

UNOLS Mission Statement

The University-National Oceanographic Laboratory System (UNOLS) is an organization of academic oceanographic institutions working in cooperation with agencies of the U.S. Federal Government to ensure broad access to modern, well operated, state of the art research vessels, submersibles and facilities required to support a healthy and vigorous research and education program in the ocean sciences.

UNOLS is an advisory body that provides the mechanisms for coordinated utilization, scheduling and access to research vessels and facilities, co-operation and innovation by facility operators and broad community input to operators and federal agencies regarding current and future facility requirements for the ocean sciences.

UNOLS GOALS

Ensure broad, coordinated access to oceanographic research facilities:

Maintain a system that ensures broad access to research vessels and other facilities and provides for coordinated, efficient and effective scheduling and utilization of those research vessels and facilities.

Work towards continuous quality improvement of existing facilities:

Foster co-operation between facility operators, funding agencies and research scientists with the goal of continuously improving the quality and capability of existing ocean science facilities and the quality, reliability and safety of their operation.

Plan for and foster support for the oceanographic facilities of the future:

Provide leadership and broad community input to the process of planning for and supporting the improvement, renewal and addition of facilities required to support the ocean sciences in the future.

2002/2003 objectives and strategies for achieving UNOLS Goals

1 Access, Scheduling & Utilization (Ongoing Responsibilities)

1.1 Access

- ◆ Ensure systems and information in place to facilitate universal access to UNOLS research vessels and other facilities.
- ◆ Maintain and improve online systems that automate the process of equal access to UNOLS research facilities.
- ◆ Promote broad access to Arctic icebreakers, submersible assets, aircraft and other facilities
- ◆ AICC examine ways to improve expeditionary planning for Arctic science missions on US Coast Guard Icebreakers and other assets.
- ◆ DESSC and Ad Hoc Shallow Science Submergence Committee (SSSC) examine ways to improve access and broaden the user base of submergence facilities.
 - Broaden outreach to biology community
 - Identify and address Shallow Submergence Science Issues
 - Promote Global Initiatives for NDSF submergence facility
- ◆ Establish new committee (SCOAR) to promote access to aircraft facilities in support of ocean sciences.

1.2 Scheduling

- ◆ Create effective and efficient schedules by mid to late September.
- ◆ The ship scheduling committee will work with PI's and agency program managers to identify scheduling issues and funding decisions as early as possible in an effort to solidify schedules by mid to late September, 2003 for CY 2004 operations
- ◆ Every attempt will be made to meet the scientific objectives of all funded projects when creating schedules while at the same time minimizing the costs associated with deadhead transits and un-productive idle time.
- ◆ Create adequate time for maintenance, training and flexibility in schedules for contingencies.
- ◆ The UNOLS Office will work with federal agencies and schedulers to generate clear explanations to PIs of schedule compromises that may become necessary.
- ◆ Potential high-risk cruises will be identified as early as possible in order to plan and schedule these cruises properly. Advice and assistance will be sought from the Office of Naval Intelligence and the State Department.
- ◆ Idle periods will be utilized for maintenance, training and upgrade opportunities whenever possible.

1.3 Utilization

- ◆ Continue to collect data on utilization of Fleet
- ◆ Provide reports to agencies, council, committee and operators as needed for fleet planning and quality improvement
- ◆ Promote utilization by federal agencies and scientific users with non-traditional funding sources to achieve optimum utilization where possible.
- ◆ Recommend lay-ups, retirements and maintenance/upgrade periods as needed
- ◆ Recommend strategies and/or options for effective use of slack periods.

2 Continuous Quality Improvement (Improvements to Existing Facilities and Systems)

2.1 Feedback from Users and Operators

- ◆ Ensure smooth implementation of new Post Cruise Assessment (PCA) form.
- ◆ Eliminate use of previous PCA reports
- ◆ Integration of PCAs with other quality programs such as inspections, internal quality programs and other methods for addressing areas of concern.
- ◆ AICC will continue post-cruise debriefs for Arctic cruises, and will work to include aspects of the new PCA form.
- ◆ Develop a process for Council to review performance based on PCAs.
- ◆ Develop a process for Council (and the working group) to improve the PCA form.
- ◆ Create “standard” reports to Council, Agencies, Operators and Community based on PCAs
- ◆ Assist in the development of clear feedback to Users, Operators and Agencies on improvements and corrections.
- ◆ Develop methods and procedures for documenting and evaluating standards for performance, service and equipment

2.2 Safety & Security Awareness and improvement

2.2.1 Enhance Security awareness and preparedness

- ◆ Improve security and safety training and preparation for safe and secure operation of research vessels.
- ◆ Ensure operators are aware of security issues and information through circulation of security reports from Office of Naval Intelligence and other sources by email and on the security section of the UNOLS web.
- ◆ Support the RVOC security committee in developing methods for improving security preparedness.
- ◆ Include security issues in scheduling and cruise planning.

2.2.2 Safety Standards

- ◆ RVOC complete review and update of UNOLS Research Vessel Safety Standards (RVSS) with assistance from UNOLS office, Updated RVSS will be published in hard copy, on CD and on the web by the end of 2002.

2.2.3 ISM Implementation

- ◆ Class I ship operators will maintain and improve Safety Management Plans under ISM.
- ◆ Insure that the existing ISM approved plans are efficiently maintainable.
- ◆ Continue to create procedures that enable flexible and innovative science operations while maintaining safety standards.
- ◆ Ensure that scientists are aware of any new procedures and requirements.
- ◆ Work to clarify and promulgate safety-related responsibilities of scientific party members. Inform scientists regarding changes and their responsibilities.
- ◆ Develop plans for voluntary compliance or other enhancement of safety standards for smaller vessels.

2.2.4 Medical Support services

- ◆ Maintain support contract to provide Medical Advisory Services to the UNOLS fleet, including opportunities for medical response training, pharmaceutical supplies and other medical services.

2.2.5 Risk Manager services

- ◆ Continue to provide the services of an experienced maritime law expert and risk manager to provide guidance to ship operators and funding agencies as part of the overall effort to operate a safe and secure fleet of research vessels.

2.3 *Improvements to equipment, services and procedures*

2.3.1 RVOC and RVTEC continue to promote cooperation for improvement of facilities, equipment and procedures.

- ◆ Promote group purchases for improved value in new equipment
- ◆ Set standards for equipment and services
- ◆ Ship Operations Co-Operative Program (SOCP) membership for RVOC
- ◆ INMARTEC participation by members of RVTEC

2.3.2 DESSC work with National Deep Submergence Facility operator, agencies and users to promote improvement to facilities, tools and sensors.

2.3.3 AICC work with Coast Guard, ship users and funding agencies to make recommendations for improving equipment, services and science operations on all Coast Guard Icebreakers

2.3.4 SCOAR work with aircraft operators to promote improved facilities, tools, sensors and procedures for airborne support of ocean sciences.

2.3.5 Utilize Post Cruise Assessments and other forms of feedback to identify areas needing improvements.

- ◆ As an example pre-cruise planning has been identified as a significant issue and points out the need to develop an action plan to improve this process on a fleet wide basis using the best practices within the fleet.

2.3.6 Promote adequate funding for implementing improvements and for retaining the necessary supporting personnel

2.3.7 Improve training for operating complex equipment and systems

2.4 *Improve Scheduling, Cruise planning and Information Systems*

- ◆ The UNOLS office will work with the system administrators, Federal Agencies, PI's and ship schedulers to follow up on and implement the recommended changes and improvements to the scheduling and ship time request systems developed during the summer of 2002.
- ◆ Work toward integrating the various separate systems such as ship time requests, schedules, cruise planning documents, foreign clearances, post cruise assessments and utilization reports. Support fleet wide efforts to improve cruise planning processes.
- ◆ Work to clarify and simplify when possible permitting procedures for acoustics and other research that might be impacted by marine mammal & protected species

regulations. Consider setting up a contractor to assist operators with these issues on a fleet wide basis.

- ◆ Work with funding agencies, NMFS, NOAA and Core to develop permitting procedures that exempt routine acoustic instrumentation from permitting requirements and makes permitting for other equipment as straightforward as possible.
- ◆ Maintain current and complete information resources on the UNOLS web site for foreign clearances and other permitting requirements
- ◆ Work with the State Department to update information and procedures for foreign clearances.

3 Plan for Future Facilities (New Opportunities and Facilities)

3.1 Fleet Renewal Process

- ◆ Assist in the implementation of the FOFC fleet renewal plan. Develop a recommended approach to design and construction of new vessels.
- ◆ Promote the budgeting of ship design and construction funds.
- ◆ Continue the development of SMRs for Ocean Class and Regional Class R/Vs and identify regional differences through workshops, community input and follow up by FIC and SMR steering committees.
- ◆ Promote concept design development for new vessels.
- ◆ Support efforts for community input by institutions and agencies currently involved in design and planning efforts such as Univ. of Delaware and the Univ. of Alaska
- ◆ Contribute to the Navy's Scalable Common Hull Study

3.2 Assess the need for and impact of new facilities for Ocean Sciences

- ◆ Monitor and stay engaged with the development of "Ocean Observatories"
- ◆ Examine the possibility of other new uses of research vessels related to observatories and other new observing and sampling instruments such as gliders, AUVs, drifters and other potentially important technologies, including but not limited to nanotechnology, fuel cells, improved batteries.
- ◆ Examine the long-term impacts that Ocean Observatories and other new systems will have on the scheduling process, consider a new scheduling paradigm.

3.3 Development of New Facilities

- ◆ Develop Science Mission Requirements and specifications for oceanographic wires, cables and ropes for the future.
 - Hold a workshop to develop design requirements and specifications for a stronger cable with higher bandwidth to replace or augment .322 CTD cable.
- ◆ Provide community input on the development of new submersible assets and instrumentation for both deep water and shallow water facilities.
 - Participate in advisory role to the NDSF New Submersible Design effort
- ◆ Development of new submergence facilities, sensors, instruments and tools.
 - Consolidate and prioritize the results of workshops and meetings that have identified new instrumentation requirements for submergence facilities and provide mechanism for continuing availability of updated inventory.
- ◆ Improve shipboard scientific equipment through new design efforts and by facilitating group purchases and community development of standard specifications to increase performance, efficiency and cost savings.

3.4 Promote public and government awareness

- ◆ Showcase ocean science accomplishments and needs and the subsequent impact on the need for facilities
- ◆ Maintain web site with valuable information for scientists, operators and the public.
- ◆ Promote and advertise educational information from research cruises and projects
- ◆ Maintain a good working relationship with CORE and other oceanographic organizations and agencies
- ◆ Provide requested information to Congress, NORLC, FOFC, The Oceans Commission, Agencies and others as needed.