

Interagency Arctic Research Policy Committee

March 1, 2005

Committee Members and Agency Representatives Present: Arden L. Bement, Jr. (Chair), Karl Erb, Charles E. Myers, Thomas Pyle, Scott Borg, and Neil Swanberg, National Science Foundation; George Newton, Jr. (ARC Chair) and Garrett Brass, Arctic Research Commission; John Stubstad, Department of Defense; Sylvia Edgerton and Jerry Elwood, Department of Energy; Natalie Tomitch and Peter Hartssock, Department of Health and Human Services; James Tate and Patrick Leahy, Department of the Interior; Ann Gordon, Department of State; John Berkson, Captain Dennis Holland, and Rear Admiral James Underwood, Department of Homeland Security, U.S. Coast Guard; Jeff Morris and Greg Susanke, Environmental Protection Agency; Waleed Abdalti and Mary Cleave, National Aeronautics and Space Administration; John Calder, Kathleen Crane, and James Mahoney, National Oceanic and Atmospheric Administration; David Trinkle, Office of Management and Budget; Kathy Olsen, Office of Science Technology Policy; David Evans and Igor Krupnik, Smithsonian Institution; Daniel Kugler and Luis Tupas, Depart-

Dr. Arden Bement, Jr., IARPC Chair and Director of the National Science Foundation, convened the meeting at the National Science Foundation in Arlington, Virginia.

National and International Framework for the International Polar Year (IPY)

Dr. Bement introduced Dr. Robin Bell, Columbia University, and Chair of the Polar Research Board, to provide an update on the national and international framework for IPY planning. Dr. Bell reported that the International Council for Science (ICSU) and the World Meteorological Organization (WMO) now officially jointly sponsor International Polar Year activities. U.S. members of an international Joint Committee are Dr. Bell and Dr. Igor Krupnik, Smithsonian Institution.

Dr. Bell discussed the agenda for the next IPY Joint Committee meeting, which includes extensive review of planning activities, review of the IPY Expression of Intent submissions, and development of full proposals.

Dr. Bell reported that 866 Expressions of Intent for IPY activities had been received. The highest percentage (21%) was from the U.S., and 34 other nations are participating. Geographically, the breakdown includes 159 activities proposed for the Antarctic, 483 for the Arctic, 136 bi-polar activities, and 88 non-specific but polar. Dr. Bell also reported on the initial responses by discipline. The Joint Committee is now working to group the Expressions of Intent into programs. A Consultative Forum will provide an opportunity to discuss the next steps and coordination between groups. Updates from the national committees and a discussion of logistics, data, education, and linking activities will be addressed. Full proposals will be requested by June 2005.

The U.S. National Committee is chaired by Dr. Mary Albert. It is a subcommittee of the PRB. It is

serving as a data and information clearinghouse and a coordination point.

The challenge Dr. Bell posed to the IARPC is to help leverage a leading U.S. role in forming the IPY programs, to aid in developing creative partnerships nationally and internationally, and to identify opportunities.

The IARPC members discussed the organization of the projects. The role of the Secretariat was also noted. The Secretariat will select a director for the IPY office, establish IPY web sites, develop the IPY logo, and perform WMO "project office" activities. In the future, the primary role of this office may be to coordinate and facilitate meetings.

Report on Study of Environmental Arctic Change (SEARCH) and International Study of Arctic Change (ISAC) – An Arctic IPY Activity

Dr. Bement introduced the Study of Environmental Arctic Change (SEARCH) interagency program, an Arctic IPY activity, and welcomed Dr. Peter Schlosser, Columbia University, Chair of the Science Steering Committee for SEARCH.

Dr. Schlosser described the SEARCH program as a system-scale, cross-disciplinary, long-term Arctic research program. The Arctic has been characterized in recent decades by a complex of interrelated, pan-Arctic changes occurring across terrestrial, oceanic, atmospheric, and human systems. Observed physical changes have large impacts on Arctic ecosystems and society. SEARCH is interested in the human dimension of change and issues related to local infrastructure, transportation, subsistence activities, coastal erosion, storm patterns, shipping routes, and fisheries.

The overall objective of SEARCH is to understand the nature, extent, and future development of the complex system-scale change presently seen in the Arctic. To meet the main objective, this requires:

- Determining if such changes have happened before;

ment of Agriculture;
Regina Farr and Richard
Voelker, Department of
Transportation.
Guests:
William Colglazier,
National Academy of
Sciences; Peter Schlosser,
Columbia University;
Robin Bell and Chris
Elfring, Polar
Research Board.

- Understanding the evolution of the changes;
- Understanding the forcing mechanisms and feedbacks that control the changes; and
- Understanding the interaction between changes.

The overall SEARCH Strategy, which includes the science plan and implementation strategy, is at <http://psc.apl.washington.edu/search/index.html> and at <http://www.arcus.org/search/meetings/2005/siw/index.php>.

The SEARCH organization includes a Science Steering Committee and an Interagency Program Management Committee. Established components of SEARCH include:

- Arctic/Subarctic Ocean Fluxes (ASOF)
- Bering Ecosystem Study (BEST)
- Freshwater Initiative (FWI).

Dr. Schlosser gave an update on the implementation status for the SEARCH program. The implementation strategy has been published and initial dedicated funding is in place from several U.S. agencies including NSF, NOAA, and NASA. About 43 SEARCH core projects have been funded (20 NSF, 12 NOAA, and 11 NASA). Panels and working groups will meet in May 2005 to write an implementation plan.

Dr. Schlosser briefly reviewed the history of the International Study of Arctic Change (ISAC) program. The ISAC was formed to support the large interest in SEARCH in the international community and to help carry out the SEARCH scope, which is significantly larger than the capability of any one nation to do alone. The Arctic Ocean Science Board (AOSB) and the International Arctic Science Committee (IASC) jointly sponsor ISAC. SEARCH will become a national program under the umbrella of ISAC.

Dr. Schlosser said that IPY would benefit from existing and planned SEARCH and ISAC activities in the fields of Arctic environmental change and

system-scale Arctic observing systems. SEARCH/ISAC can contribute significantly to IPY themes, and IPY could provide platforms for implementation of integrated studies on the international level.

In summary, Dr. Schlosser said the SEARCH science is firmly established, implementation is accelerating, and ISAC planning is well underway. SEARCH and ISAC will provide the structure for long-term science programs that will deliver the knowledge base required for impact assessments.

Potential Agency IPY Activities

Dr. Arden Bement requested the representatives at the IARPC meeting to provide a brief summary of their agency's planning activities. (The complete report of agency IPY planning activities is at Section 2.1, page 11 of this journal).

Comments from the Arctic Research Commission

George Newton, Jr., Arctic Research Commission (ARC) Chair, summarized the Commission's new initiatives. Most recently the ARC has focused on developing more support for SEARCH and for resource assessments in the Department of the Interior.

Mr. Newton noted that the Commission approved four resolutions at their January 2005 meeting:

- The U.S. should have an Arctic ambassador to represent the government at international meetings.
- U.S. Arctic policy should be updated.
- The Commission supports a review of U.S. icebreakers, not just from a research perspective, but as icebreakers also impact issues of homeland security, drug interdiction, and search and rescue.
- The Commission supports enhancing the role of SEARCH in the President's Climate Change Program.

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The following individuals are the principal staff representatives for the Interagency Arctic Research Policy Committee. Additional staff support is provided by the Federal agencies for specific activities through working groups, as necessary.

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