

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

**EAST COAST SHIP SCHEDULING GROUP
WEST COAST SHIP SCHEDULING GROUP
Report of Joint Meeting
October 22, 1987**

**Board Room
American Institute of Architects
1735 New York Avenue N.W.
Washington, D.C.**



East Coast Ship Scheduling Group
West Coast Ship Scheduling Group
Report of Joint Meeting
Board Room
American Institute of Architects
1735 New York Avenue N.W.
Washington, D.C.

East and West Regional Ship Scheduling Groups met at 8:30 a.m., October 22, 1987 in the Board Room, American Institute of Architects, Washington, D.C. The meeting was co-chaired by Michael Rawson and George Shor, Jr., East and West Group chairman. George Shor presided during the meeting.

Notification of the meeting, agenda and request for scheduling/operating information were distributed by UNOLS Office letter dated October 22, 1987 (Appendix I). The meeting was concentrated almost exclusively on developing and refining schedules and operating cost information for 1988.

Ship Schedules and Operating Costs for 1988. Brief individual presentations were made outlining tentative schedules for 1988, projecting science funding status, estimated costs, days operated and listing any ship-time requests that had not been accommodated.

The 1988 schedules are characterized for each ship in the UNOLS fleet. These schedules are still tentative; further adjustments are still possible.

ALPHA HELIX. Solid schedule, southwest Alaska, southeast Alaska and Gulf of Alaska March through April; Bering Sea April-September; Gulf of Alaska and Bering Sea to mid-December. Almost all NSF, all funded or renewal.

ATLANTIS II. Strong schedule, all in support of ALVIN. Operations in the eastern Pacific off California in January, Guaymas in February, EPR/Galapagos in March, April; Gorda-Juan de Fuca and continental slope of Oregon-California June through September; California Basins in October and return to Woods Hole by early November. All funded by agencies in tri-agency agreement.

BARNES. Numerous short trips in Puget Sound. Could accommodate additional Puget Sound work during most months.

BLUE FIN. Short trips in coastal waters off southeastern United States. Could accommodate additional short cruises in area.

CALANUS. Heavy schedule, January-December in Florida Straits, Caribbean Islands and Tongue of the Ocean. About 80% funded or renewal.

CAPE HATTERAS. Moderate schedule on mid-Atlantic-southeast shelf, Nicaraguan Rise and Sargasso Sea. Open after 1 November. About 90% funded/renewal.

CAPE HENLOPEN. Moderate schedule in Delaware Bay, Gulf of Maine, Georgia Embayment, Long Island Sound, Chesapeake Bay, and Bermuda/Nassau. About 75% funded. Some open periods.

CAYUSE. Transferred to Maine.

CONRAD. Full Schedule beginning Chile Ridge/Trench, around Cape Horn, MAR and western south Atlantic, Barbados Ridge, Kane Fracture Zone and Valencia Basin. Open after October. Most funded.

ENDEAVOR. Full schedule in north Atlantic and Arctic. About 90% funded.

GYRE. Schedule uncertain due to inclusion of many projects that might be deferred, are not likely to be funded or could be accommodated effectively on closer ships.

ISELIN. Heavy schedule includes Bermuda Rise, Caribbean, off Amazon, Caribbean/tropical Atlantic/Sargasso, return to Amazon and tropical Atlantic. About 85% funded, but rest unlikely to be funded. Remaining schedule would still be solid.

KNORR. Operations in south Atlantic (January-March), to Black Sea and Mediterranean (March-October). Operations discontinue in October anticipating renovation/refit.

LAURENTIAN. Schedule advanced for Lake Michigan operations May-July and August-November; July project in Erie, Ontario.

MELVILLE. Schedule in Eastern Pacific off California, Galapagos (March-May), Gorda-Juan de Fuca (May-July) and off California (July-September). Transit to south Atlantic and projects there (October-January, 1988) may be deferred to 1989.

MOANA WAVE. Operations will begin in Western Pacific and may include southern ocean. Details to be developed depending on some project decisions still pending. Funding secure for several satisfactory schedule operations under consideration.

FRED H. MOORE. Modified lay up status. No schedule advanced.

NEW HORIZON. Heavy schedule begins off California, to northwest coast (May), and return to California coast. Funding divided among DOE, ONR, NSF, and UC.

OCEANUS. Heavy schedule in north Atlantic, along northeast coast (March, April), to northeast Atlantic (May). Gulf of Cadiz-Canary Basin (June-August), northwest Atlantic (September-November) and Caribbean-tropical Atlantic (November, December). Funded.

OSPREY. Conversion continues through mid-year. Short, combined scientific and shakedown cruise anticipated second half.

POINT SUR. Operations begin with VERTEX (January-February), then Central California (February-December), and three northern California projects (March, July and August). Funded.

ROBERT G. SPROUL. Heavy schedule off southern California. (January-October) with one project in Gulf of California (July, August). Open October-December. Funded.

THOMAS G. THOMPSON. Two project schedules in Gulf of Alaska, Bering Sea (March-October). Open February-May & November-December. Funded.

RIDGELY WARFIELD. Modest schedule, all in Chesapeake Bay (February-December). Short open periods for local operations throughout year.

THOMAS WASHINGTON. Heavy schedule, EPR (January-March), off Hawaiian Islands (May, June) off California, Oregon (June, July), Aleutians and western Pacific seamounts (August-October), Ontong Java Plateau and Lau Basin (October-December). Most funded.

WECOMA. Schedule includes VERTEX (January-February), central and equatorial Pacific (February-May), VERTEX (May), and off northwest coast (June-October). Open November-December. About 85% funded.

After schedules and cost projections were presented for individual ships and institutions, summaries were prepared (see tables below, **Profiles of Funding Cycles**, and **Summary of 1988 Cost Projections** together with Appendix II, **1987 Estimates and 1988 Cost Projections**).

PROFILES OF FUNDING CYCLES \$ MILLION

	OP DAYS	NSF	ONR	OTHER	TOTAL	SHORT FALL
1985	4769	25.9	4.1	5.8	35.8	
1986	4259	25.7	4.4	3.4	33.5	
1987 Cost Projections						
March 1986 (anticipated)	5792	35.9 (26.2)	4.2 (4.2)	3.1 (3.1)	43.2 (33.5)	(9.7)
June 1986 (anticipated)	5756	35.0 (25.9)	3.6 (3.6)	3.1 (3.1)	41.7 (32.6)	(9.1)
October 1986 (anticipated)	4937	29.8 (27.7)	5.4 (5.4)	3.8 (3.8)	39.0 (36.9)	(2.1)
July 1987 (anticipated)	4843	28.2 (27.7)	5.7 (5.7)	3.6 (3.6)	37.5 (37.0)	(0.5)
October 1987 (anticipated)	4763	28.0 (27.7)	5.7 (5.7)	4.0 (4.0)	37.8 (37.5)	(0.3)

SUMMARY OF 1988 PROJECTIONS
\$ MILLIONS

	OP DAYS	COSTS			
		NSF	ONR	OTHER	TOTAL
July, 1987 Projections					
East	3,047	18.72	3.46	1.44	23.63
West	2,493	16.91	1.93	1.42	20.27
Total	5,540	35.63	5.39	2.87	43.90
(Anticipated)		(30.4)	(8.5)	(2.9)	(41.4)
Projected Shortfall		(5.2)	3.1	-	(2.1)
October, 1987 Projections					
East	3,117	17.30	2.97	1.60	21.86
West	2,289	14.99	2.18	2.87	20.04
Total	5,406	32.29	5.15	4.47	41.90
(Anticipated)		(28.4)	(5.2)	(4.5)	38.1
Projected Shortfall		(3.9)	-	-	(3.9)

Adjusted projections made October 22, 23, 1987 after adjusting for projects not likely to be funded in 1988, projects likely to be deferred until 1989 and suggestions to curtail operations.

	COSTS				
	OP DAYS	NSF	ONR	OTHER	TOTAL
Fleet					
Total	4,900	29.3	5.2	4.5	39.0

Information from Funding Agency Representatives. John McMillan, NSF, provided 1988 Budget Estimates for the Ocean Sciences Division, including Oceanographic Facilities. The estimates (see table) are based on the recent House Appropriations mark-up. The estimates do not include possible Gramm-Rudman reductions, nor do they reflect impacts that would be felt from protracted operation under a Continuing Resolution formula. The new estimate for Ship Operation is of critical interest. Within OFS \$26.6 million are estimated. The additional \$1.8 million estimated from the Ocean Drilling Program would provide from NSF a total of \$28.4 million. This is an increase of less than \$1.0 million over 1987, and is \$2 million less than the \$30.4 anticipated in July, 1987. John McMillan emphasized that the potential for shortfall in Ship Operations is very real, and could become even more drastic if the NSF budget is reduced.

Keith Kaulum, ONR, noted that his agency expects to support ship operations in the academic fleet to almost \$6 million. This total includes about \$3 million for operations on ships not owned by the Navy. Mr. Kaulum noted the the \$5 million that ONR allocated for ship operations in 1988 will be spent, although about \$2 million will go to non-UNOLS ships.

There is potential for Gramm Rudman cuts of up to 12 1/2% in ONR.

NSF BUDGET ESTIMATES
October 1987

OCEAN SCIENCES DIVISION	1985 Actual	1986 Actual	1987 Actual	1988* Estimate
Ocean Sciences Research	58.2	56.9	66.4	74.3
Oceanographic Facilities	34.9	33.7	37.2	43.9
Ocean Drilling Program	27.6	28.9	30.1	31.3
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	\$ 120.7 M	119.5	133.7	149.5

OCEANOGRAPHIC FACILITIES DETAIL

Operations

Ship Operations	23.8	24.0	26.0 (1)	26.6 (2)
ALVIN, Aircraft, Misc.	2.9	1.6	1.8	1.8
Marine Technicians	2.4	2.5	3.1	3.3
	-----	-----	-----	-----
	\$ 29.1 M	28.1	30.9	31.7

Acquisitions & Development

Science Instruments	1.8	1.6	1.8	
Shipboard Equipment	1.7	1.4	1.7	7.4
Technology Development	1.6	1.7	2.4	
AMS Center	-	-	-	2.9
UNOLS, Ship Const., Misc.	0.7	0.9	0.4	1.0
Interagency/International**	-	-	-	0.9
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	\$ 5.8 M	5.6	6.3	12.2

TOTAL	\$ 34.9 M	33.7	37.2	43.9
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* Estimate using House Appropriations markup.
 ** Not identified separately in previous years.

- (1) In 1987, an additional \$1.5 million was provided by the Ocean Drilling Program.
- (2) In 1988, an additional \$1.8 million is estimated from the Ocean Drilling Program.

Refinement of 1988 Schedules. Examination of the **Summary of 1988 Projections** (i.e. comparison of July, 1987 projections with the current October 1987 ones) reveals that UNOLS ship operators had, collectively done a credible job in addressing the shortfall projected in July. They had reduced the total NSF costs from an estimated \$35.6 million to \$32.3 million and total fleet costs from \$43.9 million to \$41.9 million. Nevertheless, the projected shortfall indicated in initial October 22 **Summaries** had risen to \$3.9 million. Reasons for this were twofold: funding expected from NSF had fallen \$2 million to about \$28.4 million; and projects for only about \$5.2 million of the \$8.5 million available from ONR were agreed on for UNOLS ship operations. Furthermore, the **Summaries** indicated that a total of 5400 days' operations had been proposed. Many of these days were for projects not likely to be funded or likely to be deferred until 1989.

Individual operators were informed of those projects on their schedules that were not likely to be funded.

Chairman's Summary of Problems:

1. Comparison of **Summary of 1988 Cost Projections** and estimated funding shows a shortfall of \$3.9 million in NSF projects.
2. Earlier concerns over support to physical studies in the north Atlantic/Arctic (e.g., Worcester/Swift, McCartney/Talley) have been accommodated or are properly deferred to 1989.
3. The MOANA WAVE schedule must remain unresolved until decisions are made on project INSTEP.
4. A number of projects local to the Hawaiian Islands cannot be accommodated with existing schedules.
5. The GYRE has potential openings that could accommodate near-Hawaii work.

The general Meeting was adjourned at 11:45.

Following the general meeting of Ship Scheduling Groups, the chairmen, East and West Groups met with the UNOLS Chairman and Executive Secretary (e.g. UNOLS Executive Committee members present). The attendees (George Shor, Michael Rawson, George Keller, Bill Barbee) agreed that the Scheduling Groups and UNOLS should go further to address the potential \$3.9 million shortfall in 1988 ship operations. Since the \$3.9 million was entirely within projects scheduled for NSF support and included in Ship Operations Proposals to NSF, it was agreed that the funding status of

all NSF science projects on the UNOLS fleet schedule for 1988 should be reviewed. Michael Rawson, Chairman, East Regional Ship Scheduling Group and Bill Barbee, together with representatives from NSF/OCFS then reviewed the 1988 schedule of each UNOLS ship. Based on that review, a set of schedule adjustments were developed that would reduce the 1988 total days operated to about 4,900, NSF funds for operation to \$29.3 million, and total funds for operation to \$39.0 million. These schedule adjustments included:

1. Projects that would probably be deferred to 1989 (affecting MELVILLE schedule),
2. None of the NSF projects on the tentative schedule advanced for the GYRE in 1988 were likely to be funded there,
3. One project on the CONRAD schedule had been declined and would be deleted,
4. NSF would negotiate with the University of Southern California to develop an abbreviated scientific operation/shakedown schedule for 1988, and,
5. Approximately 125 days on various class III, IV, and smaller ships are unlikely to be funded in 1988.

The total of all these adjustments could reduce estimated 1988 ship operations costs by \$3 million. The adjustments and resultant reductions in 1988 costs and operating days were discussed with Scheduling Group Chairmen, the UNOLS Chairman and funding agency representatives. They are reflected in adjustments to the **Summary of 1988 Projections** (see above).

Schedules adjustments 1.-5. were recommended to UNOLS (by Ship Scheduling Chairmen at the UNOLS meeting, October 23, 1987).

1986 4

1987

1987 ESTIMATES

Date: October 22, 1987

	1986 OP DAYS	1986 COSTS	1987					TOTAL \$K
			OPS DAYS	NSF \$K	ONR \$K	OTHER \$K		
ATLANTIS II	215	4,225	308	3,057	262	345	3,664	
KNORR	161	1,943	144	949	781	0	1,730*	
CONRAD	287	3,255	290	2,000	1,412	0	3,412	
OCEANUS	217	1,242	248	977	531	6	1,514	
ENDEAVOR	237	1,720	210	1,149	599		1,748	
GYRE	285	1,820	137	400*	344**	State 485	1,229	
ISELIN	177	1,499	188	1,318	216	162	1,696	
CAPE HENLOPEN	150	735	121	395	70	140	605	
CAPE HATTERAS	214	1,279	147	991	0	State 66 Carryfwd 29	1,086	
CAPE FLORIDA (RSMAS part 1986)	33	186	0	0	0	0	0	
WARFIELD	125	550	69	439	0	0	439	
BLUE FIN	138	195	134	93	0	DOE 107	200	
LAURENTIAN	70	185	65	158	0	26	184	
CALANUS	143	219	185	325	19	0	344	
MOORE	16	115	270	1,770	0	State 48 USAC 32	1,850	
TOTAL	2,468	19,168	2,516	14,021	4,234	1,446	19,701	

* does not include \$360K lay-up funds in 1987 (ONR)

**ONR lay-up funds *incl. \$170K carry over

Date: October 22, 1987

1987 ESTIMATES

	1986 OP DAYS	1986 COSTS	1987				TOTAL \$K
			OPS DAYS	NSF \$K	ONR \$K	OTHER \$K	
MELVILLE	241	2,678	231	2,398	349	UC 36	2,783
WASHINGTON	200	2,320	233	2,095	387	UC 170	2,653
NEW HORIZON	236	1,716	230	997	132	DOE 207 NASA 14 UC 347	1,697
ROBT. G. SPROUL	149	595	159	203	58	DOE 23 UC 336	621
VELERO IV/OSPREY	0	350	0	350	0	USC 600	950
POINT SUR	134	742	191	607	28	USGS 5 State 61 CNOC 362	1,063
POINT SUR TRANSFER CAYUSE LAY-UP 1986	22 0	104 119	0 0	0 0	0 0	0 0	0 0
WECOMA	0	867	244	1,307	279	0	1,586
THOMPSON	247	2,346	260	2,517	0	0	2,517
BARNES	138	220	145	218	0	19	237
ALPHA HELIX	188	1,109	221	1,447	0	7	1,454
MOANA WAVE	261	2,065	333	1,867	250	AID 395 HIG 15	2,527
TOTAL	1,816	15,231	2,247	14,006	1,483	2,597	18,088
EAST COAST	2,468	19,168	2,516	14,021	4,234	1,446	19,701
FLEET TOTAL	4,284	34,399	4,763	28,027	5,717	4,043	37,789

DATE: October 22, 1987

1988 COST PROJECTIONS

	PROJECTED 1988 COSTS							
	1987 COSTS NSF	1987 COSTS	1987 OP DAYS	1988 OP DAYS	NSF	ONR	OTHER	TOTAL
ATLANTIS II	3,057	3,664	308	311	3,045	319	307	3,671
KNORR	949	1,730	144	305	2,900	10	151	3,061
CONRAD	2,000	3,412	290	290	2,641 (212)	673 (54)	299 (24)	3,613
OCEANUS	977	1,514	248	258	1,174	650	0	1,824
ENDEAVOR	1,149	1,748	210	263	1,317	235	383	1,935
GYRE	400	1,229	137	274	1,341	385	State 189	1,915
ISELIN	1,318	1,696	188	275	1,522	592	0	2,114
CAPE HENLOPEN	395	605	121	151	755	0	0	755
CAPE HATTERAS	991	1,086	147	190	1,061	66	State 66 DOE 66	1,259
WARFIELD	439	439	69	107	517	10	0	527
BLUE FIN	93	200	135	184	106	0	DOE 102	208
LAURENTIAN	158	184	65	70	196	0	33	229
CALANUS	325	344	185	189	354	31	0	385
MOORE	1,770	1,850	270	***	***	***	***	in extended *** lay-up 1988
WEATHERBIRD	0	0	0	250	370	0	0	370
TOTAL	14,021	19,701	2,517	3,117	17,299	2,971	1,597	21,866

DATE: 22 October, 1987

1988 COST PROJECTIONS

	1987 COSTS NSF	1987 COSTS	1987 OP DAYS	PROJECTED 1988 COSTS				TOTAL
				1988 OP DAYS	NSF	ONR	OTHER	
MELVILLE	2,398	2,783	231	253	1,912	720	NOAA 354	2,987
WASHINGTON	2,095	2,653	233	332	2,926	726	0	3,652
NEW HORIZON	997	1,697	230	220	829	213	DOE 197 UC 497	1,738
ROBERT G. SPROUL	203	621	159	169	518	20	DOE 44 UC 96	678
OSPREY	350	950	0	72	854	0	USC (conv) 700*	1,554
POINT SUR	607	1,063	191	177	356	96	State 56 CNOC 491	999
WECOMA	1,307	1,586	244	252	1,715	404	0	2,119
THOMPSON	2,517	2,517	260	183	2,245	0	0	2,245
BARNES	218	237	145	147	236	2	19	257
ALPHA HELIX	1,447	1,454	221	212	1,436	0	7	1,443
MOANA WAVE	1,867	2,527	333	272	1,962	0	NOAA 270 ATT 140	2,372
TOTAL	14,006	18,088	2,247	2,289	14,989	2,181	2,871	20,044
EAST COAST	14,021	19,701	2,517	3,117	17,299	2,971	1,597	21,866
FLEET TOTAL	28,027	37,789	4,764	5,406	32,288	5,152	4,468	41,910

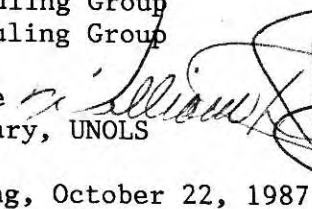
UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

An association of institutions
for the coordination and support
of university oceanographic facilities

UNOLS Office, WB-15
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October 5, 1987

TO: East Coast Scheduling Group
West Coast Scheduling Group

FROM: William D. Barbee 
Executive Secretary, UNOLS

SUBJECT: Scheduling Meeting, October 22, 1987

Scheduling Group Chairmen Michael Rawson, L-DGO (East) and George Shor, Jr., Scripps (West) have called a meeting of UNOLS Ship Scheduling Groups:

Board Room
American Institute of Architects
1735 New York Avenue NW
Washington, DC

The meeting will begin at 8:30 a.m., October 22, 1987.

The objectives of the meeting will be to quickly review schedules and costs projected for 1988 to assure that schedules are efficient, double bookings have been eliminated and scheduled science is funded (or will be). All operators will be canvassed to assure that no valid (funded) ship-time requests have been left stranded, but have been adequately accommodated.

Chairmen note that institutions have submitted their Ship Operations Proposals, and much of the work toward scheduling objectives will have been completed prior to the meeting. Thus, they expect the October 22 meeting to be completed by about mid-day.

Materials for the meeting:

1. **Ship Schedules for 1987 and 1988.** All institutions should have long since submitted valid schedules for 1987 to SHIP.SCHED87. All institutions are urged to submit their 1988 schedules (latest version, as in your Ship Ops Proposal) to SCHEDULERS.EAST.GULF and/or SCHEDULERS.WEST on or before October 15. With the information thus available to all via electronic mail, it will not be necessary to bring copies of schedules for distribution at the meeting.

Please bring 25 copies of the following:

- 1. Summary of Unfilled 1988 Ship-Time Requests.** Please bring a summary of **any** unfilled 1988 Ship-Time Request that you hold. Any valid request that you have **that you do not know positively that it is scheduled on your, or someone else's ship, should be included.**
- 2. Updated 1987 Costs/Funding** (use the blank forms attached. Should agree with similar information on your Ship Ops Proposal.) July submissions are also attached for your information.
- 3. Updated 1988 Ship Operation Cost Projection** (use the blank forms attached. Should also agree with your 1988 Ship Ops Proposal.) July submissions are also attached for your information.
- 4. Section 12, Detailed Four-Year Budget from your 1988 Ship Operations Proposal.** Copies of the one-page table for each ship.

AGENDA

Joint East and West Coast Ship Scheduling Meeting
Board Room
American Institute of Architects
1735 New York Avenue NW
Washington, DC

8:30 a.m.
October 22, 1987

1. **The Scheduling Groups will be called into joint session by Chairmen Rawson and Shor.**
2. **Schedules for 1988.** Individual presentations by institutions of their operating schedule for 1988. Information on cost projections and unscheduled requests will be collected and collated.
3. **Refinement of 1988 Schedules.** To reach effective schedules, resolve funding questions, assure coverage of all valid ship-time requests.
4. **Information from Funding Agency Representatives.** From NSF, ONR and others as desired on funding available for 1988 Ship Operations, funding decisions on individual science projects, fleet management, etc.
5. **Chairmen's Summary.** Characterization of fleet schedule for 1988 (total days, efficiency, balance, etc.), summary of cost projections for 1988, comparison with available funding.