From all members of the UNOLS Community:

Please provide your comments and recommendations regarding the following issues or any other relevant aspects to the overall problem using the <u>form</u> (disabled) below:

Balance between facilities and science budgets

The balance between facilities budgets and science budgets should be examined in order to make recommendations about whether or not the current plan is the right approach. The budget submission states that for the Ocean Science Division, facilities represent 41% of the budget, however another way to examine the balance is to view research fleet operations budgets as a percentage of research and education budgets. The table below shows that science funding was cut drastically in 2005 (partly to pay for 2004 fleet operations) resulting in a higher ratio between fleet operations and science. In 2006 an equally dramatic cut is being applied to fleet operations resulting in a lower ratio than in 2004. What should the balance between these two components be and should changes be made quickly to arrive at a new balance. For example, a more gradual reduction of ship operations costs might make more sense in bringing about a stable balance in this era of reduced and flat budgets. What are your recommendations regarding the balance between facilities budgets and research/education budgets?

References: NSF 2006 Geo-Sciences Budget and NSF 2006 Facilities Budgets

For a list of recent NSF Budget submissions and appropriations go

to: http://www.nsf.gov/about/budget/

Fiscal Year	2004	2005	2006
Research Fleet Operations (includes ship ops, tech, etc.)	72.5	72.2	66.9
Research and Education Grants	194.85	181.64	190.61
Research Fleet Operations as a percentage of Science Funding	37%	40%	35%

Facilities Renewal versus current science and operations budgets

From examining the NSF budget submission for ocean science facilities support it is clear that within a budget that is flat from FY05 to FY06 (\$83.2M), money is being shifted from current operations and maintenance to "new infrastructure." This \$5.3M dollar shift in funds pays for the design efforts for new Regional Class research vessels and other renewal projects such as the Langseth and replacement Human Occupied Vehicle (HOV). This "mid-size infrastructure" was programmed to be

2005 Ad-Hoc Committee to Address the Impact of Budget Reductions of Fleet Operations

funded from the Ocean Sciences division (OCE) funds during a period when NSF and OCE budgets were increasing and this new infrastructure would not come at the expense of existing science or facilities operations budgets. That is no longer the case and it is now necessary to take funding from either science budgets or current operations and maintenance. The community and UNOLS, in particular, have been a strong voice for fleet renewal efforts and have supported the leadership and progress being made by NSF and the Navy in this area. At the same time, budget realities make it necessary to examine the assumptions regarding the allocation of funds for these efforts versus current operations and science funding. Several members of the community voiced strong opposition to the plan to use ONR science funding for new infrastructure and the same arguments may well apply to the NSF budget plans. What is your recommendation with regards to continuing with the current pace of fleet renewal under existing budget constraints?

Academic Research Fleet Funding Profile					
(Dollars in Millions)					
	Implementation	Operations & Maintenance	Total, NSF		
FY 2001	2.30	56.60	\$58.90		
FY 2002	2.30	59.60	\$61.90		
FY 2003	3.00	62.20	\$65.20		
FY 2004	10.00	72.50	\$82.50		
FY 2005 Current Plan	11.00	72.20	\$83.20		
FY 2006 Request	16.30	66.90	\$83.20		
FY 2007 Estimate	19.50	71.00	\$90.50		
FY 2008 Estimate	19.80	73.90	\$93.70		
FY 2009 Estimate	20.80	75.50	\$96.30		
FY 2010 Estimate	21.47	77.39	\$98.85		

NOTE: Operations estimates for FY 2007 and beyond have been developed based on current cost profiles and are not intended to reflect actual budget requirements. They will be updated as new information becomes available.

The effects of lay-ups and retirements on future budgets, operations and scheduling flexibility.

Decisions about lay-ups and retirements will affect the current and future budgets. Lay-ups leave capacity in the fleet that allow for dealing with fluctuating demand, but come at a cost. Vessels need to be maintained so they are safe and effective when brought back into service, retain their inspection and classification certifications and retain their capability for science support. A key element in being able to bring a ship back into service is the availability of experienced and qualified crew. Lay-ups that involve letting crew go run the risk of losing these experienced personnel to other jobs. To some extent this can be mitigated by utilizing crew on other ships within the fleet through cooperation by the ship operators, but extensive lay-ups will always place a burden on our crews and technicians that they may not be able to sustain for long. On the other hand, retirement of vessels will result in the permanent loss of capability in terms of both the ship and its crew. Fewer ships will mean less flexibility in scheduling cruises during periods of peak demand within a year or during a year of high demand. So even if we are in a period of extended low demand, certain times of year or in certain areas fewer ships will reduce our ability to effectively schedule some projects as required or requested. Decisions about lay-ups and retirements should be made taking into consideration these longer term impacts. What are your recommendations with regard to retirement of existing vessels versus temporary lay-ups?

Cost reductions in fleet operations

An examination of costs and operating procedures should be made in an effort to find other ways to maintain existing capabilities and capacity within existing budgets. The cost of fuel, crew, maintenance and new regulations all have an impact on the number of days at sea that can be afforded within the budget. Losing ships and funding to other expenses will have a direct impact on our technicians and crewmembers and they should be consulted about solutions to these budget problems. Looking for ways to mitigate some of the current cost increases such as fuel prices and new regulations should be examined. Supplemental funding for high fuel costs have been received in the past, the use of Navy fuel sources and other solutions may all help keep operating costs down. Relief from some regulatory requirements and costs might be possible and should be examined. Recommendations to NSF and ONR to work with NOPP to find solutions to some of these budget issues will be considered. What recommendations do you have regarding cost reductions?