

PRESIDENT'S REPORT

By D. James Baker

THE U.S. NAVY OCEAN MODELING and Prediction Program, a focus for this issue of *Oceanography*, is a central element of Navy operations that has important implications for the broad international community interested in environmental assessment, monitoring, and prediction. The Navy has played a key role in the development of ocean sciences research and facilities in the United States and in applying research to improve ocean understanding and predictions. The U.S. Department of Defense is being cut back in funding as the nation reorders its priorities. It is important both to recognize the Navy's role and to look toward the future challenges for the community that will require the help of the Navy.

Without the many far-seeing individuals in the Navy who interacted closely with the academic community in the late 1940s and early 1950s, ocean science in the United States would be far different and far less healthy than it is today. For example, the decision of the Navy to provide ships to the academic community after World War II set the tone for U.S. academic oceanography, a mode of distributed ship operations that has proven remarkably effective over the long haul. The Navy guided oceanography through the decades after the war from a relatively small, regionally based science to the global programs that we have today.

In recent years, other agencies have joined the Navy in ocean interests so that today we have a partnership of agencies supporting ocean research. The Navy continues to play a central role in this partnership. Today, there is a dedicated set of individuals at the Office of Naval Research, the Office of the Oceanographer of the Navy, the Naval Oceanographic and Atmospheric Research Laboratory, and in other parts of the Navy who help guide our field. As is evident from the articles in this issue, the Navy has a global scope in modeling and prediction as well as in observations. The results from the Navy program are providing useful and important operational results, and the techniques being developed will be used in the broader context of environmental prediction.

As the nation looks toward the future, pollution and global change dominate the

environmental agenda. Our environment is being threatened by a variety of factors: increasing population puts increased stress on all aspects of the ocean, most noticeably in the coastal region, but also on the global ocean as waste disposal becomes more and more difficult. Increased pressure on fisheries leads to fleets operating globally and to the disappearance of formerly stable ecosystems. Increasing concentrations of greenhouse gases may be leading to global warming; clearly the ocean as the flywheel of the climate system must be understood and monitored as part of any environmental system. The Navy programs will contribute to better understanding of all of these issues.

There is international agreement for the need to expand the infrastructure we now have in place for monitoring, assessing, and predicting change in our environment. The expansion will build on national programs such as the ones discussed in this issue, on global research programs, and existing observational systems such as the World Weather Watch, the Integrated Global Ocean Station System, the Global Investigations of Pollution in the Marine Environment, and other such systems. Eventually, we can look to the establishment of a global-ocean observing system that will provide the infrastructure to obtain information from coastal and mid-ocean regions. This information will address issues related to changes in regional and global environments at all time scales.

A global-ocean observing system will provide systematic, long-term observations on the physical and chemical state of the ocean and on the state of ecosystems in the ocean; it will improve our ability to develop models and make prediction of changes in the ocean and associated ecosystems; it will improve our understanding and assessment of biogeochemical cycles; it will improve our ability to assess the effects of global change at regional scales on intensively exploited ocean regions; and it will provide data for the assessment of the health for the marine environment and its resources. This is the challenge of the future: to establish a fully effective global system for monitoring the ocean and providing operational ocean predictions. Henry Stommel perhaps put it best when he said, "Today, in

a time of concern over the possibility of potentially disastrous changes in climate, the nation or nations that establish a world-ocean observing system would make a splendid contribution to the world."

The scope of a global-ocean observing system is international, and thus many nations will be involved, both developed and developing. Outside the United States, individual nations such as France, Germany, Japan, and the United Kingdom have all supported technological advances for global observations of the ocean. International organizations also will be involved, for example, the European Commission has supported a project EUROMAR for the development of new technology for ocean monitoring. This was done under the general umbrella of their EUREKA organization, which is intended to coordinate the development of advanced technology throughout Europe. The expertise and resources of international organizations such as the Intergovernmental Oceanographic Commission, the World Meteorological Organization, the United Nations Environment Program, and the International Maritime Organization will be essential to the success of the system.

But in the end, it will be national contributions that make the global-ocean observing system work, just as national contributions are key to the success of the World Weather Watch. The Navy, with its global interests and achievements in ocean modeling and prediction, has played and will play a major role in the development of the global-ocean observing system. The U.S. Navy's global reach and expertise in operating such a system will be key to the success of the system in the United States. The Navy Ocean Modeling and Prediction Program sets a standard for other agencies to strive towards as the nation prepares to meet this new challenge. However, with the cuts in the funding for the Department of Defense, these efforts are endangered. Your support of the Navy is now needed more than ever. Write to your elected officials and make sure that they are aware of these programs and their important contributions to the national interest in the environment. □

ELECTION RESULTS

A final note from D. James Baker:

It has been my pleasure to serve as President of the Society in its first years. I have long believed that oceanographers need an active and effective professional society; we now have a very good start in that direction. I'm looking forward to becoming the Society's first Past President and turning over the gavel to Arnold Gordon as President and Margaret Leinen as President-Elect. I wish them both the best of success in their terms.

The new council members are: President-elect,

Margaret Leinen, University of Rhode Island; Physical Oceanography Counselor, Tommy D. Dickey, University of Southern California; Biological Oceanography Counselor, Richard T. Barber, Duke University.

SPECIAL OFFER TO MEMBERS OF THE OCEANOGRAPHY SOCIETY

The Society has concluded an agreement with Pergamon Press to allow its members to purchase subscriptions of the following journals at special reduced rates.

Continental Shelf Research	US\$55.
Deep-Sea Research Parts A & B	US\$95.
Progress in Oceanography	US\$55.

The above rates apply for 1992. To take advantage of this offer please send payment with order to: P A HENN at Pergamon Press, Inc., 660 White Plains Road, Tarrytown, NY, 10591-5153, USA (for members in the USA and Canada) or Pergamon Press Plc, Headington Hill Hall, Oxford, OX3 0BW, England, UK (for those in the rest of the world) Free sample copies of any of the above journals are available upon request from Pergamon.