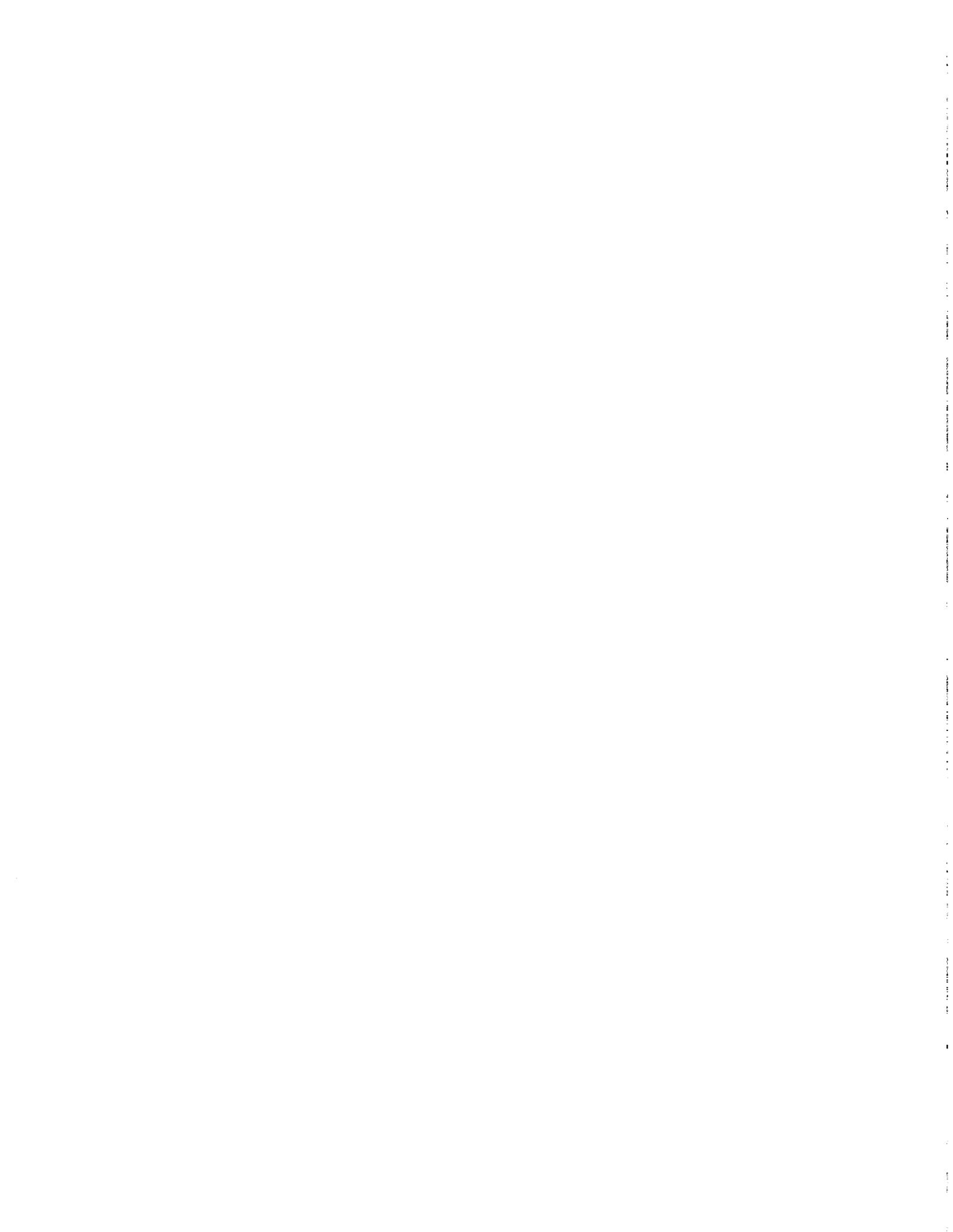
Hydrographic charting and mapping is a particular NOAA program mission which we believe merits further assessment as to whether the private sector can cost effectively contribute to meeting mission requirements as an alternative to continued reliance on NOAA vessels. NOAA's current plan includes \$335 million for overhauling two ships, converting four surplus Navy ships, and purchasing three new ships to ultimately provide about 1,700 days at sea annually for charting and mapping.

According to NOAA's Deputy Director of the Coast and Geodetic Survey, contractor capability currently exists to perform the type of charting and mapping work that NOAA performs. Representatives of several private sector charting and mapping interests have said that some of NOAA's charting and mapping missions could be performed using smaller or less expensive vessels than NOAA uses. We also found that the U.S. Army Corps of Engineers contracts for similar charting and mapping work, specifying the desired mapping and charting output rather than vessel specifications for performing the work.

As I mentioned earlier, NOAA plans to spend \$2 million to contract for charting and mapping services this fiscal year. It will be important for NOAA to follow through on these plans, and allow contractors flexibility in how they perform the work. The cost and operational data generated from this effort should enable NOAA to begin to gather the data needed to better determine the extent to which contracting can be a viable option to the acquisition of new ships.

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Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions you or members of the Subcommittee may have.



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