### UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

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

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April 2, 1985

TO:

East Coast Ship Scheduling Group West Coast Ship Scheduling Group

UNOLS Members

UNOLS Associate Members UNOLS Advisory Council

Federal Agency Representatives

FROM:

William D. Barbee Mallott

Executive Secretary, UNOLS

SUBJECT:

East Coast Ship Scheduling Group Meeting,

March 15, 1985

This distributes the report of the East Coast Ship Scheduling Group held March 15, 1985 in Washington, D.C. Schedules for East Coast ships suggest heavy ship use in 1986, although much uncertainty remains pending funding decisions. Cost projections are high. However, funding information provided by NSF officials was that in FY-1986 their science programs would require only moderate ship use (about 1985 levels) and that OFS funds would support only moderate to heavy use. A significant amount of schedule re-adjustment seems probable as response to declined science proposals, to eliminate a few double bookings and to accommodate all of the science projects that will be funded.

WB:JD

Enclosure



## UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM



East Coast Ship Scheduling Group
Report of Meeting
March 15, 1985
Room 523 National Science Foundation
1800 G Street NW
Washington, D.C.

The East Coast Ship Scheduling Group met at 9:00 a.m., March 15, 1985 at the National Science Foundation, Washington, D.C. The meeting was called to order by Chairman Robertson P. Dinsmore, W.H.O.I. The order of business followed the agenda distributed before the meeting (Appendix I).

#### Attendees:

R. P. Dinsmore, Chairman
Jack Donnelly, WHOI
Joe Ustach, Duke/UNC
Harry Barnes, Bermuda Bio. Station
Jack Bash, URI
Ron Hutchinson, RSMAS
John Van Leer, RSMAS
Mike Rawson, L-DGO
Waddy Owen, UDelaware
Tex Treadwell, TAMU
Bill Mitchell, UTexas
Harris B. Stewart, Jr., Old Dominion,
Advisory Council Representative

Grant Gross, NSF Sandra Toye, NSF John McMillan, NSF Larry Clark, NSF Dick West, NSF John Morrison, NSF

Keith Kaulum, ONR Wesley Lovass, ONR

Bill Barbee, UNOLS



Before taking up agenda items the Chairman asked attendees to introduce themselves and extended welcome to and introduced new attendees Ron Hutchinson, Marine Superintendent at RSMAS, University of Miami, Harry Barnes, Facilities Manager at Bermuda Biological Station and Wesley Lovass new head of the ONR Research Ship Management Group at NSTL, Mississippi.

Sandra Toye who heads the Oceanographic Centers and Facilities Support Section (OCFS) in the Ocean Sciences Division, National Science Foundation spoke briefly to the nature of the now officially reorganized section. In addition to its traditional functions related to ship operations, oceanographic equipment and instrumentation, OCFS will have more formal and defined responsibilities for ocean engineering, shared use facilities and ocean use of satellites and super computers. The Ocean Drilling Program is now in OCFS. Preliminary budget forecasts for FY-1986 were made.

		FY-1985	FY-1986	Percent
		Actual	Proposed	Increase
	OSRS	\$ 58.1M	\$ 59.9M	3%
	OFS	34.9	36.8	5.4%
	ODP	27.6	28.8	4.6%
		\$120.6M	\$125.6M	
Within	OFS			
	Operations (includes techs)	\$ 27.6M	\$ 28.0M	
	Equipment & Instrument	7.3	8.8	
		\$ 34.9M	\$ 36.8M	

Note that the OCE reorganization notwithstanding, the budget category Oceanographic Facilities Support (OFS) remains. Also, OFS and Ocean Drilling (ODP) are separate budget line items, and virtually no funds can be interchanged without Congressional approval.

Budget increases for FY-1986 are very modest--OFS has the greatest, 5.4%, due in large part to approximately \$1M for NSF emphasis on equipment and instrumentation. Because science program increases are projected as perhaps less than the inflation rate for 1986, projections are for little or no increase in NSF program ship requirements or ship use.

It was noted that budget projections are very uncertain for this year, because of well publicized uncertainties in the overall Federal budget process.

Operations for the Ocean Drilling Program are progressing well. The drillship JOIDES RESOLUTION is remarkable. The ship will be in Norfolk, Virginia April 10-15, and should be open for visits on April 11 and 12.

Review of 1985 Schedules and Costs. Schedules and costs for all ships in 1985 were quickly reviewed. Schedules will be updated on the UNOLS bulletin board: SHIP.SCHED85. (The bulletin board SHIP.SCHED84 will be discontinued.)

Costs for 1985 are shown on the attached table, 1985 Estimates. Costs are combined with those for West Coast ships and profiled in the summary below:

# PROFILE OF FUNDING CYCLES 1985 \$ Million

	OP					SHORT
	DAYS	NSF	ONR	OTHER	TOTAL	FALL
1983	4499	23.4	3.9	5.3	32.6	
1984	4803	23.1	4.0	7.0	34.1	
1985						
March 1984						
Projection	5889	28.7	5.4	7.6	41.7	
(Anticipated)		(25.0)	(5.4)		(38.0)	(3.7)
May 1984						
Projection	5999	31.0	4.9	6.6	42.5	
(Anticipated)		(25.0)	(4.9)	(6.6)	(36.5)	(6.0)
October 1984						
Projection	5213	28.4	4.2	4.2	36.8	
(Anticipated)		(25.0)	(4.2)	(4.2)	33.4	(3.4)
March 1985						
Projection	4952	26.5	4.0	5.6	36.2	
		(25.0)	(4.0)	(5.6)	(34.6)	(1.6)

Note that these totals (which may not reflect carry-overs or some other adjustments) still reflect a shortfall.

1985 Schedules. The UNOLS Executive Secretary reported briefly on the West Coast schedule outlook for both 1985 and 1986 (see March 13, 1985 report).

TAMU. The GYRE has scheduled 237 days in 1985, a light schedule for that ship. They have a stringent budget because of unexpected early-in-the-year dropouts. After a maintenance and upkeep period, the GYRE operates in the Gulf of Mexico (March-May) before moving to the East Coast for MECCAS, physical studies and work for MMS and USGS (June-November). After two short cruises in the Gulf of Mexico, GYRE will commence major overhaul in mid December. The GYRE has only 31 USGS days in 1985.

University of Texas. The MOORE has a very light schedule in 1985, 58 days. The schedule includes training and OBS cruises out of Galveston (January, February, May and August) and borehole experiments for the Ocean Drilling Program at sites 417 and 603 (March, April). The MOORE has no MCS work scheduled for 1985.

RSMAS, University of Miami. The ISELIN is laid up for 1985. The CAPE FLORIDA has a firm schedule of 228 days. The CAPE FLORIDA will work in the South Atlantic Bight, Sargasso, Puerto Rico Trench and N. W. Providence Channel (February-July) and eastern Caribbean, Gulf of Mexico, North Atlantic, Sargasso, Bahamas and Bimini (August-December). The CALANUS has 160 days, in the Bahamas, Bimini and both coasts of Florida.

Skidaway. The BLUE FIN is scheduled for 180 days, funded by NSF and DOE, all regional work.

DUKE/UNC. The CAPE HATTERAS schedule remains at 255 days, all funded. Operations began off Puerto Rico (January) to the west coast of Florida (February), southeast Atlantic Shelf (March-May), Georges Bank and Gulf of Maine (May, July, August), Chesapeake Bay (August, September) and Carolina Shelf (September-December).

University of Delaware. The CAPE HENLOPEN has scheduled 201 days, in Delaware Bay (January, July, September, October, November), Chesapeake Bay (February, March, April, May, June), outer continental shelf (February, May, August, November), Gulf of Maine (April, May, August, October), New York Bight (March, June, July, September and December) and Cape Hatteras (October, November). All but about 20 days are firm.

Johns Hopkins U. The WARFIELD is scheduled for 145 days, 138 funded, and all except for MECCAS in Chesapeake Bay.

LDGO. The CONRAD sees no problem in a 1985 schedule for 338 days. An open transit, Papeete to Honolulu exists in August. From the Ascension Islands, the CONRAD will work in the central Atlantic (January, February) on Barbados Ridge (March) through the Caribbean (April), to the EPR for joint work with the WASHINGTON (May, June), to Manzanillo, Papeete and Honolulu (June-August), then cable survey to Hong Kong (August, September), MCS in China margin (October-December) ending the year in Singapore.

University of Rhode Island. The ENDEAVOR's 249 days are about 80% NSF solid, although about 12 additional more days could be accommodated in June.

The ENDEAVOR work southward along the Atlantic seaboard and in the Sargasso (January), off Brazil (February), in the equatorial Atlantic (March), north western Atlantic (April, May). After a maintenance break (May, June) the ship will operate in the north Atlantic (July-October) and equatorial Atlantic (November).

W.H.O.I. The KNORR is scheduled for 196 days, April-December (presently in maintenance lay-ups). All work is in the north Atlantic. A 15 open period opportunity exists in October, Woods Hole to San Juan.

The ATLANTIS II will return to Woods Hole in November for maintenance (and ALVIN overhaul). This will reduce 1985 operating days to 257. ALVIN support operations are now underway in the Galapagos (March) to be continued in Panama Basin (April), on EPR (April-June), Guaymas (July-August), again EPR (September) and Galapagos (September-October) before transit to Woods Hole (October).

The Oceanus is scheduled for 250 days, along the east coast and to Bermuda (February-August) to Canary Island and Azores (September-November) and return to Woods Hole (December).

1986 Costs and Schedules. A UNOLS bulletin board (SHIP.SCHED86) will be establish for 1986 tentative schedules. Tentative projections of schedules

are for heavy ship use (although not as high as similar projections for 1985 made in March, 1984).

1986 Costs. Cost summaries were provided for all ships, and, in combination with totals from the west coast, are summarized below:

## SUMMARY OF 1986 COST PROJECTIONS March 15, 1985

#### \$ Million

	OP				
	DAYS	NSF	ONR	OTHER	TOTAL
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

The tentative schedules must include some projects that will not be funded, and associated cost projections exceed preliminary estimates of funding.

Ship Time Requests. Ship Time Requests for 1986, together with information on recent withdrawal of some requests, were exchanged among operators. Some ship schedules were tentatively juggled to accommodate as-yet-unfilled requests and to fill holes left by request withdrawals. Although many funding decisions are yet to be made, it seems likely that finally all funded projects can be accommodated.

#### 1986 Schedules.

TAMU. Although the tentative schedule for the GYRE included 269 days, TAMU considers it light and uncertain. After overhaul period in Galveston (January, February), the GYRE would conduct a project enroute to Norfolk (February, March) and then MECCAS off the mid Atlantic coast (March, April). The schedule mid April to mid June is being developed, but could include MMS work off the Atlantic coast and work in the north Atlantic and in the Sargasso. The ship would continue to work out of Woods Hole, near Bermuda (July, August), Grand Banks (August) and Gulf of Maine (September), and would return to the Gulf of Mexico with a chemistry project enroute (September) for biology, chemistry and student training and research cruises through early December.

University of Texas. The MOORE has a tentative schedule of 111 days but with open periods January-April and mid September-mid December. Operations would begin with OBS and student training in the Gulf of Mexico (May), seismic imaging near Costa Rico (June) a two ship experiment in the Carolina Trough (July), moored array work in the Atlantic (August) and further student training and OBS work in the Gulf of Mexico (August, September).

RSMAS, University of Miami. The ISELIN's tentative schedule has 193 days, beginning in the Sargasso Sea and Gulf Stream (January, again in April and

again in August, September) in the Carioca Trench (February, March) near the Bahamas (March, April, May), Lesser Antilles to Venezuela (June-July), in the Gulf Stream north to Savannah (July) and in the north Atlantic (October-November). The ISELIN could accommodate additional work from the west coast of South America to the north Atlantic.

The CAPE FLORIDA has, tentatively, 174 days in 1986. Operating areas would include the north Atlantic (January, March, April and August), Bahamas, Tongue of the Ocean (February, May, July and September), the Gulf Stream north to Savannah (May), the Carioca Trench (June) and in the Sargasso (August). Some additional work could be accommodated throughout the year, and nothing is scheduled after September.

The CALANUS has 214 days scheduled, in the Bahamas, Florida Keys and Tongue of the Ocean.

Skidaway. A BLUE FIN schedule of 180 days is projected, funded equally by NSF and other sources.

DUKE/UNC. A schedule of 240 days is planned for the CAPE HATTERAS. Operating areas would include the southeast Atlantic states Shelf, middle Atlantic Bight and the Grand Banks/Gulf of Maine.

University of Delaware. The CAPE HENLOPEN has projected 175 operating days, in the Gulf of Maine (January, April, and September), Chesapeake Bay and Shelf (January, February, March, April, May, June), Delaware Bay and adjacent Shelf (January, March, May, July, September and November).

Johns Hopkins University. The WARFIELD has projected 172 days, 97 already funded. Operating areas are Chesapeake Bay and adjacent Shelf.

LDGO. The CONRAD has planned 305 operating days. After work along the west coast of Australia and the central Indian Ocean, the CONRAD could undertake projects in the Arabian Sea/Gulf of Aden/Red Sea, followed by work in the northwest Atlantic and along the east coast of South America. Alternatively, after the central Indian Ocean, work could be pursued in the southwest Indian Ocean, followed by projects in the South Atlantic/Southern Ocean. After either of these alternations the CONRAD would be at Cape Horn, ready to undertake projects along the west coast of South American and in the Panama Basin.

University of Rhode Island. The ENDEAVOR projects schedules on the basis of 306 days in 1986, beginning in the equatorial Atlantic (January), near Bermuda (February, March) in the mid Atlantic Bight (April), northwestern Atlantic (May), Rhode Island Shelf and Bermuda Rise (June, July, August), Grand Banks, Gulf of Maine (September, October), southwest of Bermuda, near Puerto Rico and Kane Fracture Zone (November, December).

WHOI. Planning schedule for the ATLANTIS II is 260 days. Conventional operations on the mid Atlantic Ridge (January), Panama Basin (February) and in the north Atlantic (March) would be followed by the resumption of ALVIN operations in the north Atlantic (May). Schedule for the rest of the year will be developed after review of ALVIN time requests.

The KNORR is tentatively scheduled for 273 days, beginning with FASINEX (January, February) drydocking (February-April), work off Florida (April, May), in the north Atlantic (May, June), again FASINEX (June), in the north Atlantic (July, November) and equatorial Atlantic (December). Alternatives are to begin with work in the south Atlantic (January-March), Indian Ocean (April), north Atlantic (May-September) Black Sea (September, October) and finally south Atlantic/Antarctic (November, December).

The OCEANUS plans are for 278 days. Several alternative schedules are under consideration, with most work on each of them in the north Atlantic. One alternative includes projects in the Straits of Gibraltar (March-May); another includes work in the Mediterranean (October) and south Atlantic work (November). Further schedule development depends on funding decisions and the ability of the ships to accommodate some requests.

1986 and 1987 Wire and Cable Requirements. Individual institutions provided their wire and cable requirements to Captain Dinsmore. The critical situation concerning a source for 3x19 torque balanced wire rope was discussed. The tentative new supplier, MacWhite, has not yet set firm delivery schedules. Other potential sources were discussed. The recent instance when TANU was delivered only a partial reel of cable was also discussed.

Automated System for Ship Time Requests. Suggestions that the UNOLS Office establish a computer-based system for registering and tracking UNOLS Ship Time Requests were discussed. Similar systems developed by WHOI, RSMAS and LDGO were noted. Although it was not unanimous it was recommended that the Office set up a trial system for presentation at the May UNOLS meeting.

The meeting was adjourned at 3:30 p.m.

### 1986 COST PROJECTIONS

					PROJ	ECTED 19	86 COSTS				
SHIP	1985 COSTS NSF	1985 COSTS (Proposed)	1985 OP DAYS	1986 OP DAYS	NSF	ONR	OTHER	TOTAL			
ATLANTIS II	2,550	3,170	257	260	2,320	500	500	3,320			
KNORR	1,250	2,520	196	273	1,780	1,820	-	3,600			
CONRAD	2,350	3,093	338	305	2,450	600	75	3,125			
OCEANUS	1,260	1,700	250	278	640	830	420	1,890			
ENDEAVOR	1,574	1,930	249	306	1,627	372	-	1,999			
GYRE	974	1,870	237	269	1,768	-	222	1,990			
ISELIN	537	548	-	193	1,134	24	<u>.</u>	1,158			
CAPE HENLOPEN	580	925	201	175	631	0	253	884			
CAPE HATTERAS	1,026	1,446	225	240	988	-	MMS 286 UNC 59 USGS 59 Other 36	1,429			
CAPE FLORIDA	932	1,106	228	174	729	89	_	818			
WARFIELD	506	532	145	172	618	-	-	618			
BLUE FIN	105	190	180	180	100	-	100	200			
LAURENTIAN	_	-	-	-	-	-	-	_			
CALANUS	172	244	160	214	282	9	UM 38	328			
HOORE	200	576	58	111	528	-	360	888			
TOTAL	14,016	19,850	2,724	3,150	15,595	4,244	2,408	22,247			
est Coast LEET TOTAL	12,524 26,540	16,323 36,173	2,228 4,952	2,550 5,700	16,392 31,987	1,189 5,433	1,392 3,800	18,974 41,221			

1985 ESTIMATES

					1985	1	
	1984 OP	1984	OPS	NSF	ONR	OTHER	TOTAL
SHIP	DAYS	COSTS	DAYS	\$K	\$K	\$K	\$K
ATLANTIS II	331	3,090	257	2,550	250	370	3,170
KNORR	208	2,840	196	1,250	1,270	0	2,520
CONRAD	310	2,861	338	2,350	433	310	3,093
OCEANUS	244	1,500	250	1,260	60	380	1,700
ENDEAVOR	238	1,700	249	1,574	74	282	1,930
GYRE	261	1,858	237	974	84	812	1,870
ISELIN	$233 \frac{1}{2}$	1,381	-	537	11	-	548
CAPE HENLOPEN	166	748	201	580	0	345	925
CAPE HATTERAS	255	1,374	225	1,026	0	MMS 187 NC 57 DOE 176	1,446
CAPE FLORIDA	219	1,100	228	932	19	Other 155	1,106
WARFIELD	133	531	145	506	-	NOAA 26	532
BLUE FIN	129	187	180	105	-	DOE 85	. 190
LAURENTIAN	-	-	-	-	-	-	-
CALANUS	88 1/4	171	160	172	39	33	244
MOORE	64	540	58	200	-	376	576
TOTAL	2,879	19,881	2,724	14,016	2,240	3,594	19,850
West Coast FLEET TOTAL	1,924 4,803	13,932 33,813	2,228 4,952	12,524 26,540	1,791 4,031	2,005 5,599	16,323 36,173

#### AGENDA

# East Coast Ship Scheduling Group March 15, 1985

- 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 formate similar to UNOLS SHIP. SCHED85, 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 (West Coast requirements to be consolidated with East Coast at their meeting March 15. Need input to consolidated list.)
- 7. Computer system to register UNOLS Shiptime Requests (It has been suggested that a system is needed to register (and acknowledge, distribute, sort, etc.) all UNOLS Ship Time Requests. WHOI has developed a system using DATABASE, and have applied it to their and NECOR's Requests. Perhaps other institutions have programs available. Discussion of whether the UNOLS Office should implement a system, if so, what system and with what scope/constraints.)
- 8. Recommendations (Raise any problems/solutions re UNOLS ship scheduling process.)
- 9. Other Business