

Report to UNOLS RVTEC Meeting, October 18-20, 2000

NSF (Division of Ocean Sciences)

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**Oceanographic Instrumentation and Technical Services Program**

2001 NSF Budget:

Actual program budgets for FY2001 are not resolved yet, and that process normally isn't complete until early next year. However, as of 10/13/00, it appears that the overall NSF budget has been approved, and it includes a significant increase (13.6% above FY'00 overall for NSF). The NSF budget request for FY'01 was a very ambitious one, asking for 17.3% more than FY'00 overall, and it included even higher percentage increases for Ocean Sciences (22.2%) and the section of Ocean Sciences Division, Oceanographic Centers and Facilities (27.3%), that supports ship and other facilities operations. Thus while we can't say at this point *precisely* what the FY2001 budget will be for support of ship operations, technical services and ocean instrumentation, we can say that we are much more optimistic about the outlook than we were last year at this time. Based on our plans and recent budget actions by Congress, we expect to extend our efforts to improve the capabilities and quality of support available to NSF-funded researchers using the UNOLS fleet.

Personnel Changes at NSF:

2000 has been a year of transition in Division of Ocean Sciences, including changes at all levels in the Division and in leadership of the Geosciences Directorate above us, where Assistant Director Margaret Leinen replaced Robert Corell as AD/GEO in January. Dr. Leinen has, in addition to her responsibilities for Geosciences, a special cross-directorate mandate (new) for coordination of all environmental sciences programs, which includes the new Biocomplexity initiative that has several major cruises on UNOLS ships over the next three years (and more coming, we expect). Our Division Director, G. Michael Purdy, submitted his resignation effective November 30, 2000, to accept the position of Director at Lamont-Doherty Earth Observatory. We anticipate that an Acting Director will be appointed very shortly, and that a search will take place over the coming months, hopefully culminating in selection of a new Division Director by mid 2001. Our Section Head of many years, Donald Heinrichs, retired at the end of 1999, and was replaced by Michael Reeve, formerly Head of the Ocean Sciences Research Section here; the search for Mike's replacement in the Research Section is nearing completion. Larry Clark has been serving in the Acting Section Head capacity until that effort is complete. Also, sometime later this year the research section will be divided into two parts, with a search expected to begin shortly for a Head for the new section, which will include the Marine Geology & Geophysics and Ocean Drilling programs. Within our Facilities group, we have had an unfilled Program Director position since the late 1998 retirement of Richard West, and a search that has been underway for more than a year has finally concluded successfully with selection of Dr. Linda Goad of University of Michigan. We understand Linda will join us in mid-January, and she will work closely with Dolly Dieter on Ship Operations, Shipboard Equipment, and other UNOLS-related responsibilities. We anticipate some further changes in structure and assignments over the coming months as we realign into three sections, but there is unlikely to be much direct impact on those activities that relate to support of the UNOLS fleet operations.

CY2000 and CY2001 UNOLS Ship Schedules

Perhaps more than many years, some uncertainties remain in schedules for CY2001, and these have had particularly big impact on the large and intermediate ship schedules in the Pacific. Though clearly a problem for those directly impacted, one more optimistic view of the scheduling difficulties this year is that it shows increased demand, and continuing growth in use of UNOLS ships by NSF and Navy groups, especially. From NSF's viewpoint, this could be considered surprising, inasmuch as the programs being scheduled for '01 were supported from FY2000 funds, and that was a year of almost no overall growth for our Division. It implies, therefore, that we supported more seagoing programs than in previous years as a percentage of our awards, and with a significant increase in support expected for FY'01, there is reason to be optimistic about continued growth in use of UNOLS time by NSF again in '02 (though no assurance, of course). So overall, we're pleased with the direction things are going, and we're making efforts to look ahead to be sure the necessary facilities support and improvements are in place to support

the research. If there's a downside, it's that the pressures on the scheduling process are stressing the scientists and ship operators pretty heavily this year, and that may continue.

### Various Instrumentation Issues

Robotic Drilling Workshop – Taking place at Texas A&M University November 3-4, 2000, hoping to define scientific and technical requirements for drilling systems, and especially those that can be handled from UNOLS vessels. Bill Martin of UW will represent RVTEC; I will be there as well. Convenor is Will Sager of TAMU; Steering Committee also includes Henry Dick (WHOI), Paul Johnson (UW) and Patty Fryer (Hawaii).

Acoustic Doppler Current Profiler test results – recent tests by Frank Bahr of the new phased array ADCP (75 kHz, RDI) compare these data with 150 kHz narrow band RDI data collected on the same cruise. Data are available on web site at [http://matisse.who.edu/adcp/oceanus\\_os/adcpcomp.html](http://matisse.who.edu/adcp/oceanus_os/adcpcomp.html) and Frank has indicated if anyone would like a CD-ROM of the data, he can provide them on request. You can reach him by email at fbahr@who.edu. In a similar vein, Eric Firing has recently sailed with a 38 kHz RDI PA-ADCP on the Japanese vessel Kaiyo, and will have more info on that later; he was generally pleased with its operation, and has recommended that this system be added to the inventory of instruments on the AGOR-26 presently being built for U of Hawaii. For more info from Eric, you can reach him directly at efiring@soest.hawaii.edu. And finally, there is being planned a further test of the new 75 kHz on R/V Endeavor – for status and details, contact John Freitag at jfreitag@gso.uri.edu.

U.S. Marine Seismic Reflection Acquisition Needs for the Next Decade– Report from the workshop held last fall at Scripps are available by contacting co-convenors Tom Shipley (tom@utig.ig.utexas.edu) at University of Texas or Greg Moore at University of Hawaii (gmoore@soest.hawaii.edu). It is also available online at the Geo-Prose web site, <http://www.geo-prose.com/seis/seis.html>.

### Federal Fleet Plan:

In coordination with ONR and NOAA, NSF is involved in developing a plan for future federal fleet requirements, specifically ship replacement priorities, technology upgrades and future scientific needs. This effort, which was called for last year in the Academic Fleet Review presented to the National Science Board, is intended to serve as a guide in replacing the aging vessels in UNOLS, and to assist in preparing a coordinated voice for the federal agencies involved in ocean sciences research in the area of budget development for building new research ships.

### Technical Services Program: Quality of Service and Training

The Oceanographic Technical Services Program will continue to emphasize personnel training and quality of service in 2001, continuing efforts begun last year based on recommendations of the Academic Fleet Review. As part of this effort, we are beginning a dialogue at this RVTEC meeting regarding standards of service in the UNOLS fleet, and what role RVTEC might have in helping define them. In particular, we seek to get RVTEC to comment on appropriate levels of staffing for support of basic services, as well as minimum and/or optimum shared-use instrumentation capabilities that should be available on UNOLS research vessels (of various classes).