East Coast Ship Scheduling Group
West Coast Ship Scheduling Group
REPORT OF JOINT MEETING
May 21, 1985
Room 1242, National Science Foundation
1800 G Street NW
Washington, D.C.

The East and West Regional Ship Scheduling Groups met separately at 8:30 a.m. and jointly at 2:00 p.m. in room(s) 1242, National Science Foundation. Individual meetings were called to order by Robertson P. Dinsmore (East) and Brian Lewis (West). They jointly chaired the combined meeting. The order of business followed the agenda (Appendix I). In addition, the Groups discussed the May 2, 1985 letter from Sandra Toye, Head OCFS concerning 1986 UNOLS Fleet Support Outlook (Appendix II).

Review of 1985 Schedules and Costs. Schedules and Costs for 1985 were quickly reviewed. They are summarized in the attached tables, *1985 Estimates*, and in the following table, *Profile of Funding Cycles, 1985 Cost Projections.* Schedules for individual ships are being updated on the UNOLS bulletin board: SHIP.SCHED85.

The total number of operating days and the total costs projected have changed very little since the March, 1985 projection. Most of the change is in increases in funding from Other sources and from ONR. The total of operating days, 4,994 is up 3 1/2% over 1984, and costs are projected to rise about 7%. Scheduling problems for individual ships had been identified in earlier reports (West Coast Ship Scheduling, March 11, 1985 and East Coast, March 15).

The University of Southern California's plans are to operate the VELERO IV into late August, after which the ship will be laid up for transfer of equipment and later sale.

PROFILE OF FUNDING CYCLES
$MILLIONS

	OP DAYS	NSF	ONR	OTHER	TOTAL	SHORTFALL
1983	4,499	23.4	3.9	5.3	32.6	-
1984	4,816	23.1	4.0	7.0	34.6	-

1985 COST PROJECTIONS

	OP DAYS	NSF	ONR	OTHER	TOTAL	SHORTFALL
MARCH 84 PROJECTION (ANTICIPATED)	5,889	28.7 (25.0)	5.4 (5.4)	7.6 (7.6)	41.7 (38.0)	(3.7)
MAY 84 PROJECTION (ANTICIPATED)	5,999	31.0 (25.0)	4.9 (4.9)	6.6 (6.6)	42.5 (36.5)	(6.0)
OCT 84 PROJECTION (ANTICIPATED)	5,213	28.4 (25.0)	4.2 (4.2)	4.2 (4.2)	36.8 (33.4)	(3.4)
MARCH 85 PROJECTION (ANTICIPATED)	4,952	26.5 (25.0)	4.0 (4.0)	5.6 (5.6)	36.2 (34.6)	(1.6)
MAY 85 PROJECTION (ANTICIPATED)	4,994	26.6 (25.0)	4.4 (4.4)	6.3 (6.3)	37.2 (35.7)	(1.5)

1986 Costs and Schedules. Tentative schedules for individual ships are being updated on UNOLS bulletin board: SHIP.SCHED86. Summaries of costs appear in the following *Summary of 1986 Cost Projections* and in the attached tables *1986 Cost Projections.*

SUMMARY OF 1986 COST PROJECTIONS

May 22, 1985 Projections	OP DAYS	NSF	ONR	OTHER	TOTAL
		$Million			
East	3,220	15,470	5,008	2,642	23,120
West	2,537	16,782	772	2,160	19,716
Total	5,757	32,252	5,780	4,802	42,836
ANTICIPATED FUNDING*		(26,600)	(4,200)	(3,800)	(34,600)
PROJECTION SHORTFALL		5.6M	1.6M	-	7.2M

*NSF/OCFS LETTER OF MAY 2, 1985

(SIMILAR PROJECTIONS MADE MARCH, 1985)

East	3,150	15,595	4,244	2,408	22,247
West	2,550	16,392	1,189	1,392	18,974
Total	5,700	31,987	5,433	3,800	41,221

Projections for 1986 are for heavy ship use--over 5,700 days. This is about the capacity of the UNOLS fleet. Although this is lower than last year's projections for 1985, it is for about 750 days more than probably will be realized. According to information from funding agencies (Appendix II) neither ship operations funding nor funded science ship requirements will increase significantly over 1984 and 1985 totals of 4,900-5,000 days. The potential exists for ship layups in 1986.

A number of specific scheduling problems were identified for 1986:

Although all ships are proposing to operate a full year in 1986 (except MOORE, projecting one half year), funding constraints will undoubtedly reduce the fleet schedule.

Proposed schedules are for about 50% of science projects already funded with most of the remainder submitted and pending review. The distribution of funded projects among individual ship, though, is uneven. Some ships have schedules with virtually all projects firm, while others have as little as 15% already funded.

Possible schedule weaknesses are indicated for the following ships:

CAPE HENLOPEN (late in year)
ENDEAVOR (early in year)
ISELIN
KNORR (late in year)
MOORE
WECOMA
USC ship.

Possible layups were identified for the CAPE HENLOPEN (1/4 year), KNORR (1/4 year) and MOORE (1/2 year). Although there may also be need for layup among intermediate vessels, it is not possible to identify which ship(s) until further science funding decisions are made. (See the recommendation below.)

Some problems remain in effectively incorporating certain funded projects into schedules:

WEPOCS, in the western Pacific,
the Riser, et al project to Tahiti,
part of the China Sea project,
various projects off the west coast of South America, and
regional survey work for the Ocean Drilling Program in the western Pacific (probably early 1987).

The Joint Ship Scheduling Group made the following recommendation:

Recognizing potential schedule weaknesses or conflicts among the following vessels, the Scheduling Group considers that presently envisioned ship requirements in 1986 may be accomplished by one or two fewer ships:

East Coast	*West Coast*
ENDEAVOR	*MOANA WAVE*
GYRE	*NEW HORIZON*
ISELIN	*VELERO IV Replacement*
OCEANUS	*WECOMA*

Noting, however, that it is not possible to identify lesser utilized ship(s) until more science project funding information is available, the Committee recommends that an Ad Hoc Working Group be convened for the following purposes: (1) To review the status of proposed 1986 projects; (2) To

recommend the most effective ship schedules based on the best match of ships to project requirements, locations and costs; and (3) To recommend ship layups where so warranted. Tentatively, the meeting will be on September 24, 1985, the day preceding RVOC, in Monterey, California.

The Working Group shall comprise one representative from each operating institution of the above listed ships and shall be co-chaired by the Chairmen of the East and West Coast Scheduling Committee.

Wire. Donald A. Moller, W.H.O.I., reported on the status of the UNOLS wire pool. Oceanographic cables on hand at institutions, in the pool, on order and in the proposal for 1985 are shown on the attached summary: Oceanographic Cables. He also presented an excellent status report on manufacturer's specifications, test results and supply availability for 3 X 19 torque balanced wire rope. Although the problem of a supplier for this standard in the oceanographic community cannot be said to be solved, good progress is being made.

The meeting was adjourned at 3:15 p.m.

DATE May 21, 1985

1985 COST ESTIMATES

SHIP	1984 OP DAYS	1984 COSTS	1985 OPS DAYS	1985 NSF $K	1985 ONR $K	1985 OTHER $K	1985 TOTAL $K
ATLANTIS II	331	3,090	264	2,600	250	370	3,220
KNORR	208	2,840	191	1,370	1,170	-	2,540
CONRAD	322	2,915	348	2,301	550	413	3,264
OCEANUS	244	1,500	237	1,270	-	390	1,660
ENDEAVOR	238	1,679	262	1,478	89	379	1,946
GYRE	261	1,890	259	942	74	904	1,920
ISELIN	233	1,381	laid up	548	-	-	548
CAPE HENLOPEN	166	748	197	580	0	345	925
CAPE HATTERAS	255	1,374	255	1,026	-	DOE 176 MMS 187 STATE 56	1,445
CAPE FLORIDA	219	1,100	228	932	19	155	1,106
WARFIELD	133	531	138	506	-	-	506
BLUE FIN	129	187	180	105	-	DOE 85	190
LAURENTIAN	-	-	-	-	-	-	-
CALANUS	88	171	160	172	39	33	243
MOORE	64	540	58	200	-	376	576
TOTAL	2,891	19,946	2,777	14,030	2,191	3,869	20,089
WEST COAST	1,923	14,656	2,217	12,577	2,165	2,389	17,133
TOTALS	4,814	34,602	4,994	26,607	4,356	6,258	37,222

DATE May 21, 1985

1985 COST ESTIMATES

	1984 OP DAYS	1984 COSTS	1985 OPS DAYS	1985 NSF $K	1985 ONR $K	1985 OTHER $K	1985 TOTAL $K
MELVILLE	194	2,521	275	2,719	265	UC 24 NOAA 36 Sandia 265	3,308
WASHINGTON	293	2,981	239	1,368	1,149	UC 230	2,747
NEW HORIZON	254	1,791	200	822	66	UC 506 DOE 73	1,468
(Scripps) ROBT. G. SPROUL	(32)* 155	(187)* 449	154	390	57	UC 72 DOE 64	584
VELERO IV	93	630	85	364	0	18	382
CAYUSE	87	473	122	319	47	153	519
WECOMA *from Mar 11,85	214	1,411	212	1,553	193		1,747
THOMPSON	262	2,145	272	2,252	388	0	2,640
BARNES	101	113	175	207	0	23	230
ALPHA HELIX	115	1,212	155	1,478	-	16	1,494
MOANA WAVE KANA KEOKI	** 155	** 930	328	1,105	0	909	2,014
TOTAL	1,923	14,656	2,217	12,577	2,165	2,389	17,133

*included in SPROUL TOTAL

DATE May 21, 1985

1986 COST PROJECTIONS

SHIP	1985 COSTS NSF	1985 COSTS (Proposed)	1985 OP DAYS	PROJECTED 1986 COSTS: 1986 OP DAYS	NSF	ONR	OTHER	TOTAL
ATLANTIS II	2,600	3,220	264	260	2,000	700	620	3,320
KNORR	1,370	2,540	191	273	1,780	1,820	-	3,600
CONRAD	2,301	3,264	348	320	2,045	1,227	0	3,272
OCEANUS	1,270	1,660	237	278	640	830	420	1,890
ENDEAVOR	1,478	1,946	262	279	1,603	210	140	1,953
GYRE	942	1,920	259	292	1,607	99	361	2,067
ISELIN	548	548	Laid up	278	1,752	-	-	1,752
CAPE HENLOPEN	580	925	197	130	600	-	283	883
CAPE HATTERAS	1,026	1,446	255	250	1,085	-	328	1,413
CAPE FLORIDA	932	1,106	228	209	869	113	-	982
WARFIELD	506	506	138	172	618	-	-	618
BLUE FIN	105	190	180	180	100	-	100	200
LAURENTIAN	-	-	-	-	-	-	-	-
CALANUS	172	243	160	188	243	9	30	282
MOORE	200	576	58	111	528	-	360	888
TOTAL	14,030	20,090	2,777	3,220	15,470	5,008	2,642	23,120
West Coast	12,577	17,133	2,217	2,537	16,782	772	2,160	19,716
TOTAL	26,607	37,223	4,994	5,757	32,252	5,780	4,802	42,836

DATE May 21, 1985

1986 COST PROJECTIONS

SHIP	1985 COSTS NSF	1985 COSTS (Proposed)	1985 OP DAYS	PROJECTED 1986 COSTS: 1986 OP DAYS	NSF	ONR	OTHER	TOTAL
MELVILLE	2,719	3,308	275	262	2,161 DPP 838	0	UC 13 Sandia 419	3,432
WASHINGTON	1,368	2,747	239	264	1,958 DPP 716	0	UC 358 Other 119	3,152
NEW HORIZON	822	1,468	200	236	1,101	75	UC 397 DOE 195	1,767
ROBT. G. SPROUL	390	584	154	175	564	0	UC 8 DOE 100	672
VELERO IV	364	Replacement in 1986 382	85	195	1,181	0	GS 98 NPS 84	1,363
CAYUSE	319	519	122	135	364	40	141	546
WECOMA	1,553	1,747	212	260	2,028	-	-	2,028
THOMPSON	2,252	2,640	272	264	2,380	438	0	2,818
BARNES	207	230	175	200	229	7	26	262
ALPHA HELIX	1,478	1,494	155	217	1,610	-	15	1,625
MOANA WAVE	1,105	2,014	328	329	1,652	212	187	2,051
TOTAL	12,577	17,133	2,217	2,537	16,782	772	2,160	19,716

OCEANOGRAPHIC CABLES
UNOLS
1985 SUMMARY

Wire Size	On Hand	Pools	On Order	'85 Prop.	Totals (Dec.'85)
3 x19					
3/16"	11	2	0	0	13
1/4"	5	0	0	7	12
3/8"	0	0	1 (?)	1	2
1/2"	11	0	0	5 *	16
9/16"(30K)	2	0	0	4	6
9/16"(45K)	2	0	1 (?)	1	4
E-M (CTD)					
.225" (25K)	3+(3/2)	0	0	6*	9+(3/2)
.303" (27K)	1	1	0	0	2
.322" (20K)	7	2	0	5	9
.322" (33K)	7	4	0	2	13
COAXIAL					
.68" (30K)	1+(2/2)	0	3+(1/2)	1	5+(3/2)

* Includes the Polar Program requests

APPENDIX I

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

AGENDA

Separate and Joint Meetings

East Coast Scheduling Group

West Coast Scheduling Group

May 21, 1985

Separate Meetings

1. Brief review of 1985 schedules, costs and funding status *(Please provide 15 copies of updated schedule and cost summaries.)*

2. 1986 Ship Use Requests *(Please provide 15 copies of summaries of your Requests received.)*

3. Tentative 1986 schedule *(Please provide 15 copies of your tentative 1986 schedules - format similar to UNOLS SHIP.SCHED86, if practical. At least time line.)*

4. Ship Costs for 1986 *(15 copies of your rough estimates for 1986---similar to 1985 cost summary noted above.)*

5. Long Range Expeditionary Plans *(Expeditionary projects, Austral summer 1986-87 and beyond. Interface with UNEPC.)*

6. 1986 and 1987 wire and cable requirements *(If necessary, update your March, 1985 inputs.)*

7. Recommendations and response to 1986 UNOLS Fleet Support Outlook *(Recommended response to May 2, 1985 letter from Head, OCFS.)*

Joint Meeting

Consolidate and summarize results of separate meetings.

APPENDIX II

NATIONAL SCIENCE FOUNDATION
WASHINGTON, D.C. 20550

DIVISION OF OCEAN SCIENCES
OCEANOGRAPHIC CENTERS AND FACILITIES SECTION

MEMORANDUM

May 2, 1985

TO: Brian Lewis, Chairman, West Coast Scheduling Committee
Bob Dinsmore, Chairman, East Coast Scheduling Committee
George Shor, Chairman, Expeditionary Planning Committee
Charles Miller, Chairman, Advisory Council
Ferris Webster, Chairman, UNOLS Membership

FROM: Head, Oceanographic Centers and Facilities Section

SUBJECT: 1986 UNOLS Fleet Support Outlook

As we complete our preparations for the UNOLS Semi-Annual Meetings on May 20-22, we see difficulties ahead for the fleet. These difficulties probably cannot be completely avoided, since they result from larger national budget problems; but their impact can be lessened by concerted effort in the community. We would like you to know our concerns now so that you can work them into your thinking about the UNOLS agenda.

The outlook for fleet support for Fiscal Year 1986 is not encouraging. That is our annual prediction, and it is understandably tempting to shrug it off. But as everyone is aware, concern about the Federal deficit makes FY 1986 an uncommon year: budget reductions are in store for much of the Federal establishment. Furthermore, the political sensitivities surrounding budget and appropriations may result in continuing resolutions, vetoes, or other tactics which can compound the problem by adding months of uncertainty to the equation.

We do not want to presume on the agency reports that will be made to the UNOLS membership at the upcoming meeting, but our discussions with the other Federal agencies and our assessment of our own prospects point to a difficult year. At best, we expect level funding for the fleet in absolute dollars. When this is racked up alongside the expectations of the operators as recently as the March scheduling meetings, the discrepancies become self-evident. [See Attachment]

It's true, of course, that estimates in the early scheduling rounds are always based on extremely hopeful forecasts of success in project funding. Since the March round, the NSF Ocean Sciences Research Section panels have met, and many PI's and ship operators should now have more solid indications of the likelihood of support for proposed field programs. After all allowances are made, however, it still appears to us that no more than 20 or 21 ship years can be supported in 1986. We call on UNOLS to help find the most rational way to deal with that reality if it does come to pass.

Part of the "cure" lies in scheduling. Fully utilized ships get more science done for each operations dollar, especially in distant water operations. If layups are inevitable, it is better to plan for them than to be forced into a patchwork of last-minute partial layups which save little money and disrupt schedules for scientists and operators alike.

We see one particular area where schedules must be rationalized if the right mix of facilities is to be available -- the Western Pacific, Indian Ocean and adjacent regions in 1986-87. Following on the Indian Ocean, there are bodies of work emerging for the Red Sea and Gulf of Aden; another group of proposals in the far southern oceans; and yet others, in the equatorial and northwest Pacific. This is the kind of situation UNEP was created to handle, yet the March schedules show little evidence of integration in the thinking of the operators with an obvious stake in these plans. CONRAD, WASHINGTON, MOANA WAVE and THOMPSON schedulers need to sit down together and look hard at the real requirements. Any schedule which is still relying on new proposals, not yet submitted, for a major portion of next year's operation is unrealistic.

There are also larger questions about fleet management under the likely funding constraints -- questions which the Advisory Council and/or the membership should address. What should be our position on fleet expansion and fleet distribution under these circumstances? How can the community identify and protect those capabilities essential to the long-range health of the field? Do we need special deadlines or other administrative devices to handle the short term FY 1986 schedule and support decisions?

We look forward to working with UNOLS in the coming months to manage this situation equitably and effectively.

Sandra D. Toye

Attachment

Copy to: Capt. Barbee, UNOLS
Mr. Kaulum, ONR
Dr. Rowland, USGS

Attachment

UNOLS Fleet Funding Estimates

	1985 Est.	1986* UNOLS Est.	1986 NSF Est.
NSF-OFS	24.3	32.0	24.1
NSF-Other	2.2		2.5
ONR	4.0	5.4	4.2
Other	4.8	3.8	3.8
	$35.3M	$41.2	$34.6
Potential No. of Ships	25	25	25
Actual Number	22 1/2	24	?

layups:				
	MOORE	3/4	VIV Rep.	1/2
	KNORR	1/4	CAYUSE	1/4
	ISELIN	1	MOORE	1/4
	VELERO IV	1/2		

*Source: UNOLS East and West Coast Scheduling Meetings: March 1985