



SHIP SCHEDULING COMMITTEE MEETING

National Science Foundation
4201 Wilson Boulevard, Board Room 1235
Arlington, VA 22230
September 15, 1997
0830 HRS

Appendices:

- [I. Meeting Announcement](#)
- [II. Ship Scheduling Meeting Attendance List](#)
- [III. Scheduling Procedure Review](#)
- [IV. Ship Cost Summary 1997 & 1998](#)
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Introduction:

The Ship Scheduling Committee met on 15 September 1997 in Room 1235 of the National Science Foundation (see agenda [Appendix I](#)). The list of attendees is attached as [Appendix II](#).

The meeting was called to order at 0830 by Don Moller, SSC Chair. Don welcomed the attendees.

UNOLS: Ken Johnson, UNOLS Chair, provided a summary of recent UNOLS activities. The MOU between NOAA (OAR) and UNOLS is about to be signed. The NOAA vessel RON BROWN will be scheduled through the UNOLS scheduling process. UNOLS is also exploring with NOAA/NMFS for ways that UNOLS can be helpful with their programs. Ken reported that an ad hoc committee chaired by Rick Jahnke met in February of this year to review possible changes to the UNOLS scheduling process. Jack Bash will report later in the meeting on the results of this meeting. UNOLS is also having a charter review by a Council subcommittee. Ken reported the NSF inspection program is again underway with LAURENTIAN receiving the first inspection by Jamestown Marine Services. Ken also reported that the Navy would be building a new AGOR for the community and that the announcement for the operator of this vessel would be out soon.

Agency Reports: Dolly Dieter began the NSF report. Dolly reported that she anticipated several light schedules for 1998 and that lay-ups were expected. She encouraged all to pick up a copy of the latest *Grant Proposal Guide and Instructions for Preparation of Proposals Requesting Support for Oceanographic Facilities*. Don followed with the budget outlook for 1998. The NSF budget is pending in Congress. Both the House and Senate versions are close to what was requested. This suggests a small increase of 2.1%, however, the facilities budget is expected to remain flat. Don thanked Annette DeSilva for her work in providing statistics for the Government Performance and Results Act. The NSF tasking will include 1.) an Agency Strategic Plan; 2.) an Annual Performance Plan (goals and objectives) and 3.) an Annual Performance Report. Significant effort will be necessary to keep these plans current. Changes to the cruise reporting form may be necessary to assist in collecting the data.

Don announced that Lisa Rom is back at NSF but will be working half time with Larry Clark as Assistant Program Director for the Ocean Technology and Interdisciplinary Coordination Program. Alexander Shore will continue as Program Director for Instrumentation and Technical Services until the first of the year. Recruitment of a permanent Program Director for this program will be initiated shortly.

ONR's report was given by Sujata Millick. She reported that the ONR budget for ship operations should remain healthy reflecting Admiral Gaffney's interest in getting science to sea. ONR will be providing funds for FLIP and small coastal vessels. Sujata explained that the RFP to select an operator for the new AGOR should be out today. Highlights of the RFP include turning in a ship and institutional cost sharing.

CDR. Beth White provided the report for NOAA. Beth confirmed that the UNOLS/NOAA MOU should be signed this week. RON BROWN has successfully completed its first cruise, mooring work in the Pacific, and is now involved in Vents work at Juan de Fuca. With the exception of some minor problems all is going well. NOAA will be chartering over 300 UNOLS days in 1998 representing about \$2.8 M. The NOAA 1998 budget is expected to be up slightly. In 1999 NOAA expects to support funds for new fishery research vessels. RON BROWN is planning to participate in the opening of EXPO '98 in Lisbon, Portugal. Beth encouraged UNOLS to play a part in the ship's visit.

NAVO's report was presented by Gordon Wilkes. The program is expected to continue at the same \$7.5M level in 1998 providing funding is available. There are more projects in 1998 than the money can support. Gordon reported that NAVO has been very pleased with their work with UNOLS. The current gravity work on MELVILLE is well ahead of schedule. NAVO is looking forward to next year's activities with UNOLS.

Ship Scheduling Procedure Review Subcommittee: Jack Bash provided a summary of the UNOLS' subcommittee charged to look at the perceived weaknesses in the ship scheduling process. A summary of Jack's remarks are included in the view graphs appended as [Appendix III](#).

Ship Review:

Each ship's scheduler provided in advance of the meeting a proposed schedule for 1998. The cost summaries for 1998 as originally submitted are included in [Appendix IV](#) along with the 1997 costs. These costs represent the operator's best estimate of conducting the cruises on the proposed schedule. The costs are subject to change as the schedules change. [Appendix V](#) includes the ship tracks submitted by the schedulers reflecting the schedules presented.

OCEANUS/ENDEAVOR - WHOI/University of Rhode Island - Because of the dearth of funded programs for intermediate ships in the Atlantic only a single schedule was presented for these two ships. One ship will lay up in 1998. The decision as to which ship will lay up will be made by NSF after receiving a recommendation from the UNOLS Council.

The cruise by Anderson scheduled in the early 1998 is likely to be rescheduled for November 1997 aboard ENDEAVOR. The Keigwin cruise has been coordinated with a second Keigwin cruise scheduled later on CAPE HATTERAS. A conflict is possible with the multi-coring crew for this cruise and the cruise of Silva aboard KNORR. ENDEAVOR is scheduled for a shipyard period in 1998. The OCEANUS/ENDEAVOR schedule includes 199 days which could drop if Anderson goes early.

CAPE HENLOPEN - University of Delaware - This ship is scheduled for 188 days in 1998. All days are funded except a USCG physical oceanographic cruise of 18 days for Ricard.

CAPE HATTERAS - Duke/UNC - Joe Ustach of Duke presented a 242 day schedule for CAPE HATTERAS. All of these are funded but for 49 days of ECOHAB work in the Gulf of Maine.

BLUE FIN - Skidaway - The Nelson work has not been funded on the schedule presented for BLUE FIN. A total of 146 days remain on the schedule with 99 of these days presently funded.

WEATHERBIRD II - BBSR - The WEATHERBIRD II schedule is dominated by Hydro-station work and BATS cruises. The schedule contains 139 days of which 121 are funded. A shipyard period is scheduled for 1998.

SEA DIVER - HBOI - An 85 day schedule was presented for SEA DIVER. 40 of these days are presently funded. Two cruises of 11 days each for Ackleson appear on the schedule. The September cruise will be

moved to 1999 and the other cruise will be increased by one day. This leaves a schedule of 75 days.

EDWIN LINK - HBOI - The EDWIN LINK's schedule is dominated with NOAA/NURP submersible work. The schedule includes 238 days with 83 of these days presently funded.

SEWARD JOHNSON - HBOI - An all funded 233 day schedule was presented for SEWARD JOHNSON.

CALANUS - University of Miami - CALANUS has a full schedule with 80 days of NSF work and 60 days of work for NOAA, all funded.

PELICAN - LUMCON - The PELICAN schedule was presented with 192 days of which 162 are presently funded. An additional ten to 30 MMS days are possible. The ship is expected to go into an extended shipyard period at the end of 1998 or early 1999.

LONGHORN - University of Texas - The cruises of Joyce, Muller-Karger and Villareal will not be funded removing 48 days from LONGHORN'S schedule. This leaves 36 days.

GYRE - TAMU - GYRE has one cruise of ten days that is NSF funded. The only remaining days on the 1998 schedule are six State days and two Other days.

URRACA - STRI - Two NSF cruises, Glynn and Kidwell, are funded for URRACA. These 50 days are part of a 173 day schedule.

LAURENTIAN - University of Michigan - The LAURENTIAN schedule is dominated with COP work with a total of 146 days. This is the best LAURENTIAN schedule in years. There is a weather concern because some of these cruises are to go out after the ice has formed.

ALPHA HELIX - University of Alaska - The GLOBEC and ECOHAB programs of ALPHA HELIX are jointly funded by NSF and NOAA. The ship has a schedule of 147 days with 37 of these days still pending funding.

MOANA WAVE - University of Hawaii - The schedule for MOANA WAVE is dominated by the HOTS program and NOAA work by Clark. The schedule includes 185 days with 175 days presently funded. Two programs, Worcester and Welschmeyer, are double booked with NEW HORIZON.

BARNES - University of Washington - A schedule of 100 days was presented for BARNES. The work of Deming is still pending funding.

WECOMA - Oregon State University - A schedule of 215 days was presented for WECOMA. This schedule includes 104 days of NOAA funded work. The Cowles work is jointly funded with NSF and ONR.

POINT SUR - Moss Landing Marine Laboratory - POINT SUR is being hauled this week to investigate a stern tube problem. The ship has a schedule of 195 days in 1998 of which 165 days are presently funded.

SPROUL - Scripps - The SPROUL schedule dropped the Simenstad work because of weather concerns. The schedule shows 168 days with 111 of these days funded.

NEW HORIZON - Scripps - A schedule of 213 days for NEW HORIZON was presented. This includes the double booked work of Worcester and Welschmeyer.

RON BROWN - NOAA - RON BROWN has a total of 264 days of funded NOAA work for 1998. The ship will have a PSA in the months of February and August. It plans a call to Lisbon, Portugal for the opening of EXPO 98 and the Year of the Oceans. NOAA is planning to send BROWN to the Indian Ocean in 1999.

EWING - LDEO - The EWING schedule of 139 days included 48 days of NAVO work off Hawaii. It is unlikely that NAVO will have funds to support this cruise. The ship is scheduled to lay up in a Gulf port after completion of its abbreviated schedule. A new multi-channel system will be installed.

KNORR - WHOI - A schedule of 257 days was presented for KNORR. All this work is in the Atlantic.

REVELLE - Scripps - REVELLE has a schedule of 280 days which includes 135 days of gravity work for NAVO.

MELVILLE - Scripps - A 1998 schedule of 179 days was presented for MELVILLE. The ship will complete this work in the first half of the year.

THOMPSON - University of Washington - The THOMPSON schedule has 290 funded days.

ATLANTIS - WHOI - A schedule of 272 days was presented for ATLANTIS. All of this work is with a submersible. The schedule remains unsettled because of conflicting requirements which must be settled by the NSF program managers.

Appendix I

AGENDA

UNOLS SHIP SCHEDULING MEETING

15 September 1997 - 0830 Hrs

National Science Foundation, Room 1235

4201 Wilson Boulevard

Arlington, VA

The Ship Scheduling meeting will be called into session by Don Moller, Chair.

AGENCY PRESENTATIONS. - Representatives from NSF, ONR, NOAA and NAVO will provide scheduling guidance, science program ship requirements and priorities, science funding decisions, ship operations funding outlook and related matters for the 1998 scheduling year.

REVIEW AND UPDATE SCHEDULES. Each scheduler will present and update their respective ship(s) schedule and cost information. Viewgraph(s) for this presentation are recommended.

IDENTIFY CONFLICTS AND UNRESOLVED ISSUES. There will be a discussion of issues regarding cruises with scientific, personnel and operational conflicts, the coordination of cruises requiring specialty equipment, and the overall efficiency of fleet operations. (Note: We will attempt to account for all cruises on the inventory list maintained by the UNOLS Office.)

COSTS. The UNOLS Office will provide a summary of projected cost figures for vessel operations in CY- '98.

GENERAL DISCUSSION. Significant changes have occurred in the environment in which the UNOLS fleet operates. Projected funding reductions, expansion of the partnerships with NOAA and NAVOCEANO, an increase in the number of PIs from non-UNOLS academia, an increase in the number multi-year, multi-ship programs, the need to coordinate vehicles and personnel between ships and changes in the very nature of the science programs themselves all directly affect the way the fleet is utilized and scheduled. There will be a discussion of the effect that these and other changes are having on the UNOLS ship scheduling process. Jack Bash will identify procedural changes, particularly those

utilizing the "web", that are intended to improve the information flow amongst the scientist user, funding agencies and ship operators involved in the scheduling process.

PRE-MEETING ACTION. All ship's schedules should be posted on OCEANIC. Cost figures in the following format for both 1997 and 1998 should be passed to the UNOLS Office no later than 8 September '97.

1997 NSF NAVY OTHER TOTAL

Ship Days

Cost \$K

1998 NSF NAVY OTHER TOTAL

Ship Days

Cost \$K

Costs for 1997 should be your latest projection. Costs for 1998 should be realistic estimates.

WHAT TO BRING TO THE MEETING:

1. Viewgraph(s) to illustrate your 1998 schedule.

2. Viewgraph(s) of the track chart(s) for 1998. (A hard copy for inclusion in the record is requested.)

3. An extra copy of all UNOLS Ship Time Request forms not on file with the UNOLS Office.

Appendix II

Attendance List

NAME	INSTITUTION/ ORGANIZATION	PHONE	FAX	E-MAIL
Tim Askew	HBOI	(561) 465-2400 x262	(561) 465- 2116	taskew@hboi.edu
Rodger Baier	NSF	(703) 306-1589	(703) 306- 0390	rbaier@nsf.gov
Jack Bash	UNOLS	(401) 874-6825	(874) 792- 6486	unols@gso.uri.edu
C. Lee Black	BBSRI	(441) 297- 1880x208	(441) 297- 1839	lblack@bbsr.edu
Jeff Callahan	URI	(401) 874-6110	(401) 874- 6578	callahan@gso.uri.edu
Norman Cherkis	NRL	(202) 404-1103		cherkis@qur.navy.mil
Larry Clark	NSF	(703) 306-1580	(703) 306- 0390	
Mary D'Andrea	UNOLS	(401) 792-6825	(401) 792- 6486	unols@gsosun1.gso.uri.edu
Paul Dauphin	NSF	(703) 306-1581	(703) 306- 0390	gdauphin@nsf.gov
Dolly Dieter	NSF	(703) 306-1577 x7233	(703) 306- 0390	e.dieter@nsf.gov
David Epp	NSF/MGG	(703) 306-1586	(703) 306- 0390	depp@nsf.gov
Linda Goad	U of Michigan	(313) 763-5393	(313) 647- 2748	lgoad@umich.edu
Donald			(703) 306-	

Heinrichs	NSF/OCE	(703) 306-1576	0390	dheinric@nsf.gov
Ken Johnson	MLML	(408) 755-8657	(408) 753-2826	johnson@mlml.calstate.edu
Robert Knox	SIO	(619) 534-4729	(619) 535-1817	rknox@ucsd.edu
Bruce Malfait	NSF/ODP	(703) 306-1581	(703) 306-0390	bmalfait@nsf.gov
Scott McKellar	NOAA	(301) 713-3435x135	(301) 713-1541	scottmckellar@noaa.gov
Don Moller	WHOI	(508) 289-2277	(508) 457-2185	dmoller@whoi.edu
Tim Pfeiffer	U of Delaware	(302) 645-4341	(302) 645-4006	pfeiffer@udel.edu
Dave Powell	U of Miami	(305) 361-4832	(305) 361-4174	dpowell@rsmas.miami.edu
Sean Powers	NSF	(703) 306-1587	(703) 306-0390	spowers@nsf.gov
Mike Prince	MLML	(408) 633-3534	(408) 633-4580	prince@mlml.calstate.edu
Mike Purdy	NSF	(703)-306-1580	(703)-306-0390	mpurdy@nsf.gov
Steve Rabalais	LUMCON	(504) 851-2800	(504) 851-2874	srabalais@lumcon.edu
Michael Rawson	LDEO	(914) 365-8367	(914) 359-6817	rawson@ldeo.columbia.edu
Elizabeth Rios	UCSD/SIO	(619) 534-2841	(619) 535-1817	shipsked@ucsd.edu
Lisa Rom	NSF	(703) 306-1578	(703) 306-0390	lrom@nsf.gov
Alexander Shor	NSF/ODP	(703) 306-1580	(703) 306-0390	ashor@nsf.gov
Phil Taylor	NSF	(703) 306-1580	(703) 306-0390	prtaylor@nsf.gov
Joe Ustach	Duke/UNC	(919) 504-7579	(919) 504-7651	joeu@duncoc.ml.duke.edu
Tom Weingartner	U of Alaska	(907) 474-7993	(907) 474-7204	weingart@ims.alaska.edu
Richard West	NSF	(703) 306-1579	(703) 306-0390	rwest@nsf.gov
CDR Beth White	NOAA	(301) 713-2465x184	(301) 713-0163	elizabeth.white@noaa.gov
Gordon Wilkes	NAVOCEANO	(601) 688-4376	(601) 688-5602	gwilkes@navo.navy.mil
Stan Winslow	U of Hawaii	(808) 847-2661	(808) 848-5451	swinslow@poha.soest.hawaii.edu

Appendix III
SCHEDULING PROCEDURE REVIEW

A Ship Scheduling Procedure Review Committee chaired by Rick Jahnke met 7 January 1997 to address perceived weakness in the ship scheduling process. These were:

1. Information Exchange

2. Insufficient Project Tracking
- 3 . Cost Benefit Analysis
4. Timing of Science Meetings and Milestones
5. Other Factors (additional charges caused by shifting ships)

The following recommendations were presented:

1. Revise the ship-time request form
2. Develop a ship request tracking system relational data base
3. Automate the procedure for PI input on preliminary schedules and schedule changes
4. Standardize procedures for all users
5. Optimize scheduling meeting and procedure times (encourage more regional communications)
6. Cost benefit analysis system
7. Variable costs should be handled by Program Managers on an individual basis

ACTION TO DATE:

Revised Electronic Ship Time Request form (work in progress).

Two parts, single page for proposals and scheduling followed by an extensive second part for cruise planning. Part one submitted with proposal, part two after funding or special request. Each request will have a backup ~archive file of pertinent traffic.

Posted by year to web on world chart, geographically located in pull down box.

On-line ship schedule form. Auto cruise track posted to web on world chart. All PIs automatically notified at posting and for subsequent changes.

Transit bank auto-update for no cost cruises of opportunity.

Future work. Program ship daily cost, distance and fuel use into ship track program to provide a first level cut at a cost analysis.

Appendix IV

SUMMARY OF SHIP USE AND COSTS

YEAR: 1997

As of: 9/12/97

SHIP/CLASS	NSF		NAVY		OTHER		TOTAL		DAILY RATE
	DAY	\$	DAY	\$	DAY	\$	DAY	\$	
R. REVELLE	233	3,719	8	128	47	750	288	4,597	15,962
MELVILLE	199	3,359	87	1,469	21	354	307	5,182	16,879
KNORR	152	2,478	112	1,826	28	456	292	4,760	16,300

ATLANTIS	157	2,512	0	0	28	448	185	2,960	16,000
EWING	191	3,103	60	975	22	357	273	4,435	16,245
T.G. THOMPSON	171	2,624	24	368	66	1,013	261	4,006	15,349
MOANA WAVE	180	2,342	0	0	23	300	203	2,642	13,015
CLASS I/II - TOTAL	1,283	20,137	291	4,766	235	3,678	1,809	28,852	-
AVE: (7)	183	2,877	42	681	34	525	258	4,083	-
EDWIN LINK	43	366	34	289	135	1,148	212	1,803	8,505
ENDEAVOR	117	1,260	74	797	0	0	191	2,057	10,770
OCEANUS	156	1,716	45	495	0	0	201	2,211	1,100
GYRE	30	216	32	230	86	619	148	1,065	7,196
NEW HORIZON	114	1,318	70	640	48	439	262	2,397	9,149
SEWARD JOHNSON	179	1,683	0	0	105	987	284	2,670	9,401
WECOMA	109	1,079	12	119	79	782	200	1,980	9,900
CLASS III - TOTAL	778	7,638	267	2,570	453	3,975	1,498	14,183	-
AVE: (8)	97	955	33	321	57	497	187	1,773	-
PELICAN	57	200	51	179	103	361	211	740	3,507
LONGHORN	4	16	0	0	41	164	45	180	4,000
POINT SUR	82	508	57	353	58	360	197	1,221	6,198
CAPE HATTERAS	120	825	90	619	19	131	229	1,575	6,878
ALPHA HELIX	73	788	10	107	27	413	110	1,308	11,981
R. SPROUL	118	673	17	97	45	180	180	950	5,278
CAPE HENLOPEN	86	490	115	655	5	28	206	1,173	5,694
WEATHERBIRD II	130	964	20	148	1	7	151	1,119	7,411
SEA DIVER	5	23	22	99	70	315	97	437	4,505
CLASS IV - TOTAL	675	4,487	382	2,257	369	1,959	1,426	8,703	-
AVE: (9)	75	499	42	251	41	218	158	967	-
BLUE FIN	85	215	0	0	8	20	93	235	1,816
LAURENTIAN	35	165	0	0	12	56	47	221	4,702
BARNES	106	16	0	0	28	39	134	185	1,381
CALANUS	66	218	12	40	24	79	102	337	3,304
URRACA ©	0	0	0	0	0	0	0	0	NA
CLASS V - TOTAL	292	744	12	40	72	194	376	978	-
AVE: (5)	58	149	2	8	14	39	75	196	-
Fleet Total	3,028	33,006	952	9,633	1,129	9,806	5,109	52,446	-
AVE: (29)	104	1,138	33	332	39	338	176	1,808	-

SUMMARY OF SHIP USE AND COSTS

YEAR: 1998

As of: 9/11/97

SHIP/CLASS	NSF	NAVY	OTHER	TOTAL	DAILY				
	DAY \$	DAY \$	DAY \$	DAY \$	RATE				
R. REVELLE	127	2,121	135	2,255	18	301	280	4,677	16,704

MELVILLE	172	3,044	0	0	7	124	179	3,168	17,698
KNORR	185	3,034	53	869	19	312	257	4,215	16,400
ATLANTIS	223	3,524	11	174	38	600	272	4,298	15,801
EWING	73	1,278	48	840	18	315	139	2,432	17,496
T.G. THOMPSON	112	1,773	76	1,203	102	1,615	290	4,591	15,831
MOANA WAVE	104	1,452	16	224	65	907	185	2,583	13,962

CLASS I/II - TOTAL	996	16,226	339	5,565	267	4,174	1,602	25,964	-
AVE: (7)	142	2,318	48	795	38	596	229	3,709	-

SHIP/CLASS	NSF DAY	\$	NAVY DAY	\$	OTHER DAY	\$	TOTAL DAY	\$	DAILY RATE
EDWIN LINK	29	261	0	0	209	1,881	238	2,142	9,000
ENDEAVOR	0	0	0	0	0	0	0	0	
OCEANUS GYRE	152	1,611	40	424	7	74	199	2,109	10,600
NEW HORIZON	77	754	97	950	37	362	211	2,066	9,791
SEWARD JOHNSON	173	1,687	34	330	26	252	233	2,260	9,700
WECOMA	71	703	58	574	86	851	215	2,128	9,898

CLASS III - TOTAL	502	5,007	229	2,278	365	3,420	1,096	10,705	-
AVE: (8)	63	626	29	285	46	428	137	1,338	-

SHIP/CLASS	NSF DAY	\$	NAVY DAY	\$	OTHER DAY	\$	TOTAL DAY	\$	DAILY RATE
PELICAN	62	233	25	94	105	394	192	721	3,755
LONGHORN	54	216	0	0	30	120	84	336	4,000
POINT SUR	121	762	28	176	46	290	195	1,228	6,297
CAPE HATTERAS	104	724	81	564	57	397	242	1,685	6,963
ALPHA HELIX	132	1,417	0	0	12	129	144	1,546	10,736
R. SPROUL	81	482	44	262	20	119	145	863	5,952
CAPE HENLOPEN	104	593	68	388	16	91	188	1,072	5,702
WEATHERBIRD II	139	1,043	0	0	0	0	139	1,043	7,504
SEA DIVER	18	86	22	105	45	214	85	405	4,761

CLASS IV - TOTAL	815	5,556	268	1,589	331	1,754	1,414	8,899	-
AVE: (9)	91	617	30	177	37	195	157	989	-

SHIP/CLASS	NSF DAY	\$	NAVY DAY	\$	OTHER DAY	\$	TOTAL DAY	\$	DAILY RATE
BLUE FIN (b)	72	224	0	0	34	106	106	330	1,816
LAURENTIAN	140	630	0	0	6	27	146	657	4,500
BARNES	65	99	17	26	18	27	100	152	1,520
CALANUS	80	248	0	0	60	186	140	434.0	3,100
URRACA							0	0	NA

CLASS TOTAL	357	1,201	17	26	118	346	492	1,573	-
AVE: (5)	71	240	3	5	24	69	98	315	-

Fleet Total	2,670	27,990	853	9,458	1,081	9,694	4,604	47,141	-
AVE: (29)	92	965	29	326	37	334	159	1,626	-

