

AICC Meeting



UNOLS Report
November 2003

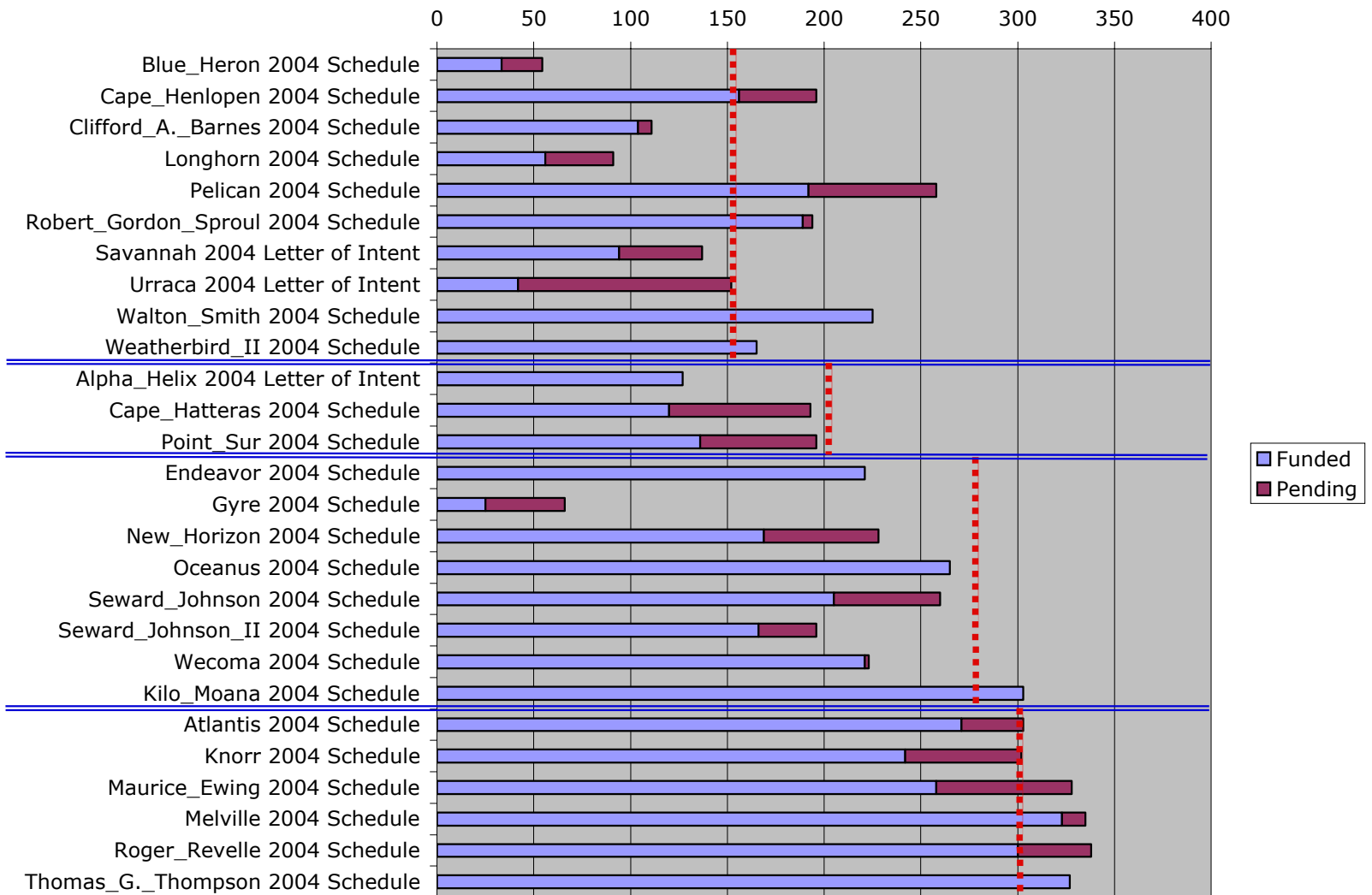
UNOLS Top Ten Issues

- Fleet Renewal - Implementation of FOFC plan, concept designs and funding for new ship construction.
- Observatories - Assess the needs and impacts of observatory systems with respect to facilities, ships, submersibles and aircraft.
- Scheduling improvements - Improve systems and results to maximize access to facilities.
- Quality Improvement - Use Post Cruise Assessments as core of quality improvement plans
- MMPA/ESA Permitting - facilitate compliance and cruise planning.
- Icebreaker renewal - service life extension and science system improvements for POLAR Class icebreakers.
- Integrated Facilities planning - plan for ships, submersibles, aircraft, observatories and instrumentation through a systematic and coordinated approach.
- Outreach and Education - bring the knowledge of ocean science research to the public along with an understanding of the facilities needed to support that research.
- Standards of Service - set standards for facilities, instrumentation and service.
- Submergence vehicle renewal - develop the tools to enhance access for submergence science.

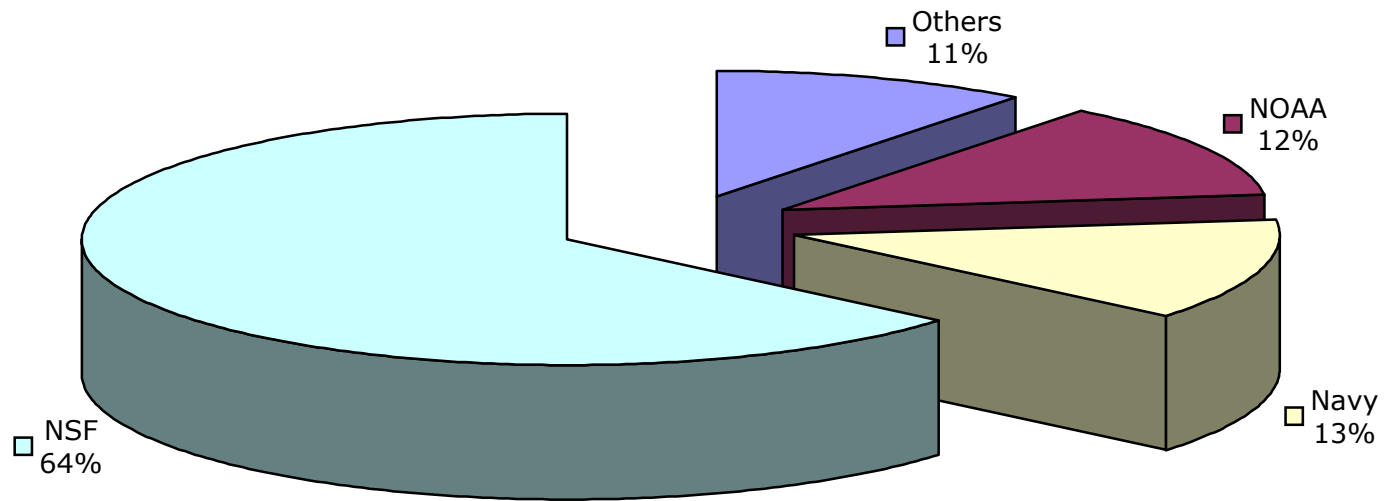
Scheduling Improvements

- New software
- Collaborative Web Conferencing
- New database
- Tougher scheduling environment
 - High demand in peak periods
 - Multi-Ship and Multi-PI projects
 - High demand for specialized facilities
 - Tight fiscal environment

2004 Schedules



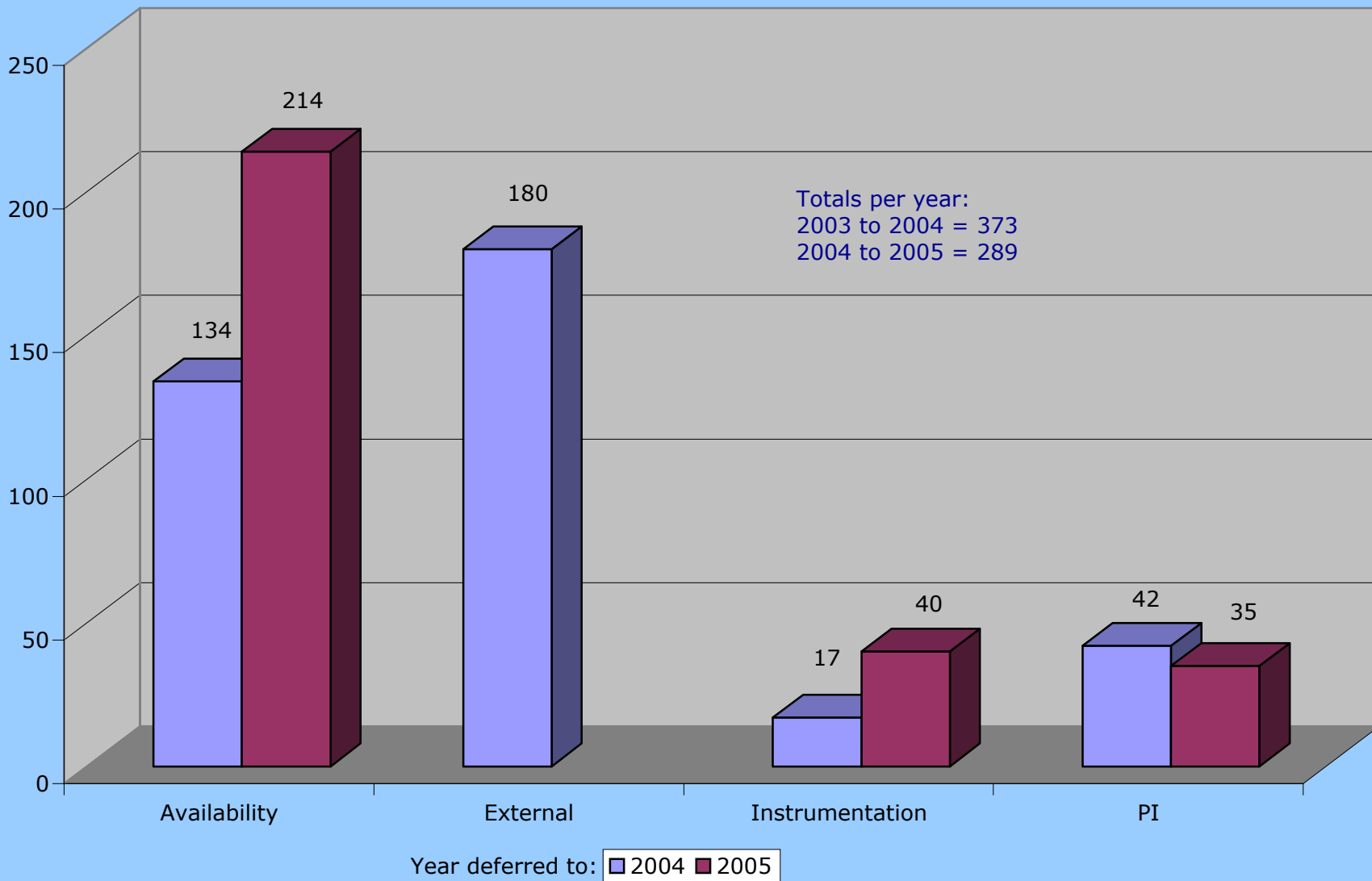
Percent of 2004 Ops by Agency



Fleet Utilization Trends



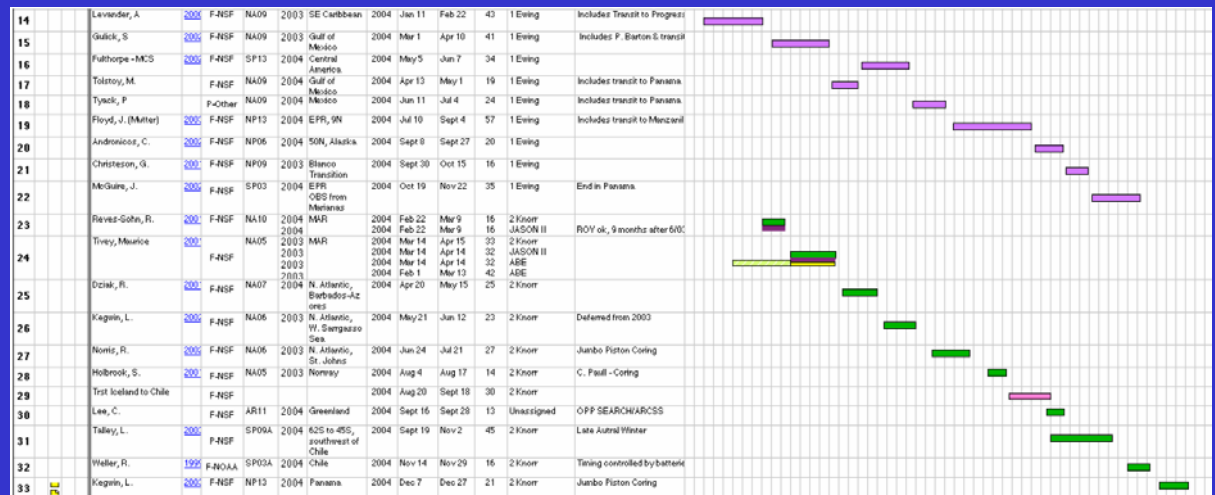
Deferred Cruises



New Scheduling Software

- Bar Napkins
- FastTrack & MS Project

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.



Collaborative Web Conferencing

- PictureTalk Web Conferencing

The screenshot shows a web browser window titled "PictureTalk v4.3 - Powered by Pixion". The address bar displays "http://meetings.picturetalk.com/picturetalk/main.jsp". The browser's address bar includes search engines like Google and various bookmarks. The main content area features a blue header for the "UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM" with contact information for the UNOLS Office in Moss Landing, CA. Below the header is a navigation menu with tabs for "Meeting", "Account", and "Set-up". Under the "Meeting" tab, there are sub-tabs: "SCHEDULE", "CALENDAR", "ARCHIVE", "ELAPSED", "CREATE", "ATTEND", and "LOGOUT". The "Meeting Schedule" section is active, showing a table of "Current Meetings". The table has columns for "In Progress", "Key", "Meeting Topic", "Date / Time", "Details", "Send Invite", "Attachments", "Playback", and "Delete". A single meeting is listed with key "wxpt6798" and topic "My Perpetual Meeting". The interface also shows "seat usage: 0" and "license: 5".

UNIVERSITY-NATIONAL OCEANOGRAPHIC
LABORATORY SYSTEM

UNOLS OFFICE
MOSS LANDING MARINE LABS
8272 MOSS LANDING RD.
MOSS LANDING, CA 95039

PHONE: (831) 771-4410 FAX: (831) 632-4413

Meeting Account Set-up

SCHEDULE CALENDAR ARCHIVE ELAPSED CREATE ATTEND LOGOUT

Meeting Schedule

Current Meetings
(click on meeting to join)

seat usage: 0 license: 5

| In Progress | Key | Meeting Topic | Date / Time | Details | Send Invite | Attachments | Playback | Delete |
|-------------|----------|--------------------------------------|-------------|---------|-------------|-------------|----------|--------|
| | wxpt6798 | My Perpetual Meeting | | | | | | |

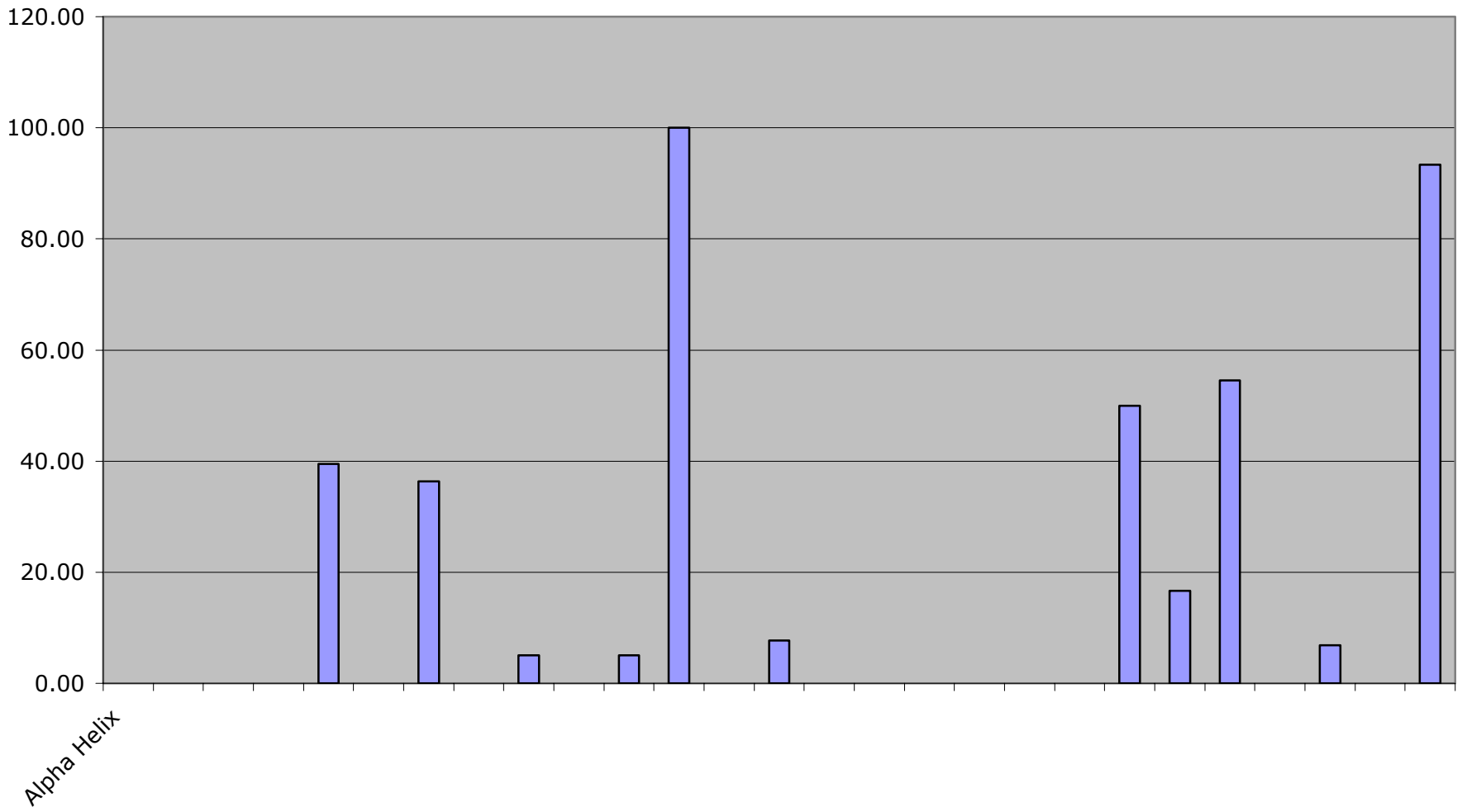
Delete

Quality of Service Subcommittee on Post Cruise Assessments

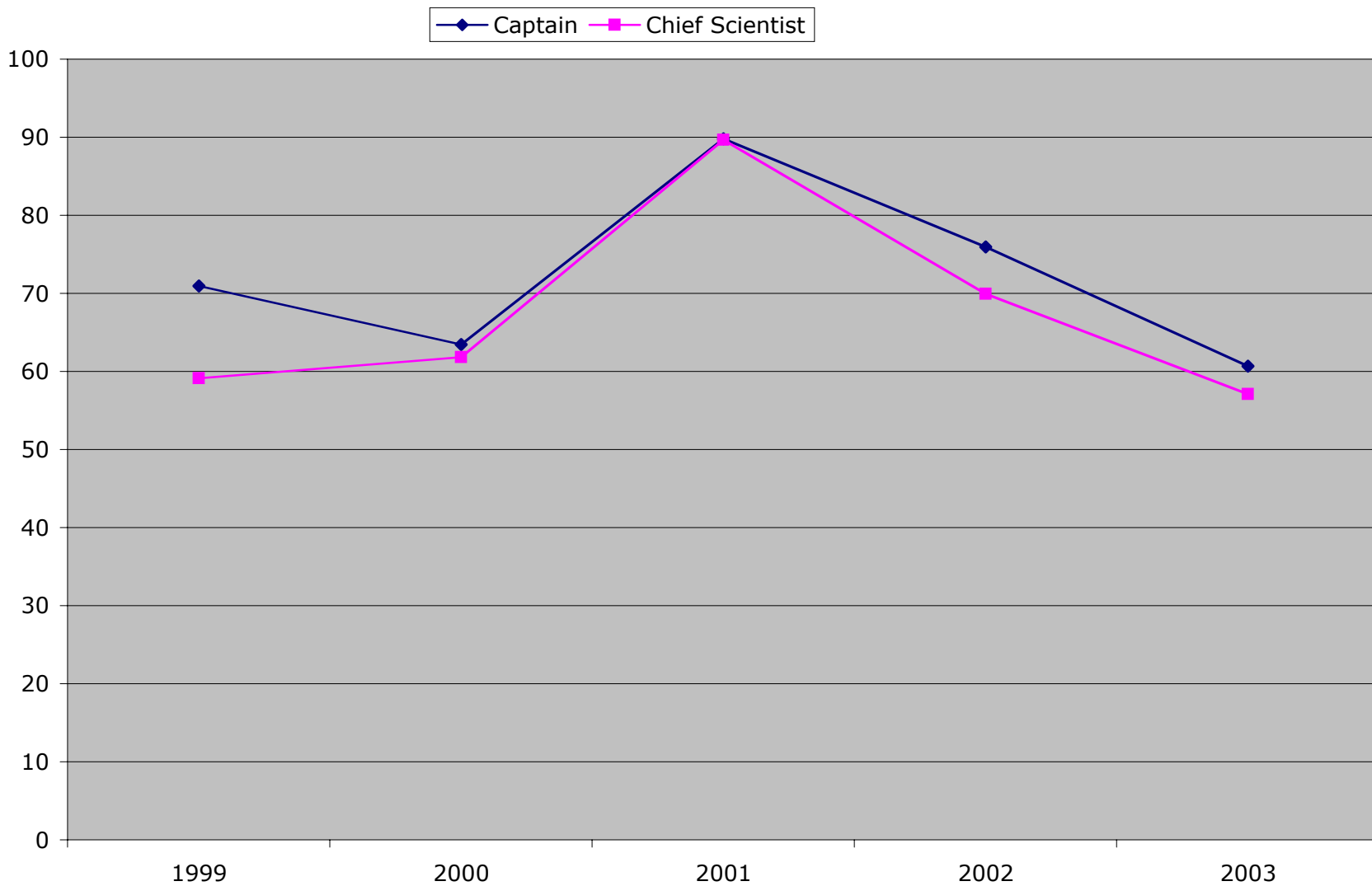
- The Sub-Committee reviewed a subset of the new post cruise assessments to evaluate how well the form addressed issues of quality improvement.
- The new form is a big improvement and is providing valuable feedback.
- They have made some observations that will be used to refine the charge to the Sub-Committee, help to define the role of the UNOLS Council.
- They will consider whether or not to make recommendations for improving the form.
- The rate of return from Chief Scientists is still hovering near 60% and should be increased to get the full benefit of this assessment system.



% Return by Marine Technicians for 2004 cruises through 11/10/03



Percent Return for Post Cruise Assessments 1999 - 2003 (thru 11/10)



New Cable Project

- Posted Draft Functional Requirements for review
 - http://www.unols.org/wire/Cable_Functional_req.html

UNOLS Scientific Committee for Oceanographic Aircraft Research (SCOAR)

SCOAR is a new UNOLS committee, established in September 2002, which seeks to promote collaboration and cooperation between research aircraft operators, funding agencies and the scientific community to improve the availability, capabilities, and quality of aircraft facilities supporting the ocean sciences.

Visit the SCOAR website at: <http://www.unols.org/scoar/>

First UNOLS National Oceanographic Aircraft Facility:
Center for Interdisciplinary Remotely-Piloted Aircraft Studies (CIRPAS)



Federal Aircraft Facilities and Information Brochure:
<http://www.oma.noaa.gov/pdffiles/fedairbrochure.pdf>

SCOAR Committee Members

| Name | Institution | Email |
|---------------------------------|--------------------------------------|-------------------------|
| John Bane (Chair) | University of North Carolina | bane@unc.edu |
| Ken Melville | Scripps Institution of Oceanography | kmelville@ucsd.edu |
| Charles Flagg | Brookhaven National Laboratory | flagg@bnl.gov |
| Daniel Riemer | University of Miami, RSMAS | driemer@rsmas.miami.edu |
| Bob Bluth (ex-officio) | CIRPAS, Naval Postgraduate School | rtbluth@nps.navy.mil |
| Hafliði Jonsson (ex-officio) | CIRPAS, Naval Postgraduate School | hjonsson@nps.navy.mil |
| John Seinfeld (ex-officio) | California Institute of Technology | seinfeld@caltech.edu |

One-page flyer
describing SCOAR
mailed with federal
research aircraft
brochure this month

UNOLS Scientific Committee for Oceanographic Aircraft Research (SCOAR)

SCOAR is a new UNOLS committee, established in September 2002, which seeks to promote collaboration and cooperation between research aircraft operators, funding agencies and the scientific community to improve the availability, capabilities, and quality of aircraft facilities supporting the ocean sciences.

Visit the SCOAR website at: <http://www.unols.org/scoar/>

First UNOLS National Oceanographic Aircraft Facility:
Center for Interdisciplinary Remotely-Piloted Aircraft Studies (CIRPAS)



Federal Aircraft Facilities and Information Brochure:
<http://www.oma.noaa.gov/pdffiles/fedairbrochure.pdf>

SCOAR Committee Members

| Name | Institution | Email |
|---------------------------------|-------------------------------------|-------------------------|
| John Bane (Chair) | University of North Carolina | bane@unc.edu |
| Ken Melville | Scripps Institution of Oceanography | kmelville@ucsd.edu |
| Charles Flagg | Brookhaven National Laboratory | flagg@bnl.gov |
| Daniel Riemer | University of Miami, RSMAS | driemer@rsmas.miami.edu |
| Bob Bluth (ex-officio) | CIRPAS, Naval Postgraduate School | rtbluth@nps.navy.mil |
| Hafliði Jonsson (ex-officio) | CIRPAS, Naval Postgraduate School | hjonsson@nps.navy.mil |
| John Seinfeld (ex-officio) | California Institute of Technology | seinfeld@caltech.edu |

One-page flyer
describing SCOAR
mailed with federal
research aircraft
brochure this month

SCOAR website

SCOAR

- Held 2nd Meeting in Arlington, 10/14 & 15
- Providing input to Observatories planning groups
- Providing guidance to CIRPAS and funding agencies on how to make aircraft more accessible for ocean scientists.

Looking Ahead

- Communicate with science community about SCOAR activities and interests
- Interact with NCAR-OFAP and ICCAGRA
- Determine scheduling and funding practices for NOAF aircraft
- Define basic instrument suite for ocean science
- Consider roles for research aircraft in ocean observing initiative

Marine Mammals and Acoustic Permitting Issues

- NSF and NMFS consulting regarding the requirements and procedures to be followed.
- LDEO handling requests for IHA permits for EWING and LDEO portable systems
- SIO would do the same for their portable systems
- Lead for other permitting action not as clear
- Guidance from NMFS on acoustic thresholds that would require consultation or complete permitting action are expected in the near future.

UNOLS Chair & Office Staff



Tim Cowles
541-737-3966

office@unols.org
831-771-4410



Kate



Annette
401-874-6827



Mike



Dennis
401-874-4184



Laura

Fleet Improvement Committee

**Activities, Plans and
Recommendations**

FIC and Fleet Renewal Activities (2002/2003)

- **SMR Development:**
 - Ocean Class (version 1 posted)
 - Regional Class (Version 2 posted)
 - Global Seismic Ship (posted for community review and feedback)
- **Review of ongoing Design efforts:**
 - ARRV, CAPE HENLOPEN Replacement, EWING Midlife workshop/vessel tour (letter of endorsement)
- **Regional Class Phase II Study**

FIC Activities

(ongoing and planned)

- **Implementation of Fleet Renewal - major focus.**
- **Recommend an update to the FOFC Fleet Renewal Plan**
- **Provide feedback to agencies regarding Regional Class Phase II study and acquisition process**
- **Continue to review and advise on Ship Design and Construction Efforts**
- **Continue KILO MOANA Debrief Activities**
- **New Ship Design Issues**
- **Ocean Observatory Facility Needs**

KILO MOANA

- **Continue FIC Debrief Interviews of KILO MOANA Chief Scientists**
- **FIC will provide information to the University of Hawaii on items/issues that are identified by the debrief interviews**
- **Recommend that a ship motion analysis of KILO MOANA be supported.**
- **FIC will review debrief interviews with respect to the monohull versus SWATH hull characteristics**

New Ship Design Efforts

- **Ensure that new issues/regulations are considered in future design efforts:**
 - **Homeland Security**
 - **Handicap Access**
 - **Noise**
 - **Broadband Communications**
- <http://www.mlml.calstate.edu/unols/fic/smr/whatwelearned.html>
- **Recommend that the UNOLS Post Cruise Assessment Subcommittee provide feedback to FIC in respect to shipboard capabilities and equipment improvements.**

FIC Membership Changes

- **Outgoing FIC Chair – Larry Atkinson (ODU)**
- **New Chair – David Hebert (GSO/URI)**
- **New Members:**
 - **Ronald Benner (USC)**
 - **Newell Garfield (SFSU)**

UNOLS Working Group on Ocean Observatory Facility Needs

- Formed in early 2003. Alan Chave appointed as Chair.
- Study areas:
 - Deep ocean seafloor observatories Deck handling and mooring deployment/recovery needs
 - ROV and AUV requirements
 - Mapping requirements
 - Coastal observatory requirements (including aircraft)
 - Vessel characteristics, possible improvements, and recommendations for new vessel designs

The Working Group Draft Report is expected to be available soon for community review and feedback.

Ocean Observatory Working Group Preliminary Recommendations:

Improvements To UNOLS Vessels:

- **Shroud Z-drive nozzles to protect props from cables**
- **Install redundant DP systems to improve reliability during critical ops.**
- **Increase deck space on UNOLS Large ships**
- **Consider installation of stronger A-frame/heavier winch combinations to increase load handling ability to 20,000 lb static**
- **Major safety issue--requires trained crew not UNOLS-standard science party plus resident technician**

Consider the acquisition or long term lease of a heavy lift vessel (cable repair or equivalent)

Ocean Observatory Working Group (continued)

ROV Support Recommendations

- Routine access to ROVs will be required for all observatory operations
- 1 additional vehicle will be required when the OOI is implemented (2-3 y from now)
- 1 more vehicle will be required when OOI facilities are fully operational (5-7 y from now)
- Commercial ROVs are not suitable for most science operations but may be usable for routine maintenance tasks

A photograph of a sunset over the ocean. The sun is low on the horizon, creating a bright orange and yellow glow that reflects on the water's surface. The sky is filled with various cloud formations, including wispy cirrus clouds and denser, darker clouds. The overall scene is serene and captures the beauty of a coastal sunset.

Deep Submergence Science
Committee Activities
2003

Spring DESSC Meeting WHOI June 11-12, 2003 Discussion Items

- **NDSF Chief Scientist replacement**
- **2002/2003 Operations and Requests for 2004 and beyond**
- **Upgrades to Jason 2 and DSL-120 - Field tests completed**
 - **1st science programs successful**
 - **(Fryer used Jason 2 at 6500 m)**

Spring DESSC Meeting

Discussion Items (continued)

- **Upgrades to NDSF sensors and tools**
- **Scheduling issues: effects of demand for ROVs**
- **New ALVIN Design Study - discussion of various design parameters and a trial of observer and view-port placement**

Biology Outreach Efforts

- **DESSC Annual Meeting to be held at the 2004 Ocean Sciences Meeting, AGU, Portland, OR - January 25, 2004**
- **ASLO Special Session will be held in Honolulu February, 2004**

DESSC Outreach to other disciplines and the public

- **Nontraditional fields (marine archeology educational efforts)**
- **Lectureship program in association with RIDGE2000**
- **IMAX movie and outreach activities**
- **Discovery Channel series**

OSB's Committee on Future Needs in Deep Submergence Science

- **Task Summary:**
 - **Assess the continued role of human occupied vehicles in deep submergence science.**
 - **Make recommendations regarding the mix of new facilities needed.**
 - **Discuss innovative design concepts and technological advances that should be incorporated into any new submersibles.**

NSB Committee on Future needs of Deep Submergence

- **First public meeting: May 2003 at
WHOI: Presentations by Sub users**
- **Second public meeting: June 2003 in
San Francisco**
 - **Potential research at greater depth**
 - **Potential ROV/AUV development**
- **Third meeting (committee only)**

Draft report is currently in review