

REPORT OF THE INTERAGENCY
ARCTIC RESEARCH POLICY COM-
MITTEE—MESSAGE FROM THE
PRESIDENT—PM 127

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, together with an accompanying report; which was referred to the Committee on Governmental Affairs.

To the Congress of the United States:

As required by section 108(b) of Public Law 98-373 (15 U.S.C. 4107(b)), I transmit herewith the Eighth Biennial Report of the Interagency Arctic Research Policy Committee (February 1, 1998, to January 31, 2000).

WILLIAM J. CLINTON.

THE WHITE HOUSE, September 14, 2000.

EIGHTH BIENNIAL REPORT OF THE INTER-
AGENCY ARCTIC RESEARCH POLICY COM-
MITTEE TO THE CONGRESS—FEBRUARY 1, 1998
TO JANUARY 31, 2000

(Prepared by the National Science Founda-
tion for the Interagency Arctic Research
Policy Committee)

BACKGROUND

Section 108(b) of Public Law 98-373, as amended by Public Law 101-609, the Arctic Research and Policy Act, directs the Interagency Arctic Research Policy Committee (IARPC) to submit to Congress, through the President, a biennial report containing a statement of the activities and accomplishments of the IARPC. The IARPC was authorized by the Act and was established by Executive Order 12501, dated January 28, 1985.

Section 108(b)(2) of Public Law 98-373, as amended by Public Law 101-609, directs the IARPC to submit to Congress, through the President, as part of its biennial report, a statement "detailing with particularity the recommendations of the Arctic Research Commission with respect to Federal interagency activities in Arctic research and the disposition and responses to those recommendations." In response to this requirement, the IARPC has examined all recommendations of the Arctic Research Commission since February 1998. The required statement appears in Appendix A.

ACTIVITIES AND ACCOMPLISHMENTS

During the period February 1, 1998, to January 31, 2000, the IARPC has:

Prepared and published the fifth biennial revision to the United States Arctic Research Plan, as required by Section 108(a)(4) of the Act. The Plan was sent to the President on July 7, 1999.

Published and distributed four issues of the journal Arctic Research of the United States. These issues reviewed all Federal agency Arctic research accomplishments for FY 96 and 97 and included summaries of the IARPC and Arctic Research Commission meetings and activities. The Fall/Winter 1999 issue contained the full text of the sixth biennial revision of the U.S. Arctic Research Plan.

Consulted with the Arctic Research Commission on policy and program matters described in Section 108(a)(3), was represented at meetings of the Commission, and responded to Commission reports and Recommendations (Appendix A).

Continued the processes of interagency cooperation required under Section 108(a)(6)(7), (8) and (9).

Provided input to an integrated budget analysis for Arctic research, which estimated \$185.7 million in Federal support for FY 98 and \$221.5 million in FY 99.

Arranged for public participation in the development of the fifth biennial revision to

the U.S. Arctic Research Plan as required in Section 108(a)(10).

Continued to maintain the Arctic Environmental Data Directory (AEDD), which now contains information on over 400 Arctic data sets. AEDD is available on the World Wide Web.

Continued the activities of an Interagency Social Sciences Task Force. Of special concern is research on the health of indigenous peoples and research on the Arctic as a unique environment for studying human environmental adaptation and sociocultural change.

Continued to support an Alaska regional office of the Smithsonian's Arctic Studies Center in cooperation with the Anchorage Historical Museum to facilitate education and cultural access programs for Alaska residents.

Supported continued U.S. participation in the non-governmental International Arctic Science Committee, via the National Research Council.

Participated in the continuing National Security Council/U.S. Department of State implementation of U.S. policy for the Arctic. U.S. policy for the Arctic now includes an expanded focus on science and environmental protection and on the valued input of Arctic residents in research and environmental management issues.

Participated in policy formulation for the ongoing development of the Arctic Council. This Council incorporates a set of principles and objectives for the protection of the Arctic environment and for promoting sustainable development. IARPC supports the contributions being made to projects under the Council's Arctic Monitoring and Assessment Program (AMAP) by a number of Federal and State of Alaska agencies. IARPC's Arctic Monitoring Working Group serves as a U.S. focal point for AMAP.

Approved four coordinated Federal agency research initiatives on Arctic Environmental Change, Arctic Monitoring and Assessment, Assessment of Risks to Environments and People in the Arctic, and Marine Science in the Arctic. These initiatives are designed to augment individual agency mission-related programs and expertise and to promote the resolution of key unanswered questions in Arctic research and environmental protection. The initiatives are intended to help guide internal agency research planning and priority setting. It is expected that funding for the initiatives will be included in agency budget submissions, as the objectives and potential value are of high relevance to the mission and responsibilities of IARPC agencies.

Convened formal meetings of the Committee and its working groups, staff committees, and task forces to accomplish the above.

*Appendix A: Interagency Arctic Research Policy
Committee Responses to Recommendations of
the Arctic Research Commission*

Section 108(b)(2) of Public Law 98-373, as amended by Public Law 101-609, directs the IARPC to submit to Congress, through the President, as part of its biennial report, a statement "dealing with particularity the recommendations of the Arctic Research Commission with respect to Federal interagency activities in Arctic research and the disposition and responses to those recommendations." In response to this requirement, the IARPC has examined all recommendations of the Arctic Research Commission since January 1998. The previous IARPC report, submitted in January 1998, responded to Commission recommendations through 1997. Many of these recommendations deal with priorities in basic and applied Arctic research that ongoing agency programs continue to address.

The following recommendations are from the Arctic Research Commission report "Goals and Opportunities for United States Arctic Research" (1999).

RECOMMENDATIONS FOR AGENCIES

At the request of the IARPC agencies we are including specific recommendations for these agencies and interagency groups in order to make clear to them our view of the opportunities.

National Science Foundation

The National Science Foundation Arctic Science Section in the Office of Polar Programs has made great strides in recent years in their interest in and efforts on behalf of research in the Arctic. We are pleased with several developments in recent years, including the partnership with the Commission in support of the ARCUS Logistics Study, the participation of the Section's staff on the Commission's field trips to Greenland and Arctic Canada, and the Foundation's support for the swath bathymetric mapping system deployed in 1998 as part of the SCICEX Program. Nevertheless, there still remains a substantial disparity between support for research in the Antarctic and in the Arctic. A new era is about to dawn in Arctic research because of the arrival in 2000 of the new Coast Guard icebreaker *Healy*. *Healy* has the potential to become the most important ship for Arctic research ever launched. On the other hand, it may languish at the dock making only occasional forays into the Arctic. The National Science Foundation has committed to *Healy* by ending its support for the ARV design activity conducted by the University National Oceanographic Laboratory System. *Healy* will be the principal U.S. resource for surface studies of the Arctic Ocean. Having committed philosophically to *Healy* it is essential that NSF find the resources to operate *Healy* as a research vessel with a minimum operating schedule of approximately 200 days per year. Without sufficient operating support, the NSF commitment to *Healy* will be a hollow one. The FY 99 budget for the Foundation contains a substantial increase in funding for Arctic Logistics needs.

NSF appreciates the Commission's comments on the great strides in recent years by the Arctic Science Section, Office of Polar Programs, on behalf of research in the Arctic. NSF's commitment to supporting Arctic research in all areas remains strong, but NSF is to the sole Federal sponsor for Arctic studies. As the Commission is aware, both NSF and the Office of Polar Programs must continually find the appropriate balance of support for a wide variety of disciplines and activities. In the specific case of supporting research that requires the use of the *Healy*, NSF's FY 00 budget request included funding for initial testing for scientific applications of the *Healy*. In FY 00 the Foundation also hopes to support limited research on the *Healy* during the science system testing cruises.

Long-term planning (FY 01 and beyond) includes continued support for research on the *Healy*. Support for up to 100 operating days is planned, although it is unclear whether the amount required to fully fund 200 operating days, including science costs, would be available for this purpose from NSF. NSF will work with other user agencies to develop mechanisms for science support for the *Healy*.

Department of Defense

A number of activities fall under the Department of Defense. Chief among these is the SCICEX Program of the Department of the Navy. The 109th Airlift Wing of the New York Air National Guard provides LC-130 support for both Arctic and Antarctic research operations. In addition, DOD is conducting a program entitled Arctic Military

Environmental Cooperation (AMEC) jointly with the Norwegian and Russian ministries of defense. The Commission encourages the Department of Defense to continue to provide support for Arctic research and environmental studies and to communicate with the Commission on any new programs.

The level of interest in Arctic research continues to wane at the Office of Naval Research. The fact that the Arctic Ocean is no longer considered an area of strategic threat is due to the decrease in tensions with Russia. The result has been a precipitous decline in funding for Arctic studies at the Office of Naval Research. The Commission believes that the decrease in Arctic operations is a reason for maintaining research levels in the Arctic in order to maintain the national capability in the region. Research is generally much less expensive than operations and the knowledge base created and maintained by research in the region may be of vital national interest in the future, particularly as access to the Arctic Ocean improves, a fact made likely through the observed thinning of Arctic sea ice. Reduced military activities in the region do not justify reduced research efforts and may be an excellent justification for maintaining and even increasing research.

With this mind, the Commission commends the efforts of the Navy in carrying out the SCICEX cruises. The Commission notes the substantial effort made by the Navy to support this program in the face of shrinking resources and facilities. These expeditions into the Arctic Ocean aboard operational fast attack nuclear submarines show an extraordinary interest in the support of science by the Navy. The question of the continuation of these cruises after 1999 and the retirement of the last of the Sturgeon Class submarines is of great concern to the Commission, and the Commission recommends that the Navy explore with the scientific community the means to continue this invaluable access to the Arctic Ocean.

The SCICEX Program began in 1998 to collect swath bathymetric data in the Arctic for the first time from a submarine. This instrument, known as the Seafloor Characterization And Mapping Pods (SCANP), has been made possible by the enthusiastic support of the National Science Foundation's Office of Polar Programs. These data collected by SCANP will be of great value for students of the region from many disciplines. The region surveyed in 1998 and 1999 will comprise only a moderate fraction of the area of the deep water portion of the Arctic Ocean. The means to continue gathering swath bathymetry with the SCANP system should be developed for the future, preferably using Navy nuclear submarines. This recent development in submarines capability is a reinforcing reason to continue the SCICEX Program. A corollary issue is the declassification of achieved bathymetry data collected on previous operations. These data are a valuable resource for the research community. A continuing program should be established to bring these data out from the classified realm respecting the security concerns, which may surround the collection of these data. The construction of the new U.S.-Russian Arctic Ocean Atlas CD shows that these difficulties may be overcome.

As a further indication of the utility of Navy nuclear submarines for research in the Arctic Ocean, the Commission also notes the cooperation of the Navy in attempting to carry out a test of the submarine as a receiving ship for seismic refraction measurements. This test, when completed, will indicate the suitability of the submarine for such experiments, and the Commission encourages further investigation of this concept. The Commission also notes the co-

operation of the Navy in the declassification of bathymetric and ice profile data collected by Navy nuclear submarines in the Arctic. The value of these data is indicated by the importance attached to the bathymetric data by the international community in connection with the update of the GEBCO chart of Arctic Ocean bathymetry. Navy data will at least double the data base available for this update.

Finally, the Commission recommends that the Navy cooperate fully in a study of the costs and benefits of retaining a Sturgeon Class submarine as an auxiliary research platform for worldwide use by the civilian science community as discussed above.

The Army Cold Regions Research and Engineering Laboratory (CRREL) in Hanover is a national treasure. In the current climate of budget stringency the pressure on Army labs is growing. The Commission wishes to be on record in support of the vital national resource that exists at CRREL. Serious reductions at CRREL might be helpful in the short term but a detriment to the national welfare over the long term. The Commission encourages continued support for CRREL.

The Commission has recently discussed with CRREL the importance of understanding the effects of global climate change on the permafrost regime. The Commission looks forward to CRREL's plans for further study of climate change and permafrost, supports the concept and encourages support for these studies by all of the IARPC agencies.

The Department of Defense invests in R&D priorities consistent with mission requirements and resources. First and foremost, the Science and Technology investments within DoD are undertaken to ensure that warfighters today and tomorrow have superior and affordable technology to support their missions and to give them revolutionary war-winning capabilities. Thus, the DoD S&T investment is directly linked to the assessment of current and future security threats. While the interest of the Department of Defense and the Office of Naval Research in Arctic research and environmental studies remains strong, the prioritization of S&T funding is subject to the fiscal realities and must consider present strategic and operational requirements. The Department remains committed to funding Arctic research at a level commensurate with the mission requirements. Contrary to the Commission's assertion, the decrease in military operations in the Arctic is not a rationale for maintaining or expanding departmental S&T efforts in the region.

From an S&T perspective, the Department of Defense supports the Navy's ongoing examination of the feasibility of continued Arctic research using Navy submarines. Such analysis is taking into account DoD's national security mission, the national security requirements for submarine operations, downsizing of the operational fleet, and the life-cycle costs of implementation of an extension of the SCICEX research program. Further, the Navy is cooperating with NSF and its contractors in an ongoing study of the costs and benefits of retaining a Sturgeon Class submarine as an auxiliary research platform for civilian science applications operated on a reimbursable basis.

National Oceanic and Atmospheric Administration

NOAA has been the leading U.S. agency for AMAP. In this role, NOAA has supplied both staff efforts and funding to the AMAP. These efforts have been largely conducted on a goodwill basis without organized programs or a satisfactory funding base. NOAA deserves great credit for these efforts and the Commission commends and supports their efforts. NOAA has conducted an Arctic Ini-

tiative beginning in 1996 at a funding level of approximately one million dollars. The Commission supports this initiative and recommends that it continue in the coming fiscal year and eventually becomes an ongoing part of the NOAA program.

NOAA appreciates the recognition by the Commission of its role as U.S. lead agency for the Arctic Monitoring and Assessment Program (AMAP). It is NOAA's intention to continue its participation in AMAP, to coordinate interagency AMAP projects in a partnership effort, to increase outreach to impacted Alaskan communities, and to promote greater involvement in AMAP activities by Alaskan people and organizations at both local and statewide levels.

NOAA also appreciates the Commission's support of the Arctic Research Initiative (ARI), a peer-reviewed research effort that we have administered jointly with the Cooperative Institute for Arctic Research at the University of Alaska Fairbanks. After a start at the \$1.0 million level in FY 97, the ARI received \$1.5 million in FY 98 and \$1.65 million in FY 99. NOAA intends to continue this program, and the President included support for the ARI as part of NOAA's base budget request for FY 00. NOAA completed a report on the first three years of the ARI and provided copies of the report to the Commission.

As the Commission is doubtless aware, in FY 00 NOAA is combining ARI funds with International Arctic Science Center funds in a joint announcement of opportunity. This announcement was released to the Arctic science community on August 18, 1999. It invites proposals on global change and its effects on the Arctic, including detection; interactions and feedback; paleoclimates; Arctic haze, ozone and UV; contaminants; and impacts and consequences of change. The announcement is available on the IARC web page at <http://www.iarc.uaf.edu> and on the CIFAR web page at <http://www.cifar.uaf.edu>.

In order to focus our Arctic research efforts more sharply, we have established an Arctic Research Office within NOAA's Office of Oceanic and Atmospheric Research.

The National Undersea Research Program (NURP) has had a long and perilous history. Only occasionally has it appeared in the President's budget. The Commission believes that NOAA-NURP can be a valuable asset to the research community. In particular, the Commission takes note of the report of the "Blue Ribbon Panel," which spelled out a new paradigm for NURP. The Commission's interests in NURP's activities in the Arctic include the use of unmanned and autonomous underwater vehicles in the Arctic as well as the employment of the Navy's nuclear submarine assets under the SCICEX Program noted above. The Commission believes that the time has come for an organic act for NURP that will establish it as an ongoing activity with a structure based largely on the recommendations of the "Blue Ribbon Panel." As part of their mission NURP should undertake to fulfill the commitment made in the SCICEX MOA to support the research infrastructure costs of the SCICEX Program.

Following the reinvention of the National Undersea Research Program (NURP), which began in 1997, the program has been included in the President's budget each year at increasing levels. The Blue Ribbon Panel report was taken into account in the restructuring of the program, and an organic act supporting the reinvention is under review by the Administration.

Regarding the SCICEX program, the Director of NURP serves on the National Science Foundation's Study Steering Committee to examine and analyze the costs and benefits

of employing a U.S. Navy nuclear submarine dedicated to global oceanographic science. This would be a follow-on to the SCICEX program. Based on the results of this study and future budget levels, NURP will determine its contributions to support infrastructure and research costs in any follow-on to the SCICEX program.

NOAA operates a suite of National Data Centers including the National Snow and Ice Data Center, the National Oceanographic Data Center, the National Geophysical Data Center and the National Climate Data Center. These data centers are charged with the responsibility for data rescue in the former Soviet Union. The Commission recommends that the national data centers communicate the nature of their data rescue activities to the Commission and expand them as necessary to collect data vital to our understanding of the Arctic, especially the dispersal of contaminants in the region.

The NOAA National Data Centers (NNDC) continue their long history of cooperative data exchange with counterpart institutions in the former Soviet Union (FSU). The following summary highlights some of the oceanographic, meteorological, and geophysical data sets recovered and made public in the past few years as a result of this cooperation. While these data are significant contributions to our knowledge of Arctic regions, our FSU colleagues indicate there are enormous holdings still in manuscript form or on outdated magnetic tapes. Reasonable estimates to acquire these additional data and make them available far exceed the resources available to NNDC.

The National Oceanographic Data Center (NODC) has an active, proposal-driven program of "data archaeology and rescue" for oceanographic and ancillary meteorological data for the world ocean. These activities are funded by NOAA's Office of Global Programs and by the NOAA/NESDIS Environmental Services Data and Information Management program. As a result of this project, substantial amounts of data for the sub-Arctic and Arctic have been made available internationally without restriction on CD-ROM as part of "World Ocean Database 1998" (WOD98) and the "Climatic Atlas of the Barents Sea 1998: Temperature, Salinity, Oxygen" products. The majority of these rescued data are from Russian institutions. There are an estimated 500,000 Russian Nansen casts from the Barents Sea and surrounding areas still not available, many of these data being in manuscript form.

The Ocean Climate Laboratory of NODC also is working with the Murmansk Marine Biological Laboratory to construct and publish a "Plankton Atlas of the Barents Sea." A second atlas on the physical properties of the Barents Sea will be expanded to include the Kara and White Seas. Russian institutions have expressed interest in developing atlases, databases, and joint research projects, mainly for the sub-Arctic. For example the Arctic and Antarctic Research Institute (AARI) of St. Petersburg is proposing to prepare such products for the Greenland-Norwegian Sea region. If funding becomes available, AARI and the Ocean Climate Laboratory will co-develop this database and analyses.

Recently, Arctic and sub-Arctic oceanographic data from Sweden, Poland, the U.S., and Canada were added to WOD98, and more data are being processed for future updates.

The National Geophysical Data Center (NGDC) has several ongoing data rescue and exchange programs with Russian counterparts to rescue, digitize, and render available geophysical data from Russia. Most of these are part of larger data exchange programs. Likewise, the National Snow and Ice Data Center (NSIDC), in collaboration with NGDC,

has been involved in extensive Russian and former Soviet Union data rescue activities. The NOAA/NESDIS Environmental Services Data and Information Management program has funded most of these activities. A list of rescued data sets at NSIDC is available to the Commission. Many more data sets are in need of rescue and publication. These include ice station seismic refraction stations, borehole temperature measurements, and additional years of sea ice data.

Since 1989 the National Climatic Data Center has been exchanging meteorological and climate data on an annual basis with the All-Russian Research Institute for Hydrometeorological Information (RIHMI) under the "U.S.-Russia Agreement on the Cooperation in the Field of Protection of the Environment and Natural Resources." Data exchanged include three- and six-hourly synoptic weather reports (since 1966), daily temperature and precipitation (since 1884), daily snow (since 1874), daily snow in heavily wooded areas (since 1996), monthly total precipitation (since 1890), and upper air data (since 1960).

In 1996 a project was initiated with RIHMI to rescue synoptic weather observations contained on 10,000 magnetic tapes at risk of being lost due to age and deterioration. The data from approximately 80 observing sites from 1891 to 1935, 700 stations from 1936 to 1965, 1300 sites from 1966 to 1984, and 2000 sites from 1985 to the present were copied to new media. In addition, daily precipitation data were extracted from the observations and provided to the National Climatic Data Center for the preparation of a U.S.-Russian precipitation data set for research.

During 1999 a cooperative project was initiated to make available to NCDC the upper air data from the Russian Arctic drifting stations (data beginning during the 1950s).

Environmental Protection Agency

The Environmental Protection Agency's Office of Research and Development (ORD) has shown little interest in the study of the special environmental concerns in the Arctic. Although the EPA-ORD was closely engaged in the Arctic and a principal support for the activities of the Arctic Environmental Protection Strategy up until 1994, subsequent involvement has been minimal. This has left the United States committed to programs under the Arctic Environmental Protection Strategy, particularly in AMAP, for which the appropriate agency (Environmental Protection) refrained from providing support. The Commission considers this to have been a short-sighted decision and recommends strongly that the EPA-ORD make a substantial effort in the study of contaminants in the Arctic. The U.S. has been judged an underachiever by the international community involved in the AEPS and the current discussion on the future of AMAP under the Arctic Council has become very difficult given that there are no plans for EPA-ORD to directly support AMAP efforts.

The Commission notes the workshop held in Fairbanks in the summer of 1996. The Commission also notes that the intention, announced at the 1996 Meeting by the Head of the Office of Research and Development, to establish an Arctic baseline study station at Denali National Park fails to understand that the Park is not in the Arctic, that experimental opportunities in a National Park are extremely limited, and that there are a number of superior sites in Alaska, notably Toolik Lake and the Barrow Environmental Observatory, which would provide a superior site where EPA could take advantage of ongoing studies by many scientists.

The ability of EPA to interact with the Native residents of the Arctic is compromised by the application of their risk as-

essment paradigm. This paradigm has led to the conclusion that the U.S. Arctic population is not of high priority because of its small size. This ignores the closeness of the relationship of these people to their environment (roughly 50 percent of their annual caloric intake comes from native plant and animal species), the environmental stresses on village life (almost 50 percent of Alaskan villages use the "honey bucket" system for human waste disposal), and their vast and ancient store of traditional knowledge of the Arctic environment.

There are important efforts in the Arctic sponsored by the EPA's Office of International Programs. EPA's Office of International Activities (OIA) has supported the study of contaminants in umbilical cord blood samples from Arctic residents. This AMAP-sponsored program was ignored during the AMAP initial assessment activities but has been resurrected with the assistance and support of EPA-OIA. EPA-OIA has proposed other activities in the Arctic including projects to assess and reduce sources of mercury and PCBs. The Commission commends EPA-OIA for their efforts and urges support for their activation and expansion.

The Arctic Research Commission expressed appreciation for ongoing research sponsored by the Office of International Activities (OIA) on contaminants in cord blood of Native infants, and strong concerns about the lack of investment by the Office of Research and Development (ORD). Below are responses to these concerns, and a brief outline of EPA's relevant activities.

Support of AMAP

EPA's decision to withdraw from the AMAP process in 1994 was based on issues other than recognition of the importance of this activity. EPA has re-engaged with AMAP by directly supporting the Heavy Metals workgroup and conducting other work relevant to contaminant issues in the Arctic.

In March 1999 the Office of Research and Development (ORD) agreed to chair the Heavy Metals Team during AMAP Phase II. To that end, EPA organized and sponsored a workshop "Heavy Metals in the Arctic" in September 1999 to produce a final AMAP Phase II heavy metals research plan and to establish an international heavy metals team. ORD has committed to producing a Phase II report in 2003 that includes unreported U.S. data from Phase I and new data from Phase II. The eco-system-level risk assessment process will serve as the conceptual framework for organizing research results. EPA's ability to launch major new research programs to fulfill AMAP research plans is problematic. Available funds will have to be used strategically to focus on the most essential portions of the AMAP Phase II plan. For success, efforts will be made to find matching funds through partnerships and coordination.

AMAP is targeting "effects" and plans a special workgroup on combined effects during Phase II. The ORD has also targeted this as an issue and is planning a combined symposium and workshop for multiple stressors and combine effects on the Arctic Bering Sea during FY 00. Workshop results will be framed by the risk assessment process and offered to AMAP as an alternative approach for addressing this scientific challenge.

Arctic Research

The Denali National Park Demonstration Intensive Site Project under the Environmental Monitoring and Assessment Program was designed to establish an air quality station with UV-B monitoring capability. Data collected there can and do provide very useful information about changes in UV-B radiation in northern regions as well as long-

range transport of airborne contaminants from parts of the world very remote from Alaska. However, EPA agrees that the Denali National Park research station is outside of the Arctic and recognizes the need for additional Arctic research. To further development of an Arctic research program, ORD established an Arctic Program office in Anchorage, Alaska. Program staffs are directly involved in AMAP and the Bering Sea Regional Geographic Initiative (see "Risk Assessment" below).

The Office of International Activities (OIA) has been a lead in supporting basic research with international implications characteristics of Arctic environmental concerns. OIA, in partnership with the ORD National Effects Research Laboratory and in coordination with NOAA and DOE, installed a new state-of-the-art mercury Tekran speciation monitoring unit at the NOAA research station in Barrow, Alaska. The equipment became operational in January 1999 and confirmed the "Arctic Sunrise" phenomenon this spring. In addition, OIA has continued its support of the Alaska Native Cord Blood Monitoring Program. The program is designed to monitor the levels of selected heavy metals (including mercury) and persistent organic pollutants (including PCB congeners) in umbilical cord and maternal blood of indigenous groups of the Arctic. The study will generate 180 infant-mother specimen pairs and will include two groups of infants from the Faroe Islands, Greenland, and Canada) and infants recruited from the Alaska native American populations. Other OIA activities include the Multilateral Cooperative Pilot Project for Phase-Out of PCB Use, and Management of PCB-Contaminated Wastes in the Russian Federation.

REPA Region 10 continues to support contaminants research through a new partnership with the Sea Otter Commission to expand efforts in monitoring persistent, bioaccumulative, and toxic pollutants (PBTs) in subsistence foods in Alaska. The Traditional Knowledge and Radionuclides Project, conducted in partnership with the Alaska Native Science Commission, is ongoing.

Risk Assessment

Risk assessment has a varied history of development and use in EPA. Within the last 10 years, the process and its application have broadened dramatically from single-stressor-driven assessments to complex integrated ecosystem assessments for multiple stressors and combined effects. While it is true that EPA tends to target most resources toward environmental issues impacting areas of greater population density, this is a priority setting exercise rather than an application of the risk assessment process.

EPA has found the broadened risk assessment approach to be very effective in bringing together scientific research and management strategies. Specifically it allows communities to use available scientific information (and, particularly in the Arctic, traditional knowledge) to better understand what complement of stressors may be causing undesirable change in important values, key scientific questions that need to be investigated, and alternative problem solving strategies designed to achieve environmental results.

It is within this broader frame of reference that EPA is focusing resources and time in the Arctic. The risk assessment process involves multiple steps, including planning (establishing shared goals), problem formulation (using available knowledge to develop conceptual models), analysis (exposure and effects data), and risk characterization (establishing relationships). The Bering Sea Regional Geographic Initiative, sponsored by Region 10 and ORD, is focused on planning

and problem formulation to help make sense of the enormous amount of available data and to give direction to future research in the Bering Sea. The Traditional Knowledge and Radionuclides Project sponsored by Region 10 is helping redefine the risk management process with tribes and may offer new ways to re-frame how risk assessment is used in the Arctic. In a similar vein, ORD has begun planning and problem formulation for the Pribilof Islands in partnership with the people of St. Paul to develop a demonstration case study of the process within a Native community. Risk assessment will also provide the conceptual framework for reporting on heavy metals for AMAP Phase II.

These activities will provide significant lessons within the Arctic about how to establish management direction, identify data gaps and research opportunities, link research to management concerns, and provide a legitimized use of traditional knowledge.

Department of State

The Department of State is responsible for the negotiation and operation of our international agreements in the Arctic. The Department seeks input from the IARPC agencies and others through the Arctic Policy Working Group, which meets monthly with the Polar Affairs Section at State. Over the years a disconnect has occurred between the Department and the officials in other agencies making the vital decisions affecting our participation and performance in international programs. This stems principally from the lack of coordination between what the agencies will actually do and the policies expressed in these programs. The most obvious case was the failure of the United States to participate in the AMAP health study of contaminants in umbilical cord blood. While endorsing this program and its goals on the one hand, no samples were actually sent for analysis even though samples existed. The result is that the United States has been viewed with a certain amount of scorn in AMAP meetings (the Commission notes that this program has finally begun under the auspices of the EPA Office of International Activities). The cure for this is certainly not simple. The most important step, however, is that the Department of State must, in the future, meet with Agency policy officials to review their recommendations, spell out the equivalent commitments to action by agencies, and modify their positions accordingly. These meetings must be carefully prepared so that the issues to be discussed are clearly spelled out and that the nature of the commitment required from the agencies is understood well beforehand so that the agencies can come to the table prepared to make commitments.

The complexity of this problem can be seen in the state of affairs in October 1998. In October the United States took over the chair of the Arctic Council. At the same time, agency budget appropriations were passed for FY 99 but virtually no specific budget commitments were identified as supporting investigations relevant to Arctic Council needs. Many relevant activities occur in agency programs which could demonstrate U.S. commitment to the Arctic Council but there is no system to collect results and report on relevant U.S. activities to the Council and no financial support for these activities. This problem needs to be addressed immediately for FY 00 and beyond.

The Department of State is puzzled by the Arctic Research Commission's recommendations for the Department with regard to facilitation of U.S. Arctic Research. The entire first paragraph is, verbatim, what was reported in their "Seventh Biennial Report to Congress," which was submitted last year and which covered the period of February 1,

1996 to January 1, 1998. The incident that they highlight as an example of an "inter-agency disconnect" that resulted in "complete failure" of the United States to participate in an Arctic Council program occurred in 1996 and involved a Federal agency outside of the control of the State Department. From the perspective of the Department, it appears that the Arctic Research Commission has not seen our response to this same evaluation last year. In that initial response, we explained in detail what the State Department's role is with regard to facilitating U.S. research in the Arctic and the formulation of U.S. Arctic policy. It appears that the Arctic Research Commission has failed to take this into consideration. With regard to the additional language that the Commission has submitted this year, the Department would like to emphasize that all queried Federal agencies, with the exception of one, offered general support for the U.S. chairmanship of the Arctic Council. While we are not in a position to comment on the contents of the budgets of other agencies with regard to support for the U.S. chairmanship, we note that the Department received financial support in the amount of \$250,000 for its Arctic Council chairmanship in FY 99 and has requested financial support for the Arctic Council in its FY 00 budget request. We also note that a number of other agencies, among them the Departments of Commerce/National Oceanic and Atmospheric Administration, Energy, Interior/Fish and Wildlife Service, and Environmental Protection Agency, have committed both financial resources and staff time to assist with chairing the Arctic Council. We also note that the Department of State has been generally pleased with the level of participation and leadership from the aforementioned U.S. agencies and others within the Arctic Council's working groups.

U.S. Coast Guard

The U.S. Coast Guard is the principal provider of research time on icebreakers for U.S. scientists not collaborating with other nations. In the past, the lack of an open system for soliciting participants and planning cruises has produced friction and disagreement as well as some important successes. With the advent of *Healy*, the new Coast Guard icebreaker, a new system must emerge. The dialog between the scientific community which will be using *Healy*, Coast Guard designers, and ship builders has been substantially improved. The formation of the Arctic Icebreaker Coordinating Committee has been successful and has led to substantial improvements in the design of research facilities aboard *Healy*. In the near future the need for liaison and coordination will change from the construction team to operations. The Commission anticipates that the Coast Guard will work closely with the AICC drawing upon the U.S. academic community's substantial level of experience in oceanographic operations generally and in Arctic studies in particular.

The AICC and the closer cooperation in which it is participating will not help to produce the potential for a new era of U.S. Arctic research unless a commitment to operating funds for icebreaker utilization is forthcoming. The Commission has recommended to the National Science Foundation that it provide funds for full utilization of Coast Guard icebreakers at up to 200 operating days per year as appropriate depending on funding. The Coast Guard should support NSF in its efforts to provide these funds.

The Coast Guard will depend heavily on the Arctic research community to participate in determining scheduling priorities for *Healy*. The UNOLS Ship Time Request System will be the primary mechanism for fielding and sorting requests for ship access.

There is a clear need for subsequent scheduling meetings to occur. A specific plan for arbitrating competing scheduling demands has yet to be defined. A discussion of how this process should work is an agenda item for the January 2000 Arctic Icebreaker Coordinating Committee meeting. The Coast Guard envisions a process where it provides information on ship availability and operational access to specific areas and where the science community takes responsibility for prioritizing research goals that will result in actual ship access for investigators. Input from the Arctic Research Commission, the National Research Council, and the National Science Foundation will be key to developing an equitable system that meets the national research requirements.

Interagency Task Force on Oil Spills

There is a substantial dearth of knowledge about oil spills in Arctic conditions. The Commission has long recommended a substantial research program on the behavior of oil in ice-infested oceans based in part on the research agenda spelled out in Appendix I. In addition, the Commission has had substantial discussions with the Oil Spill Recovery Institute. The Commission in collaboration with the Alaska Clean Seas Association and others has recommended test burns in the Arctic Ocean to study the variety of questions associated with this highly effective method of disposing of oil on the sea. The Commission recommends that the Interagency Task Force commence such a program soon, before the question is made imperative by an accident in the Arctic.

The Coast Guard supports the ARC in its recommendation to commence a research program on the behavior of oil in ice-covered waters, although no funds are currently available to support such a program. The Coast Guard continues to endorse the preparedness and response efforts of the Emergency Preparedness Prevention and Response Working Group of the Arctic Council, as well as individual national research.

The task force was established as the Coordinating Committee on Oil Pollution Research (CCOPR) under Title VII of Public law 101-380, otherwise known as the Oil Pollution Act of 1990. The Committee has not been funded since FY 95. As a result the Coordinating Committee has focused on ensuring that the research and development projects of its member agencies are discussed and the results of that research and development are shared with Federal, state, local, and private sector researchers. The Coordinating Committee has been unable to initiate any research not already approved by an agency as part of the agency's mission-specific activities. Thus, a proposal for the Committee to initiate and manage a research and development program to study methods of disposing of oil in Arctic waters is not viable at this time. The Arctic Research Commission may wish to propose meeting with the Coordinating Committee to discuss proper research foci with attendant partnership funds to the individual agencies that comprise the Coordinating Committee.

National Aeronautics and Space Administration

The Commission has been briefed on the programs undertaken by NASA in the Arctic or having a substantial component in the Arctic. These programs are clearly of a high caliber. The Commission notes, however, that these programs are poorly publicized outside of the community of NASA Principal Investigators. The Commission recommends that NASA carry out a program of outreach to the Arctic Research Community to publicize these programs and to encourage broader participation. NASA is always at risk for the engineering side of their programs to overwhelm scientific uses and

needs. The Commission believes that by broadening the participation of the research community in their programs, NASA can benefit from the resulting community support.

The Commission also notes that NASA is a participating agency in the International Arctic Research Center and supports the Alaska Synthetic Aperture Radar Facility at the University of Alaska. The Commission supports these efforts and looks forward to their continuation and expansion.

NASA welcomes the support of the Arctic Research Commission for its Arctic research program. NASA is sympathetic to the need for outreach of its programs within the broader scientific community. NASA has established procedures by which it seeks to inform the broader community of its goals and vision.

NASA publishes a Science Implementation Plan for the Earth Science Enterprise, which includes Arctic research. This document is reviewed outside NASA and provides an opportunity for scientists to understand the scope of planned activities and their relationship to overarching science goals. NASA has invested in the development of effective user interfaces at its Data Active Archive Centers, realizing how important these are to the productive use of mission data. In continued recognition of this, NASA initiated a National Research Council Polar Research Board review of its polar geophysical products during 1999, with a view to obtaining independent and science-driven advice on how best to provide data sets for Arctic researchers. Furthermore, through this review, NASA seeks to develop a strategy for broader use of its polar data sets by the research community.

In recognition of the important role that the Arctic plays in global climate, NASA will continue to support Arctic research. The Alaska SAR Facility and the International Arctic Research Center each have important roles to play in encouraging innovative and collaborative Arctic research.

National Institutes of Health

Under the Arctic Environmental Protection Strategy the United States has become involved in programs concerning the health of Arctic residents, particularly the indigenous people of the region. In particular, the AMAP health study has been focused on environmental effects on health in the region. When the United States undertook to sign the AEPS Declaration (and subsequently the Arctic Council Declaration) the message to agencies was that there would be no new money requested or appropriated for these activities. As a result, the U.S. effort in the AMAP health program has been paltry. It is clear that the responsibility for the national effort in this regard falls to the National Institutes of Health, particularly the National Institute for Environmental Health Studies. Unfortunately, the NIH-NIEHS effort has been virtually nonexistent. The Commission recommends that NIH immediately organize an Arctic Environmental Health Study focused primarily on the measurement program outlined by the Arctic Monitoring and Assessment Program. In addition, the study of incidences and trends in the major causes of morbidity and mortality in the Arctic should be included in Arctic Council activities, perhaps as an initiative is sustainable development. The effects of both communicable diseases such as tuberculosis, systemic diseases such as diabetes and cancer, and external causes of illness and death such as alcoholism and accident have profound effects in the Arctic.

The NIH should undertake to become the focal point for Arctic Council health studies in both AMAP and the sustainable develop-

ment activities of the Council. To this end NIH should provide secretariat support for U.S. Arctic Council health-related activities and take on the responsibility to see that the myriad relevant efforts at NIH and elsewhere are collected and reported to the Arctic Council as the U.S. contribution. This activity should also include a program, in collaboration with relevant State of Alaska agencies and institutions, to synthesize these results and return them to the Arctic community in understandable language along with their implications for life in the Arctic.

The Arctic Research Commission observed that, despite the agreement that the United States participate in the Arctic Environmental Protection Strategy (AEPS) and subsequently the Arctic Council, no new monies were requested or appropriated. U.S. efforts in AMAP (Arctic Monitoring and Assessment Program) were considered paltry. The ARC recommended that the National Institutes of Health (NIH), particularly its component, the National Institute of Environmental Health Sciences (NIEHS), organize an Arctic Environmental Health Study, focused on AMAP measurements. A study of the major causes of morbidity and mortality was suggested to be included in Arctic Council activities (but perhaps as part of Sustainable Development), and the NIH should become a focal point for reporting health studies to the Arctic Council, including informing the Arctic community of implications for life in the Arctic.

The NIH, and its sister agencies within the Public Health Service (PHS), namely the Centers for Disease Control and Prevention (CDC) and the Indian Health Service (IHS), are pleased to note considerable progress in supporting several programs under the Arctic Council, including both AMAP/Human Health and Sustainable Development.

AMAP Monitoring Program

Although the initial focus of AMAP was on the exposures to, and effects of, anthropogenic pollution, there has been a broadening of its sphere of interest, especially among the Human Health expert group, to include ancillary aspects that are related to the central focus.

The Alaska Native Tribal Health Consortium, which derived from, and closely affiliates with, the Indian Health Service, is sponsoring the Alaska Native Cord Blood Monitoring Program, with the additional financial and moral support of many other Federal, state, and local organizations. Such a monitoring program comprised a "core activity" of AMAP in its first phase, during which the U.S. was not able to participate. Now, however, during the second phase of AMAP, the U.S. is a full partner in the Arctic region monitoring efforts.

AMAP Biomarkers Conference

It is evident that there would be tremendous value in utilizing more sensitive indicators of exposure to, and of the possible adverse effects of, the various anthropogenic pollutants found in the Arctic environment. Applicability of very sensitive "biomarkers" based on genetic or biochemical tests could be expected to advance the research agenda considerably if properly understood and applied. With this in mind the National Institute of Environmental Health Sciences, NIH, is sponsoring the International AMAP-2 Biomarkers Conference, in Anchorage, Alaska, in early May 2000. The conference will bring together Arctic health researchers and experts on the use of biomarkers, with the purpose of achieving cross fertilization of ideas and identifying opportunities.

Emerging and Re-emerging Infectious Diseases

The Arctic Investigations Program of the Centers for Disease Control and Prevention

is contributing to the Human Health research agenda through its program to study emerging and reemerging infectious diseases in the Arctic. This is especially apropos because of the suspected relationship of the adverse health effects of pollution on an individual's resistance to infections (e.g. due to an impaired immune response), especially in newborns, infants, and youth.

Arctic Environmental/Health Database

Under consideration is a proposed computerized database that would incorporate traditional environmental/health knowledge from indigenous Arctic populations as well as available data entries in the National Library of Medicine (NLM, NIH) Medline database. The challenge is how to acquire and codify such traditional knowledge in a machine-readable format. If the project can be implemented, it would include education and training of Arctic populations on the access to, and use of, the database, which would also provide a means of disseminating the activities of the Arctic Council AMAP, Sustainable Development, and other working groups.

Arctic Telemedicine

In support of the Sustainable Development initiative proposed by the State of Alaska, the PHS, which chairs the White House Joint Working Group on Telemedicine, is providing input to the Telemedicine Initiative. NIH components that will be involved include the National Library of Medicine (extramural grants support program) and the NIH Clinical Center (intramural telemedicine project).

Department of the Interior

The U.S. Geological Survey has led the effort by IARPC agencies in the assembly of a data structure for Arctic research. Unfortunately, there has never been a satisfactory funding base for this program. In the past, many IARPC agencies have contributed to this effort but these contributions have faded. Only NSF continues to provide support. The Commission recommends that the USGS and the Department of the Interior accept that this program belongs to them and should be fully supported. The USGS should have the full support of the other IARPC agencies. It is particularly important that an effort be staged to save important earth science data from the former Soviet Union. Much useful data is collected in old paper records which are even more vulnerable now that fuel has become scarce in many places. The Commission has recommended that the NOAA National Data Centers undertake a data rescue project coordinated with the USGS.

The Commission is correct in stating that the data collection effort by the U.S. Geological Survey is not a funded effort. Consequently the U.S. Geological Survey is able to continue this work only as a collateral effort. The latest budget information indicates that this picture will not improve in the foreseeable future. However, the USGS intends to continue this work as best it can and will continue to seek partners to help support the program.

The USGS Water Resources Branch has recently reduced the number of hydrologic monitoring stations in the Arctic. Data from these stations are urgently needed for testing and improving the predictions of large-scale of freshwater runoff in the Arctic. In addition, fresh-water runoff affects the stratification of the Arctic Ocean and the distribution of nutrients, traces, and contaminants brought to the Arctic Ocean from the land. The World Climate Research program—Arctic Climate System Study maintains an Arctic Runoff Data Base for these purposes. The Commission recommends that the USGS

rebuild a strong program of Arctic hydrologic measurements.

The measurement of Arctic rivers and streams has never enjoyed sufficient funding, so there are just two rivers that flow directly into the Arctic that have stream gages in operation. The cost of maintaining a stream gage on an Arctic river that requires helicopter access is prohibitive. Consequently, unless the budget picture improves significantly, it is unlikely that the U.S. Geological Survey can increase the density of gages in the Arctic. However, the USGS will continue to gather as much information as possible and also promote cooperation with other interested parties whenever possible.

Members and staff of the Commission have visited the National Park Service research logistics housing facility at Nome, Alaska. The Park Service is to be commended for this effort and other agencies should consider the Park Service's example as a model to follow.

The Department thanks the Commission for its continuing endorsement of the National Park Service program.

The Fish and Wildlife Service of the Department has been a stalwart in the work of the Arctic Council's working group on the Conservation of Arctic Flora and Fauna. The Commission recommends that other divisions of the Department follow the example of the Fish and Wildlife Service in their support of Arctic Council Activities.

The Department thanks the Commission for its continuing support for the Fish and Wildlife Service's Arctic Council activities.

Department of Energy

The energy needs of Arctic villages in Alaska are extreme. Poor transportation to remote villages, small communities unable to take advantage of the economies of scale usually associated with municipal energy systems, a mixed economy with only modest cash flow, and the lack of a sophisticated technical infrastructure all make the provision of adequate energy resources in the Arctic difficult. The Commission has no specific programs to recommend but will undertake a review of DOE's village energy programs in FY 99. This study will lead to a Commission Special Report with specific recommendations for research and development of appropriate technology for the Arctic.

The State of Alaska faces many unique challenges in helping to ensure that its citizens have access to affordable and reliable electric power. These challenges are particularly evident in rural areas of the state, where electricity is primarily produced by small, expensive, and difficult to operate and maintain diesel power plants. At present the cost of electricity for rural customers is eased somewhat by the availability of the Power cost Equalization (PCE), an electric rate subsidy program administered by the Alaska Department of Community and Regional Affairs (DCRA). However, funds for the PCE are derived from the sale of oil from Prudhoe Bay and are projected to be exhausted in 2000 or 2001, and when that occurs, electricity rates in rural areas could rise substantially. Faced with higher electricity costs, and the potential danger of environmental damages related to the use of petroleum energy in a fragile Arctic ecosystem, various Alaskan entities are now exploring ways in which renewable sources of energy can aid in the production of electric power. To better understand the role that renewable energy can play, the DOE's Wind energy Program is engaged in collaborative efforts with a number of Alaskan organizations at the state and local levels to explore ways in which wind can make a greater contribution in the production of electric power.

The Department of Energy has been an important source of technology transfer to the Russian nuclear power reactor program. Unfortunately, budget reductions threaten this vital activity. The Commission is concerned that the future of U.S. participation is in jeopardy and that in the future nuclear energy production particularly in the Russian Arctic may proceed without the support of the Department of Energy. The budget for interaction with Russia on nuclear power systems should be supported and reinforced.

The concerns of the Commission are noted. The Department agrees that nuclear safety in the Russian Federation remains an important focus of international concern.

The Commission fully supports the activities in the Arctic under the Agency's Atmospheric Radiation Measurement (ARM) Program. The ARM Program is an important research effort and is also an outstanding example of close cooperation between researchers and Native communities and stands as an example for other research programs.

The Department thanks the Commission for its continuing endorsement of the ARM Program.

Interagency Arctic Research Policy Committee (IARPC)

Unfortunately, the current budget stringency has caused the IARPC agencies to become hesitant about Arctic research in the face of the many other demands on their scarce resources. At the same time, however, the national commitment to activities in the Arctic has grown. This is particularly true in the case of the Arctic Council. The Commission recommends that the NSE, in its role as lead agency for Arctic research, call together the IARPC Seniors to agree on a plan of research to support U.S. participation in the Arctic Council which goes beyond the current rhetoric and demonstrates the national commitment to carry on the goals of the U.S. Arctic Policy expressed by the President on 29 September 1994. Since the appropriation of new money to meet these commitments depends on timely consideration of the nation's participation in the Arctic Council, which we currently chair, and the submission of budget requests to allow agencies to meet their responsibilities as member and chair to the Council, it is imperative that the IARPC agencies come to the table with the intention to request and redirect resources to carry out this task.

The biennial revision to the U.S. Arctic Research Plan for 2000-2004, as approved by the IARPC, includes a multiagency focused initiative that is intended to support U.S. participation in the Arctic Council. The Department of State is the lead agency for the Arctic Council. The Department of State has assigned personnel and resources to support the Arctic Council secretariat, although no separate resources were requested to support the research program. Several agencies are conducting research that supports Arctic Council priorities.

On another front, the United States agencies need to update the IARPC plan for a comprehensive study of the Arctic Ocean. While current experiments are important and of high quality, there is no current plan for the study of the Arctic Ocean which provides context for these studies. The National Science Foundation has commissioned the formulation of a strategy for the study of the Arctic Ocean. The other IARPC agencies with responsibilities for research in the Arctic Ocean include Navy, NOAA, USGS, USCG, EPA, NASA and parts of several others. IARPC should organize an interagency meeting of the principal agencies responsible for Arctic Ocean research. The Commission has recommended such a plan in the past and feels even more strongly that an organized

effort is needed given the increasing evidence for rapid and substantial change in the Arctic Ocean. The Commission recommends that IARPC update the 1990 IARPC report "Arctic Oceans Research: Strategy for an FY 1991 U.S. Program" on a multi-agency basis and that this program be submitted to the Office of Management and Budget and the Office of Science and Technology Policy for consideration on a budget-wide basis.

The biennial revision to the U.S. Arctic Research Plan for 2000-2004, as approved by the IARPC, includes a multiagency focused initiative on Arctic Marine Sciences. This is IARPC's update of the 1990 IARPC report "Arctic Oceans Research: Strategy for an FY 1991 U.S. Program."

The Commission also notes their recommendation above the IARPC publish an annual report on Bering Sea research.

The IARPC biennial report of agency accomplishments, to be published in the IARPC journal Arctic Research of the United States (Spring/Summer 2000), will highlight Bering Sea research.

MESSAGES FROM THE HOUSE

At 12:29 p.m., a message from the House of Representatives, delivered by Ms. Niland, one of its reading clerks, announced that the House has passed the following bill, in which it requests the concurrence of the Senate:

H.R. 4986. An act to amend the Internal Revenue Code of 1986 to repeal the provisions relating to foreign sales corporations (FSCs) and to exclude extraterritorial income from gross income.

The message also announced that the House has agreed to the following concurrent resolution, in which it requests the concurrence of the Senate:

H. Con. Res. 327. Concurrent resolution honoring the service and sacrifice during periods of war by members of the United States merchant marine.

At 3:19 p.m., a message from the House of Representatives, delivered by Mr. Hays, one of its reading clerks, announced that the House has agreed to the report of the committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 1654) to authorize appropriations for the National Aeronautics and Space Administration for fiscal years 2000, 2001, and 2002, and for other purposes.

The message also announced that the House has passed the following bill, in which it requests the concurrence of the Senate:

H.R. 4942. An act making appropriations for the government of the District of Columbia and other activities chargeable in whole or in part against the revenues of said District for the fiscal year ending September 30, 2001, and for other purposes.

At 4:31 p.m., a message from the House of Representatives, delivered by Mr. Hays, one of its reading clerks, announced that the House has agreed to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 4516) making appropriations for the Legislative Branch for the fiscal year ending September 30, 2001, and for other purposes.

At 6:08 p.m., a message from the House of Representatives, delivered by Ms. Niland, one of its reading clerks, announced that the House disagrees to the amendment of the Senate to the bill (H.R. 4733) making appropriations for energy and water development for the fiscal year ending September 30, 2001, and for other purposes, and agrees to the conference asked by the Senate on the disagreeing votes of the two Houses thereon. That Mr. PACKARD, Mr. ROGERS, Mr. KNOLLENBERG, Mr. FRELINGHUYSEN, Mr. CALLAHAN, Mr. LATHAM, Mr. WICKER, Mr. YOUNG of Florida, Mr. VISCLOSKEY, Mr. EDWARDS, Mr. PASTOR, Mr. FORBES, and Mr. OBEY, be the managers of the conference on the part of the House.

The message also announced that the House disagrees to the amendment of the Senate to the bill (H.R. 4475) making appropriations for the Department of Transportation and related agencies for the fiscal year ending September 30, 2001, and for other purposes, and agrees to the conference asked by the Senate on the disagreeing votes of the two Houses thereon. That Mr. WOLF, Mr. DELAY, Mr. REGULA, Mr. ROGERS, Mr. PACKARD, Mr. CALLAHAN, Mr. TIAHRT, Mr. ADERHOLT, Ms. GRANGER, Mr. YOUNG of Florida, Mr. SABO, Mr. OLIVER, Ms. KILPATRICK, Mr. SERRANO, Mr. FORBES, and Mr. OBEY, be the managers of the conference on the part of the House.

ENROLLED BILLS SIGNED

The following enrolled bills, previously signed by the Speaker of the House, were signed today, September 14, 2000, by the President pro tempore (Mr. THURMOND):

S. 1027. An act to reauthorize the participation of the Bureau of Reclamation in the Deschutes Resources Conservancy, and for other purposes.

S. 1117. An act to establish the Corinth Unit of Shiloh National Military Park, in the vicinity of the city of Corinth, Mississippi, and in the State of Tennessee, and for other purposes.

S. 1937. An act to amend the Pacific Northwest Electric Power Planning and Conservation Act to provide for sales of electricity by the Bonneville Power Administration to joint operating entities.

At 6:08 p.m., a message from the House of Representatives, delivered by Ms. Niland, one of its reading clerks, announced that the Speaker has signed the following enrolled bills:

S. 1374. An act to authorize the development and maintenance of a multi-agency campus project in town of Jackson, Wyoming.

H.R. 1729. An act to designate the Federal facility located at 1301 Emmet Street in Charlottesville, Virginia, as the "Pamela B. Gwin Hall."

H.R. 1901. An act to designate the United States border station located in Pharr, Texas, as the "Kika de la Garza United States Border Station."

H.R. 1959. An act to designate the Federal building located at 643 East Durango Boulevard in San Antonio, Texas, as the "Adrian A. Spears Judicial Training Center."

H.R. 4608. An act to designate the United States courthouse located at 220 West Depot

Street in Greeneville, Tennessee, as the "James H. Quillen United States Courthouse."

MEASURES REFERRED

The following bill was read the first and second times by unanimous consent, and referred as indicated:

H.R. 4986. An act to amend the Internal Revenue Code of 1986 to repeal the provisions relating to foreign sales corporations (FSCs) and to exclude extraterritorial income from gross income; to the Committee on Finance.

The following concurrent resolution was read, and referred as indicated:

H. Con. Res. 327. Concurrent resolution honoring the service and sacrifice during periods of war by members of the United States merchant marine; to the Committee on the Judiciary.

MEASURES PLACED ON THE CALENDAR

The following bill was read the first and second times by unanimous consent, and placed on the calendar:

H.R. 4942. An act making appropriations for the government of the District of Columbia and other activities chargeable in whole or in part against the revenues of said District for the fiscal year ending September 30, 2001, and for other purposes.

The following bill was read the second time, and placed on the calendar:

H.R. 2090. An act to direct the Secretary of Commerce to contract with the National Academy of Sciences to establish the Coordinated Oceanographic Program Advisory Panel to report to the Congress on the feasibility and social value of a coordinate oceanography program.

ENROLLED BILLS PRESENTED

The Secretary of the Senate reported that on today, September 14, 2000, he had presented to the President of the United States the following enrolled bills:

S. 1027. An act to reauthorize the participation of the Bureau of Reclamation in the Deschutes Resources Conservancy, and for other purposes.

S. 1117. An act to establish the Corinth Unit of Shiloh National Military Park, in the vicinity of the city of Corinth, Mississippi, and in the State of Tennessee, and for other purposes.

S. 1937. An act to amend the Pacific Northwest Electric Power Planning and Conservation Act to provide for sales of electricity by the Bonneville Power Administration to joint operating entities.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. MCCAIN, from the Committee on Commerce, Science, and Transportation, with an amendment in the nature of a substitute:

S. 1534: A bill to reauthorize the Coastal Zone Management Act, and for other purposes (Rept. No. 106-412).

By Mr. MURKOWSKI, from the Committee on Energy and Natural Resources, with an amendment in the nature of a substitute:

H.R. 701: A bill to provide Outer Continental Shelf Impact Assistance to State and