

Report of the DESSC for Summer 2004 UNOLS Council Meeting

Patricia Fryer, Chair

The most recent DESSC meeting was held in Woods Hole, MA, on May 17-18, 2004.

The DESSC membership and nominations for replacements of the chair and three additional members was the first item on the agenda. Nominations and applications were presented and reviewed and several nominees for chair of the committee were discussed. Because additional CVs and statements of interest were needed, voting on new members and the new chair was postponed until later this summer. Agency and UNOLS Reports followed with NSF represented by Dolly Dieter and Mike Reeve, NOAA by Barbara Moore, ONR by John Freitag, and UNOLS by Peter Wiebe. Issues related to budget, funding decisions and impact on facility scheduling were presented

The National Facility Operators Report organized by Dick Pittenger included several of the WHOI Personnel reporting on NDSF Vehicle Operations for both ALVIN and the ROVs as well as issues related to NDSF Support Ships - ATLANTIS and Other Global UNOLS vessel operations. There followed a brief discussion of new security rules. DESSC heard a status report by Dan Fornari on the archiving of all deep submergence data in the WHOI archives, as well as the duplication and frame grabbing of legacy data

It was announced that the new interim Chief Scientist for the NDSF is to be Maurice Tivey. A search for permanent Chief Scientist continues. DESSC also heard about various personnel changes in WHOI Marine Operations. The status of the internal WHOI Access to the Sea Task Force (as related to NDSF) was reported. DESSC next heard presentations regarding upgrades to National Deep Submergence Facility. This included a review of the request for upgrades to science sensors and operational capabilities of NDSF vehicles and the status of the response to Tim Shank's survey of the biological community's needs. DESSC heard discussion on ATLANTIS improvements and of the status of tool sleds and third party tools including the potential compatibility with other deep submergence facilities. The status of the MBARI, WHOI and NSF discussions regarding the ROCK Drill was presented, although the outcome of discussions between the three was not available at the time of the meeting. DESSC discussed briefly the potential for transitioning ABE into NDSF. Although ABE is a highly sought WHOI asset by many who use ALVIN or the ROVs during the daytime, and ABE for night ops, at this time incorporation of ABE into the NDSF is not likely in the immediate future. The Deep Submergence Scheduling for 2005 and beyond was reviewed including a summary of facility requests and identification of funded programs. DESSC discussed potential replacement of Shirley Pomponi, who has stepped down as chair of the Shallow Submergence Science Committee because of increased responsibilities at HBOI. DESSC thanks Shirley for her efforts in this regard and hopes that a future DESSC member will take on the future tasks related to organizing of and advocating for the shallow submergence community.

DESSC discussed issues that are likely to arise in the next 3 years including the replacement of ALVIN, the creation of an inventory of submergence vehicles, assets, tools and samplers and the future of closer linkages among submergence facilities. DESSC also discussed the potential needs for submergence science support for RIDGE2000, the Margins Initiative and seafloor observatories. The UNOLS Working Group Report on observatories is available at <http://www.unols.org/committees/fic/observatory/observrpt.pdf> (4.4 MB). DESSC heard a brief report regarding the efforts toward replacement of ALVIN: including the response to the “New Alvin” proposal and the design status (a NADAC meeting was held immediately following the DESSC meeting). Andy Bowen reported the status of the HROV. A meeting of an HROV advisory committee of scientific users was held the day following the DESSC meeting.

On the second day of the meeting DESSC discussed nominees for DESSC again after having reviewed all the CVs and statements available. Again, the voting on new members must await receipt of all nominees’ CVs and statements. DESSC discussed Winter Meeting strategies and results of the Portland meeting and workshop. The Workshop was favorably reviewed by attendees and provided experienced and potential new users with an opportunity to interact in greater detail with members of the ALVIN Group and the DSOG, The next DESSC Annual meeting is currently planed to be held prior to the Fall AGU meeting on Dec. 12, 2004, San Francisco, CA and the following one is anticipated to be held at the Ocean Sciences Meeting, AGU/ASLO – 20-24 Feb. 2006, Honolulu, HI. The meeting ended with a brief discussion of outreach, education, archeology, and the RIDGE Lectureship Program.

Ship Scheduling Committee Report July 2004

June and July prove to be busy months for the ship scheduling community. As stated in the Spring UNOLS Newsletter a solid start of some of the 2005 large ship schedules was initiated early in 2004, but after receiving newly funded program information the large ship schedules were reviewed once again to determine if more efficient scenarios might fall out. As it turned out the beginning of the year for these large ship schedules remained the same.

Schedulers are now in the process of weaving in newly funded programs to create efficient schedules with minimal transits, but most importantly satisfying the needs of the scientific community. Most of the OCE funding decisions will be known by next week while other programs might not provide funding decisions until later in the coming months. ONR will hopefully provide more solid funding decisions by the July Scheduling meeting.

The large ship schedulers have held several conference calls to evaluate each other's schedules and to identify problems. In the most recent conference call we identified "orphan" cruises or cruises that are funded and have not been listed on a Letter of Intent or that have not been scheduled appropriately. This may be due to weather or ship specific constraints or availability of equipment. This process of conference calling-then schedule editing will continue right up to the July Scheduling meeting and through the summer. Schedulers will also maintain contact with the funded P.I. 's to make sure their scheduled time is appropriate in timing and ship needs.

The intermediate ship schedulers will also conduct conference calls, one conference call for the west coast ships and another for the east coast ships. As with the large ships, they will need to evaluate the work currently listed on the Letters on Intent, identify problems and to possibly reallocate work.

A few scientific programs have been moved from large ships to intermediate sized ships. The following is an example of how this might take place. After sorting through schedules it is determined that only intermediate sized ships will be operating in the area of work requested for a large ship. Schedulers in conjunction with the P.I. and agency program managers must identify if the actual work can be carried out on an intermediate sized ship. If it is possible then adjustments are made accordingly. As we know there are scientific programs that can only be carried out on large ships. In these cases it is probable that the project will have to wait until the following year to be scheduled.

The current goal by NSF and ONR is for approximately 3 months of down time in homeport for the large ships. This proves to be tricky because Schedulers must piece together a schedule that has the ship headed for homeport without wasteful transits. If this proves to be impossible down time may have to be taken at a reasonable non-home port.

The National Science Foundation normally funds just under 3000 days annually. In 2005 they anticipate being able to fund 3200 days, this includes transit, mobilization and demobilization days in ports other than homeport.

Requests for foreign clearances, IHA and EA have been submitted or in the process of being submitted especially for cruises that are to be carried out in the beginning of 2005.

FIC Report to UNOLS Council



July 2004

FIC Projects and Priorities for 2004

Status

- Regional Class Phase III: (To be addressed later in Meeting by Prince/Gardner)
 - SMR Prioritization - complete
 - Stay engaged in acquisition process, and insure community input – ongoing
 - Start thinking of an UNOLS representative for the IPT Oversight Committee.
- Actively participate in the Ocean Class Phase II study – ongoing – (To be addressed later in Meeting by Hebert)
- Encourage the Agencies to update the FOFC plan – FIC will provide recommendations, statistics and other information to FOFC regarding update of the Fleet Renewal Plan. - ongoing

FIC Projects and Priorities for 2004

Status

- **Ocean Observatories:**
 - Incorporated UNOLS working group recommendations into UNOLS Fleet utilization projections. Presented by Peter Wiebe to FOFC in April '04 (see report later in meeting)
 - Initiated discussions with ORION office (i.e., Brink) to determine their timeline – update in October, but too early for detailed (realistic) ship needs' in October.
- **SMRs – Action Items to be initiated**
 - Update all SMR's using some agreed on constraints –
 - Amend Regional and Ocean Class SMR to include ADA requirements
 - Review the “Lessons Learned” and PCA comments. Incorporate as appropriate into the SMR documents

FIC Projects and Priorities for 2004

Status

- Update Global SMRs – ongoing (See report later in Meeting by Hebert)
- Review PCAR feedback to FIC with regard to facility improvements. - ongoing
- Stay engaged in ongoing design and construction efforts (ARRV, EWING replacement, CHRV, etc.)

FIC Projects and Priorities for 2004

Status

KILO MOANA Debriefs

- Continue Debrief Interviews
- FIC sent letter to UH identifying KILO MOANA issues requiring attention – April 2004. No response.
- FIC drafted a table that provides pros and cons of SWATH hull form as compared to a monohull
- Obtain feedback from WESTERN FLYER and KILO MOANA Captains – action item
- Summary of Debriefs – Debrief interviews will be compiled into a summary document.

FIC Membership and Annex IV

- **Two FIC positions open in 2004**
 - **Chris Measures, U. Hawaii – [at-large, 9/04]**
 - one nomination received
 - **Terry Whitledge, U Alaska – [Operator, 9/04]** – Recommended by FIC for a second term.
- **Annex IV** – recommend that it be readopted as written.

**Report for UNOLS Arctic Icebreaker Coordinating Committee
March 2004 - July 2004**

The USCGC HEALY began her 2004 field season on April 30th. She completed recovery and deployment of three Deep-ocean Assessment and Reporting of Tsunamis (DART) moorings in support of the NOAA Real Time Tsunami Warning system in early May. From mid-May until late June HEALY participated in the first of three Shelf-Basin Interaction (SBI) programs. This past weekend she completed a port call in Yokosuka, Japan and presently is transiting back to Nome, Alaska to begin the second SBI survey. During the port call a Position and Orientation System (POS MV) was installed on HEALY, which is undergoing testing during the transit to Nome. There have been some problems with HEALY's shipboard communications for science and the power plants, but generally the ship's performance has been good.

Unfortunately, the news for the POLAR class icebreakers is quite the opposite of the HEALY news. Although both ships were believed to be in reasonably good shape after their southern tours, a detailed examination of the vessels upon their return revealed otherwise. During an official inspection, two out of three of POLAR SEA's engines were "condemned." Although the turbines are still working on SEA, there is no backup propulsion system and therefore she cannot be relied upon to help work in ice. Given the extent and expense of the repairs needed, it is unlikely that POLAR SEA will be able to help support Deep Freeze until the 2007 season. POLAR STAR is in somewhat better shape, but her condition isn't good enough that she could supply Deep Freeze alone in 2005 if there is thick ice around McMurdo. The big icebergs around Antarctica are splintering apart, and it is possible that they may prevent the present first-year ice from being blown into the Southern Ocean. If that happens, a second ship will be required to assist STAR. NSF is currently exploring options for this worse case scenario, including sending HEALY south again or using a foreign icebreaker. Regardless of how many ships are needed to support Deep Freeze, it is highly unlikely that the POLAR class vessels will be used for Arctic science anytime soon.

In short, the "Perfect Storm" scenario that USCG personnel raised concerns about in 2003 has almost arrived. The process of determining whether to replace or refit the POLAR class icebreakers is continuing - a science mission needs analysis report is under development by Booz Allen Hamilton - but at this juncture it is already late. NSF and USCG have been negotiating the costs of icebreakers and have jointly agreed to seek guidance from the Office of Management and Budget to determine which costs should be borne by the operators (CG) and which by the users (NSF, NOAA, etc.).

In addition to monitoring the icebreakers' performance and maintenance, AICC has recently revised and adopted a new Charter that clarifies the committee's function since the HEALY has become available. We have received nine applications from scientists wishing to replace Lisa Clough who cycled off the committee in March; we expect to have selected an eighth member within the next couple of weeks. The next AICC meeting is tentatively 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 to the UNOLS Office (office@unols.org).

Report submitted by M. Edwards