

University-National Oceanographic Laboratory
System

UNOLS Report to DESSC



November 9, 2006

2006 UNOLS Council Elections

UNOLS Elections:

- Chair - Marcia McNutt (MBARI)
- Chair Elect – Vernon Asper (USM)
- Immediate Past Chair – Peter Wiebe (WHOI)

2006: Issues, Activities, and Accomplishments

- ✍ Briefed the Naval Research Advisory Council on "What is UNOLS"
- ✍ Provided input to the FOFC Fleet Renewal Plan
- ✍ Created Marcus Langseth Science Oversight Committee
- ✍ Produced UNOLS Informational Brochure
- ✍ Initiated discussion on Codes of Conduct - The Impact of Scientific Studies on the Environment
- ✍ Established Procedures for Recommending Non-operational periods in the UNOLS Fleet.

Non-Operational Periods - Findings:

1. The shortfall in funding for the UNOLS fleet is not a short-term issue.
2. The under funded situation of the UNOLS fleet is unlikely to be rectified in the near future.
3. While NSF support for the fleet has, until recently, supported a nearly constant number of operating days, Navy and NOAA support has been gradually declining.
4. The under-funded situation for the UNOLS fleet could potentially become even worse as new larger ships replace the intermediate and regional ships.
5. The most funding for science field programs can be preserved with cold lay-ups or Early retirements
6. OOI facility requirements should be considered

Non-Operational Periods - Values:

1. Meeting Science Needs
2. Geographic Availability
3. Cost of Operations
4. Quality of Operations
5. Sharing the Pain
6. Diversity of Operators

Who should develop the substantive recommendations?

- ✍ The recommendations, using the above criteria, should be made by the Agencies to a subcommittee of UNOLS Council consisting only of members from non-ship-operating institutions.
- ✍ Within 30 days the subcommittee will conduct their review and then provide a response back to agencies after vetting their response through the full Council.
- ✍ The subcommittee will seek input from and share the recommendations from the Agencies with UNOLS ship operators, the Council, and any other interested parties.

2007

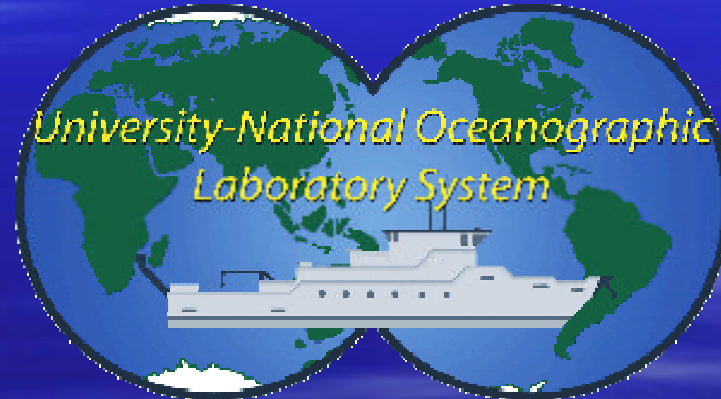
2007 UNOLS Operating Days by Agency



2007 Agency Response and Process

- ✍ Agencies endorsed process
- ✍ Would like to give this process a trial run for the 2007 operations
- ✍ UNOLS has formed a subcommittee to review and respond to the Agency recommendations

UNOLS Committee Activities



November 9, 2006

Fleet Improvement Committee

- ✍ **Fleet Renewal Activities:** - Regional Class, ARRV, Ocean Class
- ✍ **Ocean Observatories – ORION and IOOS**
- ✍ **Global Science Mission Requirements (SMRs) Update**
- ✍ **American's with Disabilities Act (ADA) Guidelines**
- ✍ **Fleet Improvement Plan (FIP)**

Fleet Renewal Activities

- **Regional Class Acquisition Status**
 - Two design teams selected
 - RFP for first operator working through NSF system - release soon?
- **Alaska Region Research Vessel Status**
 - RFP for construction and operation Released on October 31.
- **Ocean Class Acquisition Status**
 - Navy conducted study on their involvement in UNOLS.
 - NRAC recommended 2 (instead of 4) Ocean Class ships built by Navy.

General Purpose Global Vessel SMRs



2006 - *THOMPSON*



2011 - *REVELLE*



2012 - *ATLANTIS*

 **Community Survey – *Input needed!***

<http://www.unols.org/committees/fic/global/GCSMR_Survey_Form.asp>

Fleet Improvement Plan Status

 Review Project Website:

http://www.unols.org/committees/fic/Fip05/FIP2005_Outline.html

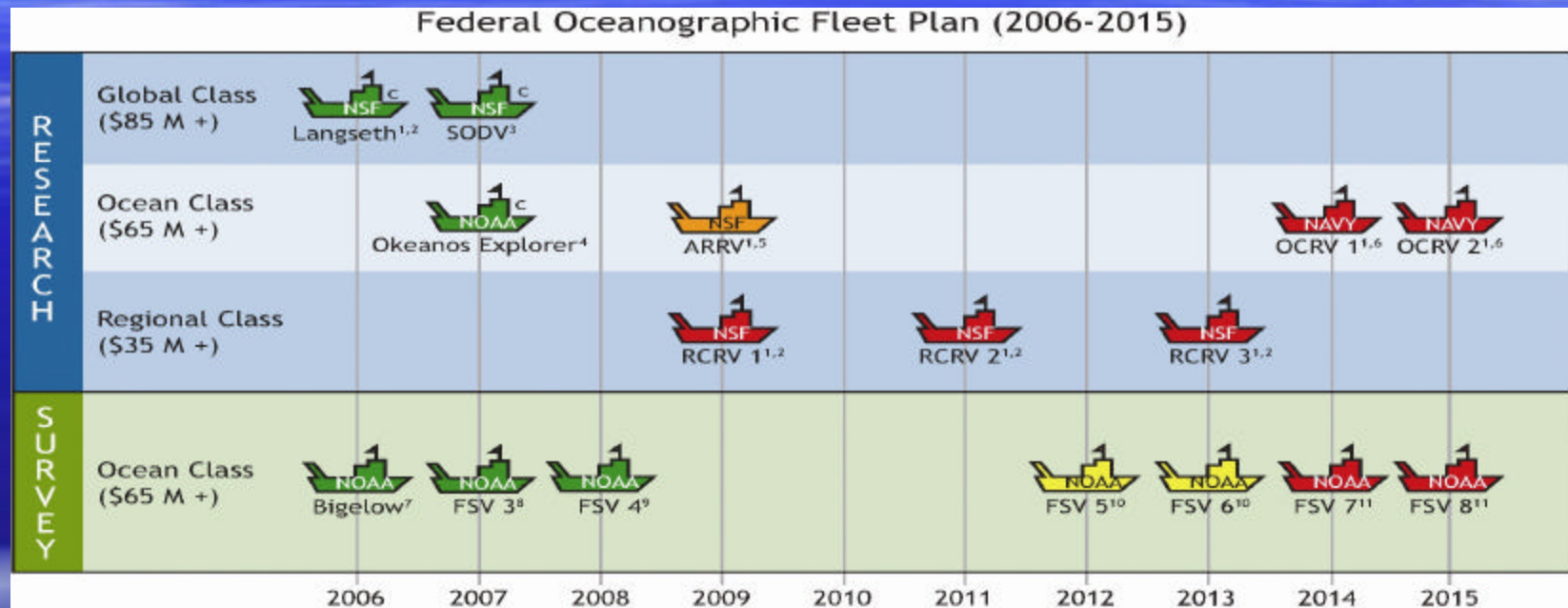
 Reclassification of UNOLS ships

 FIP document is being drafted:

- Future Science Initiatives – most draft sections available
- Projections and recommendations – being revised and updated
- Phone conferences planned.

The Federal Oceanographic Fleet Plan

Planned Renewals



¹ It is anticipated that the operator will apply for status as a UNOLS vessel

² Construction/acquisition/conversion funded through NSF Division of Ocean Sciences budget

³ FY 2005 and FY 2006 appropriation for conversion; FY 2007 President's Budget for conversion funds

⁴ FY 2005 Appropriations for vessel conversion, operating funds in FY 2007 President's Budget

⁵ FY 2007 President's Budget for Year 1 construction funds through NSF MREFC account

⁶ Vessels planned by Navy

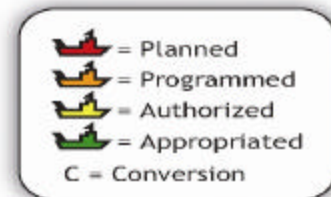
⁷ FY 2007 President's Budget for operating funds

⁸ FY 2005 appropriations for vessel construction

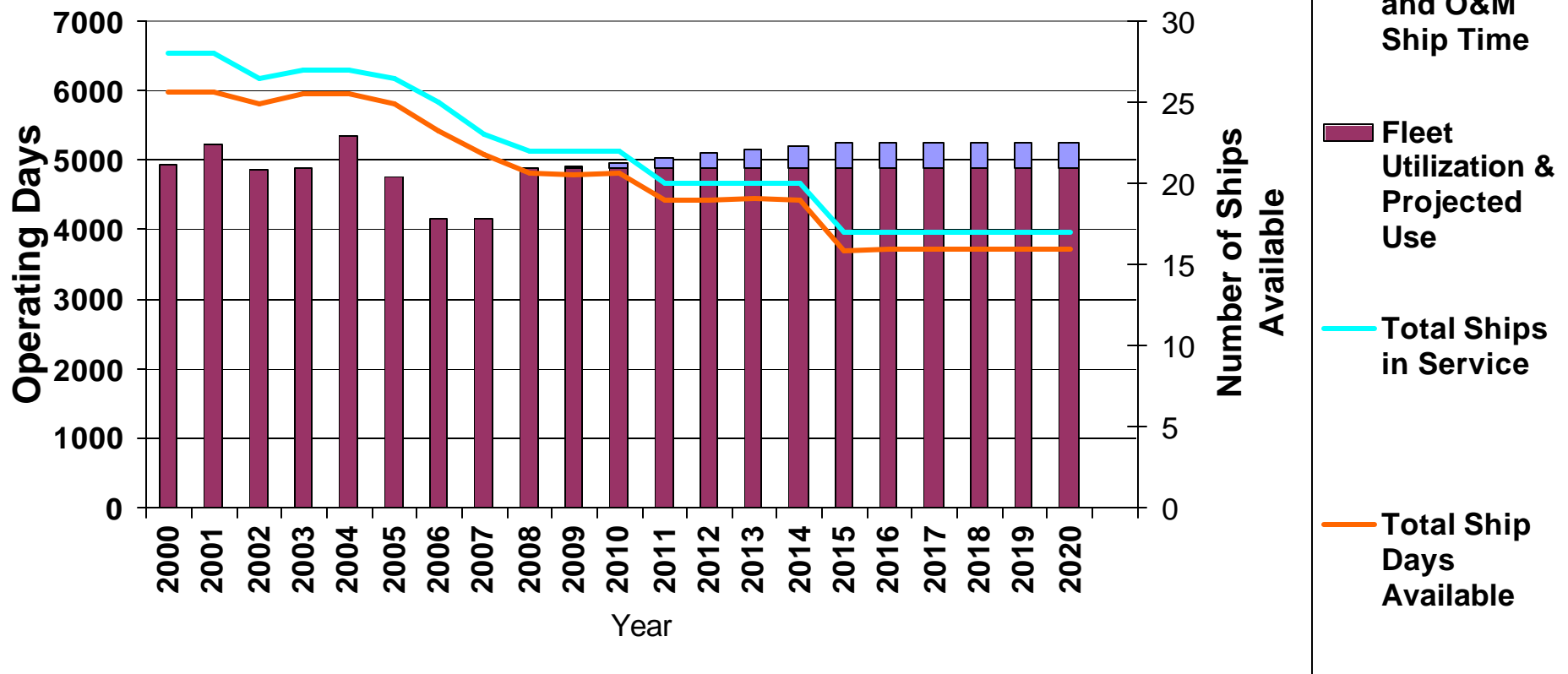
⁹ FY 2006 appropriations for vessel construction

¹⁰ Public Law 106-450 "Fisheries Survey Vessel Act of 2000" dated November 7, 2000 authorizes up to six fishery survey vessels

¹¹ FY 2008-2012 NOAA internal agency planning documents



UNOLS Fleet Utilization and Projections (2000 - 2020)



New Projection with 2 Ocean Class Ships

Current Fleet vs. 2020 Fleet

Current UNOLS Fleet (>40m)					2020 Fleet		
Class	Number of Ships	Total # Science Berths in 2005	Days Available	Avg Op Days Used (03-06)	Number of Ships	Total # Science Berths (1)	Available Days
Global	6	199	1800	1494	4	130	1200
Ocean	1	30	275	250	4	106	1100
Intermediate	5	104	1250	1497	0	0	0
Regional	4	61	800	422	4	80	800
Fleet Total	16	394	4125	3663	12	316	3100

Notes: 1) Berths: Ocean Class = 25, *Kilo Moana* = 30, ARR V = 26
Regional = 20

Americans with Disabilities Act (ADA) Guidelines for Research Vessels

Background:

- ✍ NSF indicated the need for new ship construction and ship conversion efforts to address ADA requirements.
- ✍ Vessels that support Federally funded academic research should be equipped and arranged as feasible to accommodate persons with disabilities.
- ✍ In turn, procedural guidelines to carry out shipboard operations by persons with disabilities are needed.

Committee Membership:

- ✍ Terry Whitley (UAF) – Chair, FIC Member
- ✍ Sea going scientists with and without disabilities, Ship Captain, RVTEC rep, and Marine Superintendent

Establish ADA Guidelines for new ship construction/conversion.

- ✍ ADA guidelines for UNOLS Vessels consider:
 - The various vessel classes/sizes
 - The nature of the disability (hearing, vision, and mobility).
 - Levels of compliance.
- ✍ Drafted preliminary ADA Guidelines for the Regional Class acquisition effort. – Submitted to NSF on 10 June 2006
- ✍ First Draft General ADA Guidelines was made available - 13 Sept 2006
- ✍ Final draft – end of year.

ADA Procedural Guidelines for at-sea research operations

The guidelines consider:

- ✍ Shipboard mobility and access areas
- ✍ Research operations
- ✍ Evacuation / safety procedures

Recommendations will be incorporated into the R/V Safety Standards

ADA Community Workshop September 18-19

- ✍️ A workshop was held at WHOI including a visit to the R/V *Knorr* to learn the challenges faced by the disabled.
- ✍️ 25 attendees with a broad representation.
- ✍️ Reviewed draft ADA document.
- ✍️ Incorporate workshop recommendations into ADA report to UNOLS Council.

2006 Icebreaker and AICC Activities



- ✍ 2006 – 4 *Healy* science cruises planned, 2 completed
- ✍ Encouraging early communications between science parties and local native communities.
- ✍ December 2006 – Icebreaker Retreat

Polar Sea

✈ Will conduct Deep-Freeze 2007 with *Oden*

Polar Star

• “Caretaker Status” at USCG Seattle Base



Key Findings of the NAS Report - Sept. 27:

“National interests...require that the US immediately program, budget, design, and construct two new polar icebreakers to be operated by the USCG”

RVTEC/INMARTECH 2006

✍ RVTEC – October 16

✍ INMARTECH Symposium - October 17-19

✍ Hosted by Woods Hole Oceanographic
Institution

✍ Nine Technical Sessions

✍ About 120 participants from about 12
different countries

SCOAR Report



- 1) May 2006 - First Airborne Ocean Science Conference at MLML
 - About 35 aircraft ocean/atmospheric scientists attending.
 - Continue with this conference about every two years.

- 2) The next SCOAR meeting will be within the next several weeks and will take up the topic of a community survey of needed and desired airborne sensors.

Marcus Langseth Science Oversight Committee

- ✍ Committee Formed - W. Steven Holbrook, U Wyoming (Chair)
- ✍ Visited R/V *Marcus Langseth* while in Nova Scotia Shipyard
- ✍ A brief meeting may possibly be held at the fall AGU
- ✍ First Official meeting – Galveston, TX, Feb/Mar 2007, at the ship

END