

### **UNOLS Report**

RVOC - 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.

### Fleet Renewal

# Fleet Improvement Committee

Activities, Plans and Recommendations

## FIC and Fleet Renewal Activities (2002/2003)

- SMR Development:
  - Ocean Class (version 1 posted)
  - Regional Class (Version 1 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
- Recommend that the UNOLS Post Cruise
   Assessment Subcommittee provide feedback to
   FIC in respect to shipboard capabilities and equipment improvements.
- Lessons Learned feedback from all experienced crew, scientists, operators, technicians.

### FIC Membership Changes

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

### Observatories

## 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 UNOLSstandard science party plus resident technician

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

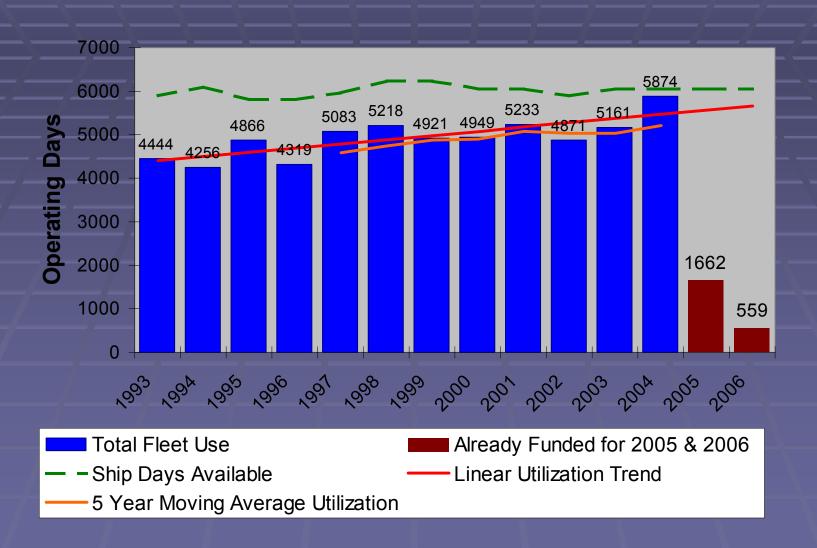
### Ocean Observatory Working Group (continued) ROV Support Recommendations

- 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

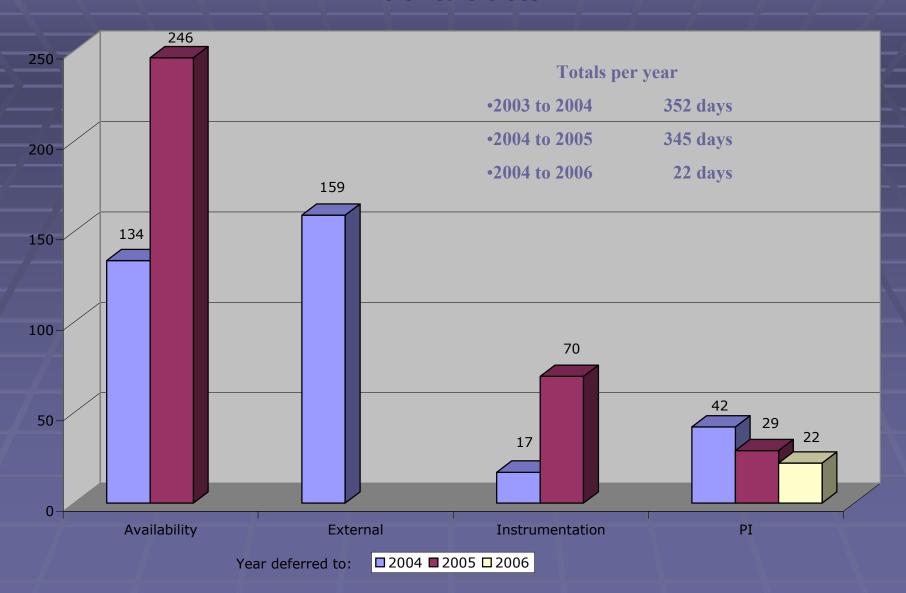
#### Scheduling Improvements

- 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

#### Fleet Utilization Trends

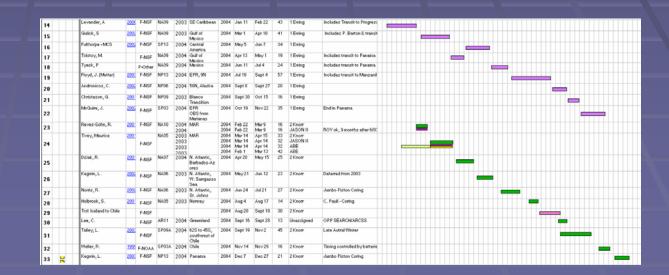


#### **Deferred Cruises**



#### New Scheduling Software

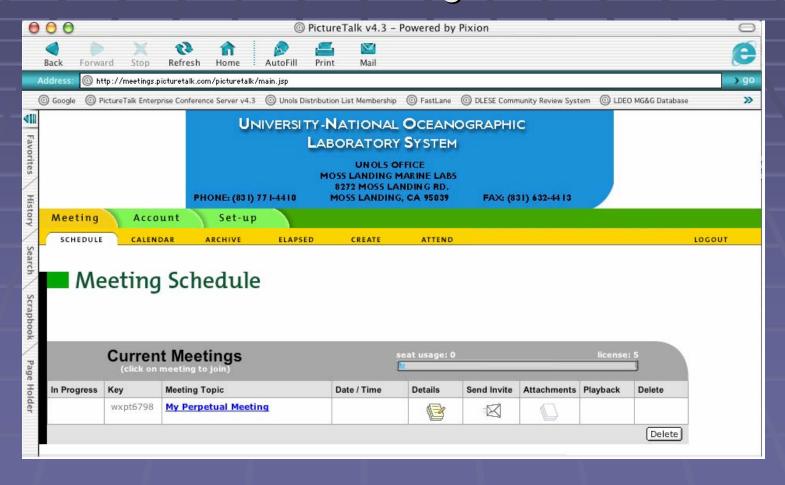
- Bar Napkins
- FastTrack & MS Project



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## Collaborative Web Conferencing

PictureTalk Web Conferencing



### **Quality Improvements**

# 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.

### MMPA/ESA Permitting

## 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.

#### Icebreaker Renewal

Will be covered in AICC report

#### Integrated Facilities Planning

This is a goal that will be the focus of FOFC and UNOLS as we address more and more facility requirements that will compete for the same dollars.

#### **Outreach and Education**

- This goal should be integrated in all that we do.
- UNOLS should support and promote these efforts on the part of PI's and Facility operators
- Outreach page on UNOLS website and other's websites.

#### Standards of Service

Will be covered in RVTEC report

#### Submergence Vehicle Renewal



# 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

### Welcome, Al Suchy

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#### **UNOLS Chair & Office Staff**

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