



UNOLS –MLSOC Early Career Workshop
Saturday December 7th, 2013
JW Marriott
San Francisco, CA

JON ALBERTS
UNOLS Executive Secretary



History of UNOLS

- **Stratton Commission Report Published 1/9/1969**
- **Recommendation for the National Oceanographic Laboratories, (NOLS) to be a partnership with federal agencies and academic institutions, (NOAA and Sea Grants also recommended)**
- **University labs agreed with goals, but opposed excessive federal control**
- **Joint Group of University & Federal Administrators worked out another approach with University Control on community wide ship access, cooperative ship scheduling, standardized ship operations, uniform funding arrangements as an association of labs designated as UNOLS**

History- What lead up to the creation of UNOLS?

- Investigators from non-operating labs were seeking a positive means of gaining access to ship time, even adding new ships to each lab.
- Federal Agencies, (NSF, ONR) concerned over increasing costs, differing modes of operations, funding & concern over adding more ships.
- University ship operators concern over higher ship costs and increasing ship numbers
- No centralized ship scheduling or coordination



UNOLS in a Nutshell

UNOLS today is an organization of 59 U.S. institutions with ocean science programs

- 15 of the UNOLS institutions are facility operators that include:
 - 19 Research vessels,
 - National Deep Submergence Facility,
 - National Oceanographic Aircraft Facility, and
 - National Oceanographic Seismic Facility.
- Facilities are either owned by one of the Federal agencies or by individual institutions.
- Elected Council & 9 major committees (volunteers)
- **UNOLS Office**

UNOLS Today

- UNOLS is a staff of 5 full time people, 1 part time maritime lawyer/risk manager and 1 part time programmer.
- UNOLS is federally funded, operating under a competitive agreement award.
- NSF, ONR, NOAA, BOEMRE, USCG, USGS
- Moves every 5-10 years to other UNOLS member institutions

UNOLS Mission Statement



“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.”



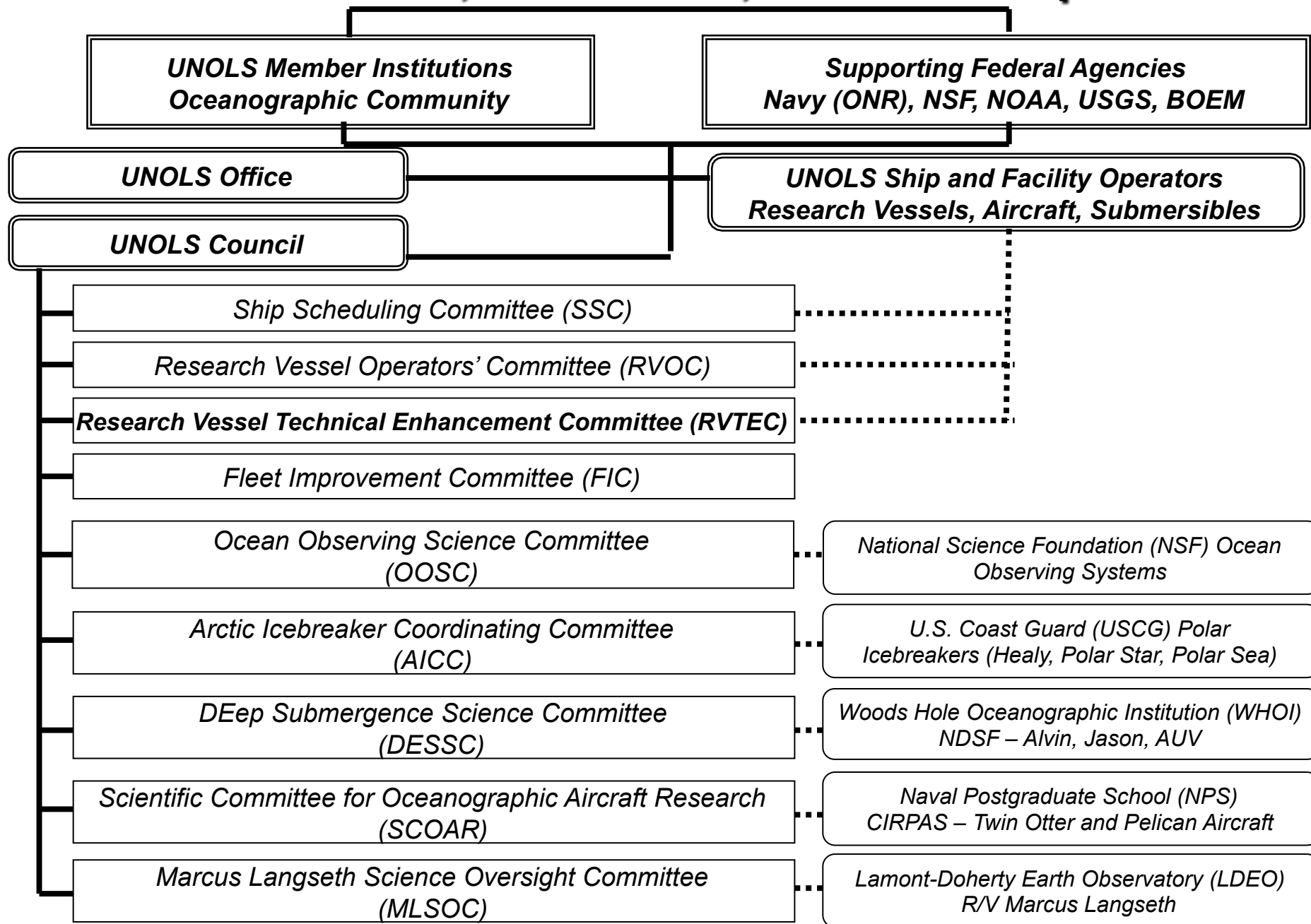
UNOLS Goals

UNOLS is a coordinator or facilitator of community-wide efforts with these goals:

- *Promote broad, coordinated access to oceanographic research facilities*
- *Support continuous improvement of existing facilities*
- *Plan for and foster support for the oceanographic facilities of the future*

UNOLS IS NOT A FUNDING AGENCY

UNOLS: Council, Committees, and Federal Sponsors



UNOLS Fleet

SHIP/CLASS	BUILT	Conv/ Mid Life	Owner	Operator	LOA m (ft)	Science Berths
Global Class						
<i>Melville</i>	1969	1992	NAVY	SIO	85 (279)	38
<i>Knorr</i>	1969	1989	NAVY	WHOI	85 (279)	34
<i>Thomas G. Thompson</i>	1991		NAVY	UWash	84 (274)	36
<i>Roger Revelle</i>	1996		NAVY	SIO	84 (274)	37
<i>Atlantis</i>	1997		NAVY	WHOI	84 (274)	37
<i>Sikuliaq</i>	2013		NSF	UAF	80 (261)	24
<i>Marcus G. Langseth</i>	1991	2007	NSF	LDEO	72 (235)	35
Ocean/Intermediate Class						
<i>Kilo Moana</i>	2002		NAVY	UHawaii	57 (186)	29
<i>Endeavor</i>	1976	1993	NSF	URI	56 (185)	18
<i>Oceanus</i>	1975	1994	NSF	OSU	54 (177)	18
<i>Atlantic Explorer</i>	1982	2006	BIOS	BIOS	52 (170)	20
<i>New Horizon</i>	1978	1996	SIO	SIO	52 (170)	19
Regional Class						
<i>Point Sur</i>	1981		NSF	MLML	41 (135)	12
<i>Hugh R. Sharp</i>	2005		UD	UD	45 (146)	14
Coastal/Local Class						
<i>Robert Gordon Sproul</i>	1981	1985	SIO	SIO	38 (125)	12
<i>Pelican</i>	1985	2005	LUMCON	LUMCON	35 (116)	14
<i>Walton Smith</i>	2000		Miami	Miami	29 (96)	13
<i>Savannah</i>	2001		UG/SKID	UG/SKID	28 (92)	19
<i>Blue Heron</i>	1985	1998	UMINN	UMINN	26 (86)	6
<i>Clifford Barnes</i>	1966	1984	NSF	UWash	20 (66)	6

NOTE: *Sikuliaq* will enter service in 2014

 UNOLS Homeport Location





Global Class



Marcus G. Langseth



Atlantis



Knorr



Roger Revelle



Melville



Thomas G. Thompson



Ocean/Intermediate Class



Oceanus



Atlantic Explorer



Kilo Moana



Endeavor



New Horizon



Regional Class



Hugh R. Sharp



Point Sur



Coastal/Local Class



Pelican



Robert Gordon Sproul



F.G. Walton Smith



Clifford A. Barnes



Blue Heron



Savannah

UNOLS National Oceanographic Facilities

In addition to the UNOLS Fleet, there are 3 specialized UNOLS Oceanographic Facilities.

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



Pelican OPV



Altus ST UAV



UV-18a 'Twin Otter'

UNOLS National Deep Submergence Facility



DSRV Alvin



AUV Sentry



ROV Jason II

UNOLS National Oceanographic Seismic Facility



Marcus G. Langseth

New Research Vessels



R/V Sikuliaq: Sikuliaq is an Inupiaq name meaning "young sea ice" or "young sea ice that is safe to walk on."

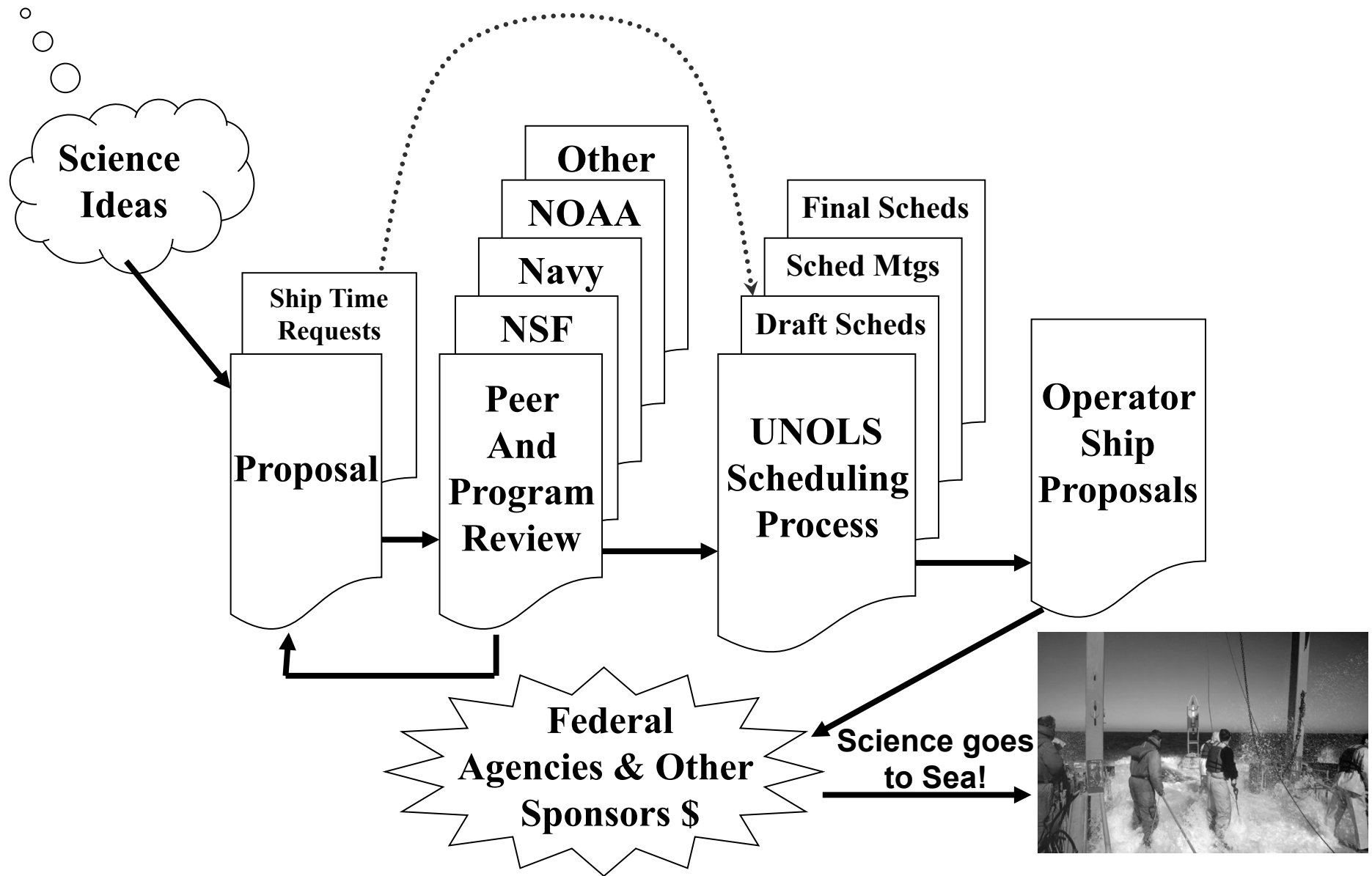
•Launch = Oct 13, 2012

•Enter Service = 2014

<http://www.sfos.uaf.edu/arrv/about/>

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- Ocean Class: Construction of two new Ocean Class ships is underway. Completion in 2014 & 2015. Navy Funded
 - Regional Class: April 2012 - NSF released a solicitation for Design and Construction of up to 3 new Regional Class ships

Science Investigators and the Fleet



UNOLS Ship Requests

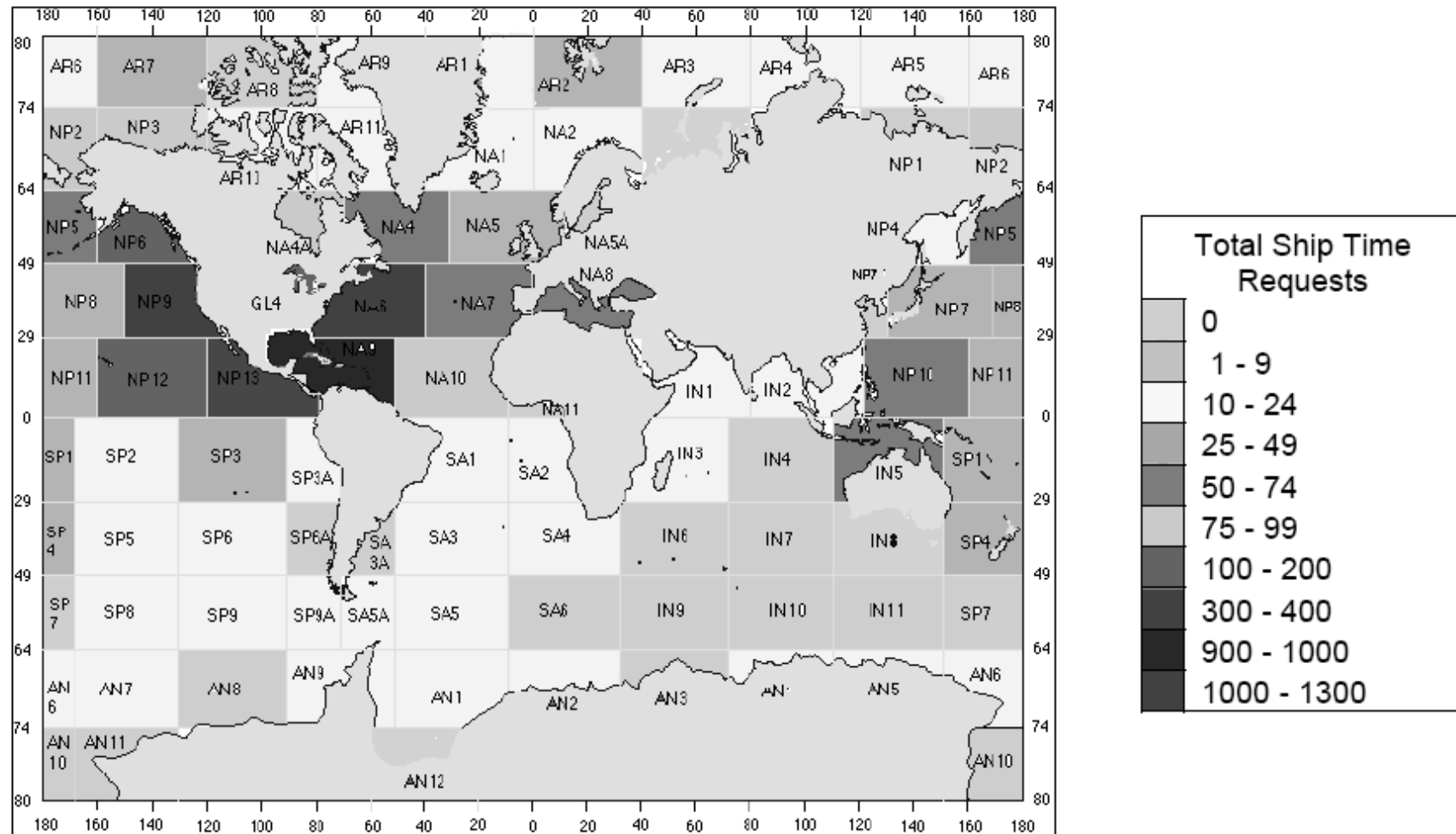


Figure 34. Geographic Distribution of Ship Time Requests (2000 to 2006)

From: UNOLS Fleet Improvement Plan, 2009 (www.unols.org)

SCHEDULING PROCESS OVERVIEW

- AN ELECTRONIC SHIP REQUEST FORM IS FILLED OUT ONLINE AT THE UNOLS WEBSITE DURING PROPOSAL PREPARATION AND SUBMITTED TO FUNDING AGENCY.
- THE REQUEST IS THEN AUTOMATICALLY DISTRIBUTED TO SCHEDULERS BASED ON SHIP SIZE REQUESTED, SHIP NAME, LOCATION OF WORK, ETC. IT IS ALSO DISTRIBUTED TO PROGRAM MANAGERS IN THE FEDERAL AGENCIES WHO ARE RESPONSIBLE FOR FUNDING SHIP OPERATIONS.
- “TARGET DATES” FOR PROPOSALS WITH SHIPTIME EACH YEAR: NSF is AUGUST 15TH.

GUIDELINES AND PRIORITIES FOR SCHEDULING

- SCHEDULES ARE PREPARED TO MINIMIZE TRANSIT TIMES.
- THE AMOUNT OF SCIENCE GOING TO SEA IS DEPENDENT UPON BUDGETS AVAILABLE FROM THE AGENCIES
- IN ORDER TO END THE CALENDAR YEAR IN A FAVORABLE POSITION FOR THE FOLLOWING YEAR'S EARLY CRUISES, SCHEDULES MUST TAKE IN ACCOUNT 14-16 MONTH OUT.
- SHIP SCHEDULES HAVE TO BE ADJUSTED TO MEET INSTRUMENTATION NEEDS, ESPECIALLY FACILITIES SUCH AS THE ROV, WHICH MAY HAVE TO BE SHIPPED LONG DISTANCES.
- WHEN INSTRUMENTATION IS NEEDED BY TWO GROUPS, IN ENTIRELY DIFFERENT AREAS AND/OR ON DIFFERENT SHIPS, THE SCHEDULES ARE EVALUATED FOR THE IMPACT TO SCIENCE, SHIPPING ISSUES, WHO REQUESTED THE INSTRUMENTATION FIRST, WHICH AWARD WAS FUNDED FIRST, WHICH AWARD EXPIRES FIRST, ETC.
- IN GENERAL, OLDER PROGRAMS GET PRIORITY, ALTHOUGH NEWER PROGRAMS MAY HELP FILL OUT THE SCHEDULE, IN WHICH CASE THEY WILL BE INSERTED.
- SEISMIC CRUISES NEED A MINIMUM OF 12 MONTHS LEAD TIME DUE TO U.S. PERMITTING PROCESSES AND INTERACTIONS WITH OTHER COASTAL STATES.

UNOLS Ship Scheduling Committee

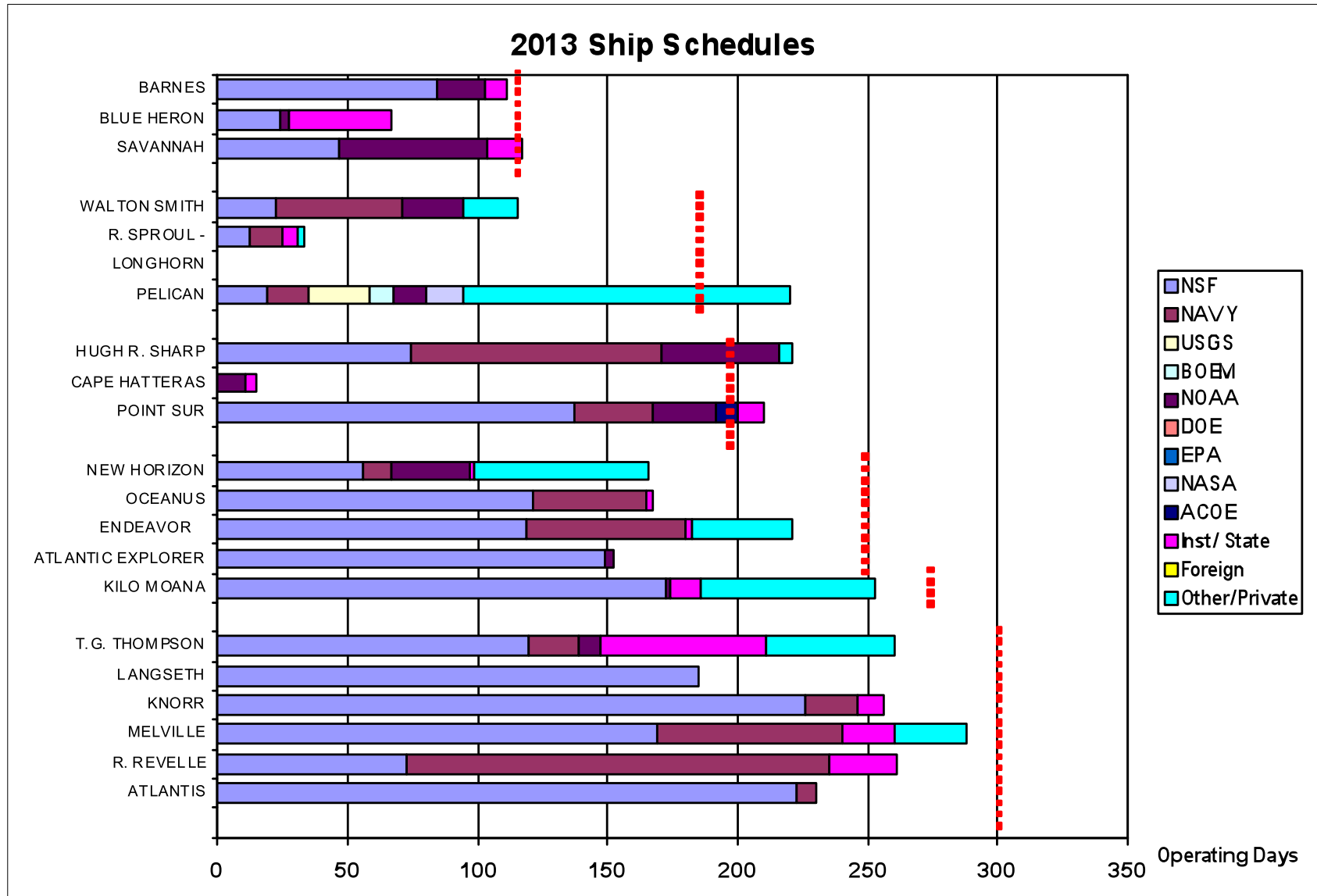
SSC Chair- Elizabeth Brenner/Scripps

SSC Vice-Chair- Doug Ricketts/Univ. of MN.

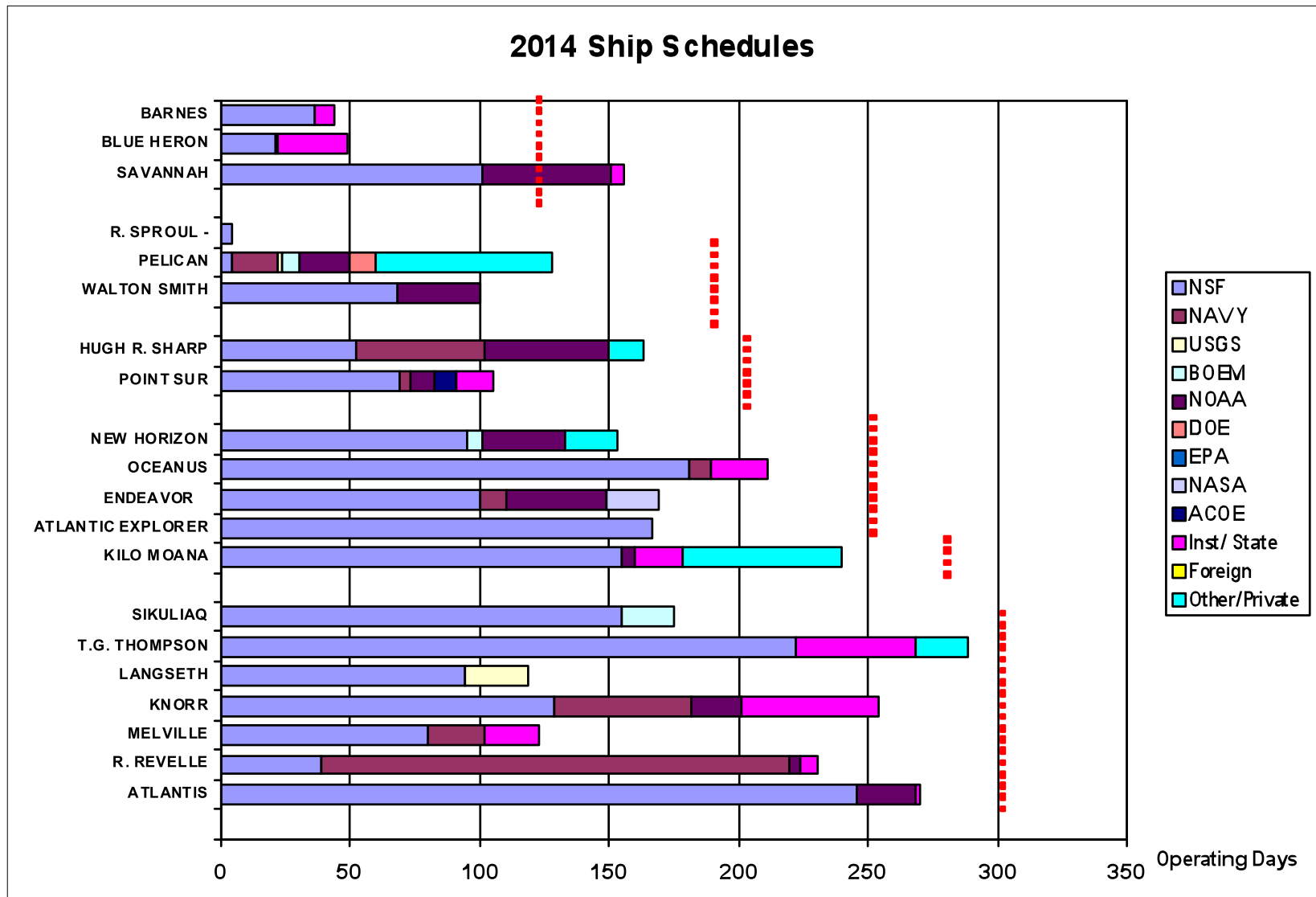
UNOLS Exec. Sec.- Jon Alberts working with funding agency reps, Rose Dufour/NSF, Tim Schnoor/ONR, Tracy Miller/NOAA

UNOLS works along with each ship operating institutions ship scheduler

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Thank you

