

**Report for UNOLS Arctic Icebreaker Coordinating Committee
July 2004 – October 2004**

The USCGC Healy presently is completing her 2004 field season with her fifth science mission (NOAA Mapping) in the Beaufort/Chukchi Seas. After a port call in early July in Yokosuka, Japan, she returned to the operations area for the second SBI Process Cruise (physical and biological sampling) during July-August. A month long SBI Mooring Recovery cruise was conducted in September, followed by a port call in Provideniya, Russia before beginning the final science mission of the year. All of the science missions to date have been highly successful. The Position and Orientation System (POS MV) that was installed on Healy earlier in the summer has been operating successfully. Problems continue with the Healy's shipboard communications for science (e-mail) but in general the ship's performance has been very good. HEALY is scheduled to return to Seattle on November 8, 2004. HEALY already has a busy schedule for 2005, including a cross Arctic Basin transect in conjunction with the Swedish icebreaker ODEN.

The news continues to be less favorable for the POLAR class icebreakers. POLAR SEA remains at the dock in Seattle with two of her three main engines condemned. If funds are obtained, POLAR SEA will be operational only after two years of repairs. POLAR STAR completed repairs from damages incurred during the 2004 Deep Freeze in Antarctica and is scheduled for her shakedown cruise during October 12-15 with departure to Antarctica for Deep Freeze 2005 on November 1. Ice conditions near McMurdo Station are quite bad this year with fourth-year ice and the potential for icebergs to block the ship channel and to prevent first year ice from being blown north and into the Southern Ocean. The ice is quite thick near McMurdo (~20') as well so that breaking it up, either by icebreaker or through big storms, will be more difficult. The NSF is currently exploring options for leasing a foreign (e.g., Finland, Norway) icebreaker (commercial or otherwise) to assist the POLAR STAR in this mission. The NSF is reluctant to request the HEALY as backup for the POLAR STAR and has not done so at this time. So at the moment, POLAR STAR is going on her own although other options may (need to) develop.

The issue of icebreaker support to break out McMurdo and to conduct research in both polar regions continues to be problematic as the POLAR class icebreakers age and funds for repairs are difficult to obtain. Some hard decisions will have to be made regarding NSF and USCG support of the icebreaker fleet and ship life extension plans for the POLAR class icebreakers. The Coast Guard has commissioned a science mission needs analysis report from Booz Allen Hamilton that should be completed in November, 2004. Many science users contributed to the report either through interviews or through web-based surveys. The NSF and the USCG have asked for assistance from the Office of Management and Budget in renewing the Memorandum of Understanding (covers the breakdown by agency of the costs of operating the ice breakers). Upcoming high-level interagency discussions are planned to review the status and future plans of US Icebreaking Operations.

In addition to monitoring the icebreakers performance and maintenance, several AICC members participated in the Booz Allen Hamilton interviews for the CG science mission needs analysis. The AICC continues to work with the Coast Guard and the science user community to come to a long-term solution for science systems support for the icebreakers. For the past field season, the USCG contracted with a group from Lamont-Doherty Earth Observatory to: (i) integrate new science equipment (e.g., POS-MV), (ii) provide onboard science support during the 2004 field season, (iii) develop protocols for data and metadata archiving, (iv) review and evaluate science operations, and (v) facilitate the transition to long-term science systems support by groups outside of but working closely with the USCG.

Finally, the AICC welcomes our newest member, Rolf Gradinger from the University of Alaska Fairbanks, who moves into the slot vacated by outgoing AICC chair Lisa Clough. Rolf is a specialist in both sea ice and biology and thus satisfies two of our targeted research areas of interest. The next AICC meeting is scheduled to take place November 18th and 19th in Seattle, WA.

The AICC can be reached by writing to the Chair (margo@soest.hawaii.edu) or the the UNOLS Office (office@unols.org).

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