

# Major Issues and Guiding Principles for UNOLS 2005-2006

- Vision
- Mission
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- Goals
- Important issues and objectives

# UNOLS Vision and Mission Statements

- ***Vision*** - A healthy and vigorous United States research and education program in the ocean sciences requires broad access to the best possible mix of modern, capable and well-operated research vessels, aircraft, submersibles and other major shared-use facilities.
- ***Mission*** - UNOLS provides a primary forum through which the ocean science research and education community, research facility operators and the supporting Federal agencies can work cooperatively to improve access, scheduling, operation and capabilities of current and future academic oceanographic facilities.

# What the UNOLS Charter says

- The UNOLS Charter was originally adopted in 1972 and serves as the bylaws and guiding document for operation of the organization. The introduction and objectives underscore the overall purpose of UNOLS

# 1. INTRODUCTION

*Recognizing the need for coordinated use of federally supported oceanographic facilities, the community of academic oceanographic institutions, which use and operate those facilities, by virtue of this Charter, do hereby establish an organization of academic oceanographic institutions. The organization shall be named the University-National Oceanographic Laboratory System (UNOLS). UNOLS is solely an advisory body. Execution and enforcement of its recommendations are matters for member institutions and for agencies, which fund the construction and operation of UNOLS facilities.*

## 2. OBJECTIVES

- *An objective of UNOLS is to coordinate and review the access to and utilization of facilities for academic oceanographic research, and the current match of facilities to the needs of academic oceanographic programs. UNOLS makes appropriate recommendations of priorities for replacing, modifying or improving the numbers and mix of facilities for the community of users. Another objective is to foster federal and other support for academic oceanography, thereby continuing and enhancing the excellence of this nation's oceanographic program. Emphasis is placed on ships and other seagoing facilities.*

# Goals

- ***Promote broad, coordinated access to oceanographic research facilities (access)***
  - Maintain a system and procedures that facilitate and promote broad access to research vessels and other major ocean science facilities.
  - Support coordinated, efficient and effective scheduling of research vessels and facilities.
- ***Support continuous improvement of existing facilities (improvement)***
  - Foster co-operation among 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 (planning)***
  - Provide leadership and facilitate 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.

# 2005/2006 Important Issues and Objectives

- **Fleet Renewal** - Support the implementation of existing FOFC plan, vessel design efforts and funding for new ship construction.
- **Facilities Improvement Planning** - Update the UNOLS Fleet Improvement Plan with respect to the current and projected status of other major facilities and with respect to the interaction between fleet renewal and fleet midlife refits etc..
- **Scheduling** - Make the best use of existing vessels, in light of financial limitations and prior commitments restricting ship availability in 2006 and beyond and look at the possibility of new scheduling paradigms.
- **Communications** - UNOLS is in a unique position to communicate between the scientific user, support facilities, and funding agencies. UNOLS should strive to improve communications and interactions between these three groups regarding major facility issues
- **Facilities improvement** - Promote and assist with planning for new types of facilities for ocean sciences such as ROVs, AUVs, Aircraft, UAVs and observatories.
- **Permitting** - Support efforts for improving the processes for obtaining permits related to research cruises.

# 2005/2006 Important Issues and Objectives

- **Education and Outreach** - Support and promote shipboard capabilities to facilitate public education and outreach by scientific users, educators and facility operators.
- **Balancing the impacts of increasing costs** – work with the community to establish the appropriate balance between available resources and the level of support required to support quality operations.
- **Regulatory Impacts** - the burden in time and money imposed by new regulatory requirements with regard to safety, security, conservation, and environmental impact have affected the cost and capabilities of ships in the UNOLS fleet. Work with the funding agencies to find support, resources and relief with regard to these requirements including the facilitation of cooperative UNOLS-wide solutions wherever possible.
- **Personnel - Technical and Marine** - finding, recruiting and retaining qualified, technically literate personnel to operate our ships and instrumentation is an increasing challenge for the member institutions, which needs to be addressed cooperatively by UNOLS institutions, agencies and the maritime/technical training industry.



A wide-angle photograph of a sunset over the ocean. The sky is a deep, dark blue, with wispy white clouds scattered across it. The sun is low on the horizon, creating a bright, golden glow that reflects on the water's surface. On the left side of the image, a faint rainbow is visible, its colors blending into the sunset light. The water in the foreground is dark blue with gentle ripples.

End

# Set the agenda for the coming year

- These guiding principles will help us keep on track for the coming year.

# Fleet Renewal

- Support the implementation of existing FOFC plan, vessel design efforts and funding for new ship construction. Many of the ships in our fleet are aging and the resources to replace those ships are needed now.

# Facilities Improvement Planning

- Update the UNOLS Fleet Improvement Plan in order to assess the current and projected status of the Academic Research Fleet and other major facilities, detail the scientific facility requirements of the future based on recently published documents and make recommendations in support of the review and update of the FOFC renewal plan and for additional research vessels and facilities that may be required including icebreakers, aircraft, submergence vehicles and seismic vessels.

# Scheduling

- Make the best use of existing vessels, particularly in light of the cutback in ship availability in 2006 (and likely to continue in 2007) due to increasing costs and decreasing ship operations support budgets.

# Communications

- RVTEC believes that UNOLS is in a unique position to communicate to the scientific user, support facilities, and funding agencies. UNOLS should strive to improve the communications and interactive support between these three groups. Issues such as funding levels, regulatory measures, understanding of ship and technician capabilities and how these issues affect each of the three groups and ultimately the overall science missions should be better disseminated between the three groups.

# Facilities improvement

- The UNOLS community is going to need more high-tech access to the sea. Assess the need and start the planning necessary to bring additional ROVs and AUVs into the suite of facilities available to support new research initiatives such as observatories.

# Permitting

- support efforts for improving the processes for obtaining permits and clearances related to cruises.



# Education

- Support and promote the capabilities on our ships to facilitate public education and outreach efforts by scientists, educators and facility operators. The public feels part of NASA missions in a way that is not currently the case for oceanographic expeditions. The recent attempts to bring real time oceanography to the public are laudable, but too expensive to be done on a routine basis. Can UNOLS change that?

# Increasing Costs

- One trend over the last 10 years, but accelerating in the last 2-5 years, is an expectation for ships and shipboard technician groups to provide more and more services and support for increasingly expensive and complex instrumentation. This is not necessarily a bad thing, but increased mission requirements generate higher costs. Other factors such as increased fuel prices and increasing regulatory and training requirements have greatly escalated the cost of ship operations. With the current budget difficulties in the federal agencies, the financial resources are not as readily available for continually escalating service levels. Maintaining safe and high quality operations costs money and trying to do more with less can lead to problems in the long-run. Finding the right balance between available resources and the level of support that can be provided should be a UNOLS focus along with promoting the allocation of sufficient resources to support quality operations.

# Regulatory Impacts

- The increasing burden in time and money being imposed under new regulatory requirements for safety management, security, and pollution response are impacting the cost and capabilities of more and more ships in the UNOLS fleet. Advocating for support, resources and relief for these requirements as well as facilitating cooperative solutions is an important role for UNOLS.

# Personnel-Technical and Marine

- Finding, recruiting and retaining qualified, technically literate personnel to operate our platforms and instrumentation is increasingly a challenge for the member institutions. Technicians with the skills required to operate and maintain data acquisition networks, multi-beam sonars, seismic profiling equipment, remote-sensing suites, chemical analyzers and the plethora of other essential components of these facilities have numerous well-paying opportunities that can be pursued ashore. Similarly, a 'perfect storm' has formed in the area of maritime personnel recruitment: The current population of merchant mariners is graying with an average age in the low fifties, the U.S. flag merchant marine has shrunk to relative insignificance on the world ocean (meaning that the job opportunities are few and far between), and the new STCW regulations--while arguably improving professionalism and safety--have had the unintended side effect of choking off the entry level for new seafarers who, in the past could sample the lifestyle and work before deciding whether or not to invest in thousands of dollars worth of training. The ability of the UNOLS operators to field and support future expeditions could be impacted by these serious industry-wide challenges.

# Flexibility in scheduling

- Allow responses to episodic events through some amount of excess capacity and flexible scheduling procedures. The overall contribution by such storm or seismic events to long term signals requires both continuous (Ocean Observing) and responsive (Fleet) observations. The already scaled back nature of the UNOLS fleet has hampered the scientific community's ability to properly study these events. Providing this capability should be considered as part of scheduling and fleet renewal discussions.

# UNOLS Overview

- UNOLS is an organization of 61 U. S. institutions that have academic research and education programs in the ocean sciences and an interest in promoting the best possible national shared use facilities to support these programs. Twenty-one of the UNOLS institutions are operators of these major shared use facilities, including research vessels, submersibles, aircraft and major instrumentation. Facilities are owned either by one of the Federal agencies or by individual institutions. UNOLS serves in an advisory role to the facility operators and to the supporting Federal agencies, and as a coordinator or facilitator of community-wide efforts directed toward scheduling, access, and improvement of existing facilities, and planning for future facilities.