

**UNOLS SHIP SCHEDULING
COMMITTEE**

Report of Meeting

9 September 1993

**National Trust for Historic Preservation
1785 Massachusetts Avenue, N.W.
Washington, DC 20036**

SCHEDULING REVIEW MEETING

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UNOLS SHIP SCHEDULING MEETING
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Appendices

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INTRODUCTION:

This report is a summary of the discussions at the UNOLS Ship Scheduling Meeting held at the National Trust for Historic Preservation in Washington, DC on 9 September 1993. Both the East/Gulf group and the West group of the Ship Scheduling Committee met together for a joint meeting. The meeting agenda was followed except as indicated herein. The Agenda is included as Appendix I. A list of attendees which included ship schedulers, funding agency representatives and program managers is appended as Appendix II.

Prior to the meeting the UNOLS Schedulers provided the UNOLS Office with copies of their proposed schedules. These were posted on the SHIP.SCHED94 OMNET Bulletin board. The Schedulers also provided the estimated costs for the schedules submitted. A summary of these costs is included as Appendix III. The UNOLS Office distributed in advance of the meeting an inventory of both 1994 and 1995 ship time requests (form 831) held by the UNOLS Office. These inventories are appended as Appendix IV and V respectively.

The meeting was called to order promptly at 0830 hrs by the Chair, Ken Palfrey.

REVIEW AND UPDATE OF SCHEDULES:

University of Michigan - LAURENTIAN. Linda Goad presented a schedule for LAURENTIAN of 95 operating days of which 65 have been funded. No comments were offered by the funding agencies.

Woods Hole Oceanographic Institution - ATLANTIS II. The schedules of all three WHOI ships were presented by Don Moller. Don reported to the Committee that a 21 day dive series for Delaney had been recently funded for 1993 work which pushed the Fox/MacDonald work into 1994. The 1994 AII schedule includes 317 operating days with 187 dives all of which are funded. Silver has 9 dives planned that are for depths in excess of 4000 meters. If the ALVIN certification is not increased to 4500 meters by that time these dives will not occur. Two engineering dive series of five dives each have been included in the schedule. Don was advised that the Batiza dives would be delayed until 1995 and that the work of Mullineaux should be moved into the schedule.

OCEANUS. OCEANUS will be completing a mid-life refit in late spring of 1994 and could be ready for operation by mid summer. No schedule is planned for OCEANUS at this time.

KNORR. The KNORR schedule was presented with three options. All options included the same first half year which appears solid. Option 1 includes Navy work in the Med for the second half of the year; Option two includes Barber and other Pacific work, and Option 3 is the chartering of the ship to MSC starting mid year. During the discussion it appeared that Options 2 and 3 were not likely but that a fourth option which included the Navy work and a possible transit to the Southern Ocean helping out MELVILLE with the WOCE work. The resolution of KNORR's schedule will take more discussion as the remaining funding unfolds.

University of Rhode Island - ENDEAVOR. The posted schedule of ENDEAVOR was altered significantly by Bill Hahn due to last minute information on programs. Montoya had not been funded and Rossby was moving to 1995. The ARPA work would be better suited for COLUMBUS ISELIN. With these openings, Bill will be able to include Stanton, Witman, and Lentz on ENDEAVOR'S schedule.

Lamont-Doherty Earth Observatory - EWING. Mike Rawson provided a fully funded schedule for EWING. The work of Smithie was transferred to KNORR for more efficient scheduling. EWING will move into the Pacific in waters off Alaska and complete the work of Diebold in coordination with ALPHA HELIX and Miller/Stanford science on the Bering Shelf and Chukchi Sea. The schedule continues down the US west coast completing the year in Panama. Mike was advised to keep the schedule of EWING to 300 days.

University of Delaware - CAPE HENLOPEN. Waddy Owen presented a 205 day schedule for CAPE HENLOPEN with 126 of these days presently funded. Waddy was advised that Donat had only requested 8 days and that Coats would be funded to 15 days. The additional work of Coats could go as ancillary work aboard the cruises of Kemp. An ONR Frew ship time request was passed to Waddy during the meeting which should be scheduled if funded.

Bermuda Biological Station for Research - WEATHERBIRD II. The schedule for WEATHERBIRD II was presented by Dennis Hansell. The schedule included 198 days of work with all but 19 of these days listed as funded. Dolly advised Dennis that NSF was funding 98 days of BATS work and that the ancillary work planned was not funded by NSF.

Duke/University of North Carolina - CAPE HATTERAS. Joe Ustach provided the CAPE HATTERAS schedule which had included 238 days. As with the ENDEAVOR schedule many changes were received at the last minute causing a major schedule change. Christensen was declined making the trip to the Gulf of Maine less cost effective. The Witman work will be passed to ENDEAVOR. George was declined. These openings permit HATTERAS to pick up the funded Moore cruise.

Skidaway - BLUE FIN. Skidaway was not represented and no schedule was available for BLUE FIN.

Harbor Branch Oceanographic Institution - SEWARD JOHNSON. The schedule of HBOI's three ships were presented by Tim Askew. SEWARD JOHNSON is scheduled for 145 days in 1994 with 17 of these days funded by NSF and the remaining by HBOI and NOAA. This ship may go to the Great Lakes this year.

EDWIN LINK. The schedule of EDWIN LINK reflects 102 days, 70 of which are NOAA funded with the remainder being funded by NSF. This ship is expected to do mostly local coastal work.

SEA DIVER. HBOI is requesting that SEA DIVER be included in the UNOLS fleet. This request will be voted on by the membership at the 1 October UNOLS Annual Meeting. SEA DIVER has been lengthened to 113 feet and will be offered at \$3800/day. Although its schedule is still unfolding the ship is in demand primarily because of its economy. SEA DIVER will be used as a submersible support ship.

University of Miami - CALANUS. The schedules of Miami ships were presented by Ron Hutchinson. CALANUS will be operated as a day boat with its schedule filling out as the year progresses. Presently there are 42 days scheduled for this ship.

COLUMBUS ISELIN. The schedule for ISELIN as with that of CAPE HATTERAS and ENDEAVOR has been constantly shifting. Three options of the ISELIN schedule were available with the first half of the year the same on all three. After August the schedule will depend on whether or not the ARPA work gets funded and the Barber work continues into 1994. A resolution of this schedule will probably not be made until later this year.

LUMCON - PELICAN. Steve Rabalais reported that PELICAN had a proposed schedule of 105 days with 87 of these days presently funded.

Texas A & M - GYRE. The GYRE schedule was presented by Dean Letzring. This schedule included 107 days of work ,both funded and proposed, of NSF, DOE, MMS and State. Dean was advised that the cruises of Santschi and of Miller/Coffin were not funded.

University of Texas - LONGHORN. Texas was not represented at the meeting and no schedule was available.

Scripps Institution of Oceanography - SPROUL. Rose Dufour provided the schedules of the three Scripps ships. SPROUL schedule included 144 days for 1994 of which 101 are presently funded. Rose was advised to check with NSF as to the funding of Niiler.

NEW HORIZON. NEW HORIZON is scheduled to work the entire year out of Southern California. The schedule includes 211 days of funded work and 18 days of work pending funding decisions.

MELVILLE. Four options of the MELVILLE schedule were presented. All options are the same through June when the ship arrives in Brisbane. Decisions of the remaining schedule must be worked out between the program managers of WOCE and MG&G along with ONR, NSF and WHOI. The problem comes with deciding which of the funded programs will have priority on the schedule.

Moss Landing Marine Laboratory - POINT SUR. The schedule of POINT SUR was presented by Mike Prince representing 206 days of funded work. POINT SUR is planning to do the Prah work off the Oregon coast in January. Mike has scheduled one 3 day ARPA cruise but was unable to fit in the second 4 day cruise. The Navy Barber work of 3 days will also need a home if funded.

Oregon State University - WECOMA. Ken Palfrey provided the report for OSU. Ken reported that WECOMA is scheduled to start its mid-life refit 22 October '93 in a west coast shipyard and complete by 15 March '94. The ship is expected to start its 137 day schedule on 7 April. All of the work has been funded except for the six additional NSF days of Trehu and the seven Navy days of Lynch. This schedule finishes on the 16th of October '94.

University of Washington - BARNES. The UW schedules were presented by Robert Hinton. BARNES will be involved in local ops and has a modest schedule of 81 days.

THOMPSON. THOMPSON'S schedule is driven by the need to be in the Indian Ocean for a 1 October start of the JGOFS program. Prior to this time THOMPSON has a fully funded schedule and includes a shipyard period to address the ship's piping problem. A total of 278 days are scheduled for this ship in 1994. Because THOMPSON will be on an extended deployment to the Indian Ocean, the State has scheduled 62 days in 1994 to better balance their ship time commitment.

University of Alaska - ALPHA HELIX. Tom Royer provided the schedule for ALPHA HELIX. The ship is scheduled for 173 days of ship time in 1994 with all but 20 days presently funded. ALPHA HELIX will have a dual ship operation with EWING on the Holbrook/Diebold cruise.

University of Hawaii - MOANA WAVE. The schedule of MOANA WAVE was presented by Stan Winslow. MOANA WAVE's schedule is anchored with the ARPA work which accounts for 104 days. A double booking of the March HOTS work was noted. MOANA WAVE will be unable to accommodate the HOTS work during the summer months. This ship will also be supporting the NOAA work of Clark.

Cruise tracks for the schedules presented above were provided and are included as Appendix VI.

FEDERAL AGENCY REPORTS.

National Science Foundation - The NSF was briefly given by Dolly Dieter. Dolly said that the NSF budget was not yet approved but did not look healthy. NSF is scheduled to move to their new Virginia location in November.

Office of Naval Research - Keith Kaulum reported the ONR ship support for 1994 would be significantly lower than in 1993. He suggested that several special focus programs had been completed and that new programs have not yet come on line.

National Oceanic and Atmospheric Administration - NOAA's report was provided by Captain Marty Mulhern. Marty indicated that NOAA would have a modest requirement for charter (UNOLS) vessels in 1994 beyond those scheduled by NURC. This would be the Ocean Color program by Clark off Hawaii. The NOAA ships DISCOVERER and BALDRIDGE would be on WOCE and TOGA cruises in the Pacific. BALDRIDGE would then go to the Indian Ocean. The NOAA 1995 budget is still uncertain but there could be modest UNOLS funding available. NOAA has been working on a Strategic Plan for 1995-2005.

SCHEDULING PROCEDURE REVISION FOR UNOLS VESSELS.

Ken Palfrey led a discussion on a proposed revision to the scheduling procedure. A copy of the proposal is included as Appendix VII. The concept is that electronic procedures are now so efficient that meeting together in June is not necessary. This presupposes that all schedulers ensure that their ship's schedules are up-to-date and posted and that the cost of these schedules are also provided. The Review Group would meet as in the past to review the schedules and recommend changes that would promote efficiency. The Committee would meet in the fall, however, those ship schedulers with local type operations could choose not to attend if they felt their schedules provided no controversy. The Review Group would again meet as usual after this fall meeting. This proposal met with no criticism and much support. It will be presented to the UNOLS Council for their approval and if received would be implemented on a trial basis next year.

The meeting was adjourned at 1300 hrs.

**Ship Scheduling Review Meeting
National Trust for Historic Preservation
Washington, DC**

9 September, 1993

The Ship Scheduling Review Group met at 1300 hrs on 9 September, 1993 in the Board Room of the National Trust for Historic Preservation, 1785 Massachusetts Ave. NW, Washington, DC. The group reviewed the schedules presented at the morning meeting of the UNOLS Ship Scheduling Committee. Present were: Ken Palfrey, Chair; Ron Hutchinson, Vice Chair; Dolly Dieter and Don Heinrichs, NSF; Keith Kaulum, ONR; Marty Mulhern, NOAA; Jack Bash and Mary D'Andrea, UNOLS.

The following is a brief summary of the recommendations of the review process.

LAURENTIAN - No comment of the schedule as presented.

OCEANUS - OCEANUS is scheduled to complete a mid-life refit in 1994 with no scheduled operations for the remainder of the year.

ATLANTIS II - The work of K. Smith in May needs more time. The cruise of Batiza will be delayed until 1995, Mullineaux should be worked into this slot. The proposed engineering dives in May and September should be supported with appropriate rationale in the ship's operation proposal.

KNORR - The schedule of KNORR is still unresolved. WHOI should work closely with ONR to ascertain the viability of the NUWC work. There is also a possibility that KNORR will be needed in the Southern Ocean in support of WOCE and Tindale cruise work. This will need coordination with Scripps and the schedule of MELVILLE.

ENDEAVOR - The ENDEAVOR schedule as presented will need further refinement and coordination with the schedule of CAPE HATTERAS. The Montoya work has been declined. Rossby will be delayed until 1995. The cruise of Yamamoto should be confirmed with ONR and the cruise of Cutter with NSF and the PI. The ARPA work of Spindel is still under evaluation and will probably be satisfied by COLUMBUS ISELIN. Both Witman cruises should be included on ENDEAVOR'S schedule. The Stanton work should be included and the Lentz work should be accommodated in coordination with CAPE HATTERAS. The Waterbury work should be scheduled for 10 days. This could increase to 14 if Bacon gets funded.

EWING - The schedule of EWING should not include more than 300 days. The work of Orcutt may be delayed until 1995. The EAR cruises are still pending. It appears that the Lyle work will not be funded.

CAPE HENLOPEN - Coats has been funded for 15 days, the remainder of his work should be ancillary with Kemp. Kemp has been funded for 48 days. The ONR Frew work should be scheduled if funded.

CAPE HATTERAS - For better schedule efficiency the Gulf of Maine cruises should be transferred to ENDEAVOR. The 12 days of W. Moore work should be planned for HATTERAS. Coordinate with URI to work out the most efficient way to schedule the Lentz work.

BLUE FIN - No schedule presented.

EDWIN LINK - No comment on the schedule as presented.

SEWARD JOHNSON - No comment on the schedule as presented.

SEA DIVER - No comment on the schedule as presented.

CALANUS - No comment on the schedule as presented.

COLUMBUS ISELIN - The work of Capone and Carpenter are still pending. The pending work of Barber should be scheduled in or after October to ensure one year from the 1993 Barber cruise. The Moore work should go aboard CAPE HATTERAS. The ARPA work should be planned for COLUMBUS ISELIN.

PELICAN - No comment on the schedule as presented.

LONGHORN - No schedule presented.

GYRE - No comment on the schedule as presented.

SPROUL - The NSF work of Yyanos has been funded. The funding status of Niiler must be checked.

NEW HORIZON - What are the plans to recover Ken Smith's moorings in December? Should they be deployed? Try to accommodate the ONR work of Spiess on the Hildebrand/Webb cruise if the earlier equipment tests prove successful. Coordinate with OSU to determine if the Spiess/Hildebrand work can be accommodated by WECOMA.

MELVILLE - More discussion is needed on the MELVILLE schedule. A split of the WOCE work with KNORR is likely.

POINT SUR - If Johnson is funded by ONR these three days should be picked up.

WECOMA - The Porter work is still pending. The extra 6 days of the Trehu cruise is still pending. Will WECOMA be able to do the Spiess recovery work?

BARNES - No comment on the schedule as presented.

THOMPSON - There is still a conflict with MOANA WAVE and the March HOTS work. If MOANA WAVE is available for this work it should go aboard that ship.

ALPHA HELIX - No comment on the schedule as presented.

MOANA WAVE - The Cowen work is fine as scheduled, however, the ONR Bruland portion of the cruise will need a resolution as to the number of days. All possible effort should be used to accommodate as many HOTS cruises as possible. The HOTS work should go aboard a UNOLS vessels if at all possible.

APPENDIX I

AGENDA

UNOLS SHIP SCHEDULING MEETING

MEETING: UNOLS Scheduling Meeting

DATE: 9 September 1993

PLACE: National Trust for Historic Preservation
1785 Massachusetts Avenue
Washington, DC 20036

TIME: 0830 HRS

The Ship Scheduling meeting will be called into session by Ken Palfrey, Chair.

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

IDENTIFY CONFLICTS AND UNSOLVED ISSUES. There will be a discussion on cruises not scheduled and those double booked. (Note: We will attempt to account for all cruises on the inventory list distributed by Jack Bash).

AGENCY PRESENTATIONS. Representatives from NSF, ONR and NOAA will provide scheduling guidance, science program ship requirements and priorities, science funding decisions, ship ops funding outlook and related matters for the 1994 scheduling year.

COSTS. The UNOLS Office will provide a summary of cost figures.

PRE-MEETING ACTION. All ship's schedules should be on OMNET SHIP.SCHEDULERS.EAST. GULF or SHIP.SCHEDULERS.WEST by 1 Sep '93. Cost figures in the following format for both 1993 and 1994 should be passed to the UNOLS Office no later than 3 Sep '93.

1993	NSF	NAVY	OTHER	TOTAL
Ship Days/ Ship \$K				
1994	NSF	NAVY	OTHER	TOTAL
Ship Days/ Ship \$K				

Costs for 1993 should be your latest projection, and consistent with your last negotiation with NSF and/or ONR. Costs for 1994 should be realistic estimates.

WHAT TO BRING TO THE MEETING:

1. Viewgraph(s) to illustrate your 1994 schedule.
2. Viewgraph(s) and one hard copy of track chart(s) for 1994.
3. An extra copy of each Form 831 Ship Time Request not yet submitted to the UNOLS Office.
4. YOU SHOULD HAVE ALREADY SUBMITTED YOUR SCHEDULE AND COST INFORMATION AND SHOULD NOT NEED TO BRING COPIES.

APPENDIX II

Appendix II

UNOLS Ship Scheduling Meeting Attendees

Tim Askew	Harbor Branch Oceanographic Institution
Rodger Baier	NSF
Jack Bash	UNOLS
Mary D'Andrea	UNOLS
Pat Dennis	Navy
Dolly Dieter	NSF
Rose Dufour	SIO/UCSD
Linda Goad	University of Michigan
William Hahn	URI/GSO
Dennis Hansell	BBSR
Roger Hanson	NSF
Don Heinrichs	NSF
Robert Hinton	University of Washington
Ron Hutchinson	University of Miami
Keith Kaulum	ONR
Russ Kelz	NSF
Robert Knox	SIO/UCSD
Dean Letzring	Texas A&M
Don Moller	WHOI
Martin Mulhern	NOAA
Wadsworth Owen	University of Delaware
Ken Palfrey	OSU
Dick Pittenger	WHOI
Mike Prince	Moss Landing Marine Labs
Steve Rabalais	Louisiana Universities Marine Consortium
Michael Rawson	Lamont-Doherty
Lisa Rom	NSF
Tom Royer	University of Alaska
Sergio Signorini	NSF
Joe Ustach	Duke University
Stan Winslow	University of Hawaii

Scheduling Review Meeting Attendees

Jack Bash	UNOLS
Mary D'Andrea	UNOLS
Dolly Dieter	NSF
Don Heinrichs	NSF
Ron Hutchinson	University of Miami
Keith Kaulum	ONR
Marty Mulhern	NOAA
Ken Palfrey	OSU

APPENDIX III

**SUMMARY OF SHIP USE AND COSTS
YEAR: 1993**

SHIP/CLASS	NSF		NAVY		OTHER		TOTAL		DAILY RATE
	DAY	\$	DAY	\$	DAY	\$	DAY	\$	
MELVILLE	242	3,531	35	511	30	438	307	4,480	14,593
KNORR	167	2,589	111	1,721	0	0	278	4,310	15,504
ATLANTIS II	176	2,781	29	458	41	648	246	3,887	15,801
EWING	221	3,900	0	0	0	0	221	3,900	17,647
T.G. THOMPSON	222	3,152	3	43	50	710	275	3,905	14,200
MOANA WAVE	197	2,041	64	659	5	52	266	2,752	10,346
CLASS II TOTAL	1,225	17,994	242	3,392	126	1,848	1,593	23,234	--
AVE: (6)	204	2,999	40	565	21	308	266	3,872	--
EDWIN LINK	0	0	33	257	92	717.6	125	975.0	7,800
ENDEAVOR *	0	1,075 a	0	0	0	0	0	1,075	--
OCEANUS	84	664	94	743	9	71	187	1,478	7,904
GYRE	23	184	67	535	73	583	163	1,302	7,988
ISELIN *	159	1,598	61	613	0	0	220	2,211	10,050
NEW HORIZON	175	1,533	26.5	232.0	45.5	399	247	2,164	8,761
SEWARD JOHNSON	31.0	241.8	2.0	15.6	97.0	756.6	130.0	1,014.0	7,800
VICKERS *	46	552	0	0	81	972	127	1,524	12,000
WECOMA	138	1,430	88	911	0	0	226	2,341	10,358
CLASS III TOTAL	656	7,278	372	3,307	398	3,499	1,425	14,084	--
AVE: (8)	82	809	46	413	50	437	178	1,761	--
PELICAN	59	194	0	0	194	638	253	832	3,289
LONGHORN *	14	56	0	0	38	152	52	208	4,000
POINT SUR	94	591	64 b	403 b	19	120	177	1,114	6,294
CAPE HATTERAS	185	1,198	12	78	14	58	211	1,334	6,322
ALPHA HELIX	129	1,145	0	0	38	359	167	1,505	9,011
R. SPROUL	41	211	43	221	67	344	151	776	5,139
CAPE HENLOPEN	134	848	18	114	12	76	164	1,038	6,329
WEATHERBIRD II	139	1,000	5	36	6	43	150	1,079	7,194
CLASS 1V	795	5,243	142	852	388	1,791	1,325	7,886	--
AVE: (8)	99	655	18	106	49	224	166	986	--
BLUE FIN	59	106	0	0	46	83	105	189	1,800
LAURENTIAN *	74	323	0	0	10	44	84	366	4,360
BARNES	44	85	0	0	17	33	61	118	1,934
CALANUS *	96	193	15	30	1	2	112	225	2,007
CLASS 1V TOTAL	273	707	15	30	74	161	362	898	--
AVE: (4)	68	177	4	8	19	40	91	225	--
FLEET TOTAL	2,949	31,222	771	7,581	986	7,299	4,705	46,102	--
AVE: (26)	113	1,156	30	292	38	281	181	1,773	--

NOTE: a NSF support for lay-up expenses.

b Includes for NPS (CNOC): 54 days, \$340 K

* Not updated since the last scheduling meeting.

SUMMARY OF SHIP USE AND COSTS
YEAR: 1994

SHIP/CLASS	NSF		NAVY		OTHER		TOTAL		DAILY RATE
	DAY	\$	DAY	\$	DAY	\$	DAY	\$	
MELVILLE	268	4,149	39	604	0	0	307	4,753	15,482
KNORR	156	2,652	14	238	48	816	218	3,706	17,000
ATLANTIS II	256	3,712	32	464	28	406	316	4,582	14,500
EWING	326	5,102	12	188	0	0	338	5,290	15,650
T.G. THOMPSON	187	2,850	23	351	68	1,036	278	4,237	15,241
MOANA WAVE	119	1,357	27	308	114	1,300	260	2,965	11,404
CLASS II - TOTAL	1,312	19,822	147	2,153	258	3,558	1,717	25,533	--
AVE: (6)	219	3,304	25	359	43	593	286	4,255	--
EDWIN LINK	32	256	0	0	70	560	102	816	8,000
ENDEAVOR	140	1,442	7	72.0	63	649	210	2,163	10,300
OCEANUS	0	1,000 ^a	0	0	0	0	0	1,000	0
GYRE	44	396	0	0	63	567	107	963	9,000
ISELIN - A	66	872	46	607	42	555	154	2,034	13,205
ISELIN - B	85	930	70	766	42	459	197	2,155	10,940
NEW HORIZON	175	1,683	20	192	34	327	229	2,202	9,616
SEWARD JOHNSON	17	136	0	0	128	1,024	145	1,160	8,000
WECOMA	118	1,404	27	322	0	0	145	1,726	11,903
CLASS III TOTAL - A	592	7,189	100	1,193	400	3,682	1,092	12,064	--
CLASS III TOTAL - B	611	7,247	124	1,352	400	3,586	1,135	12,185	--
AVE: (8) - A	74	899	13	149	50	460	137	1,508	--
AVE: (8) - B	76	906	16	169	50	448	142	1,523	--
PELICAN	46	184	0	0	75	300	121	484	4,000
LONGHORN *	37	148	0	0	40	160	77	308	4,000
POINT SUR	130	746	55	316 ^b	21	121	206	1,183	5,743
CAPE HATTERAS	196	1,262	30	193	10	64	236	1,520	6,439
ALPHA HELIX	139	1,294	0	0	28	261	167	1,555	9,310
R. SPROUL	96	513	44	235	25	134	165	882	5,345
CAPE HENLOPEN	172	1,032	27	162	6	36	205	1,230	6,000
WEATHERBIRD II	190	1,200	0	0.0	0	0.0	190	1,200	6,316
CLASS 1V - TOTAL	1,006	6,379	156	906	205	1,076	1,367	8,361	--
AVE: (8)	126	797	20	113	26	135	171	1,045	--
BLUE FIN	60	114	0	0	45	86	105	200	1,900
LAURENTIAN	71	308	0	0	19	82	90	390	4,333
BARNES	46	73	16	25	18	28	80	126	1,575
CALANUS	30	63	2	4	10	21	42	88	2,100
CLASS 1V TOTAL	207	558	18	29	92	217	317	804	--
AVE: (4)	52	140	5	7	23	54	79	201	--
Fleet Total - Opt. A	3,117	33,947	421	4,282	955	8,532	4,493	46,761	--
AVE: (26)	120	1,306	16	165	37	328	173	1,799	--

NOTES: a. NSF support for lay-up expenses.
b. Includes for NPS (CNOC) 55 days, \$316 K
* Not updated since the last scheduling meeting.

APPENDIX IV

1994 SHIPTIME REQUESTS

8 SEP 93

<u>PI</u>	<u>INSTITUTION</u>	<u>AREA</u>	<u>SHIP REQUESTED</u>	<u>OPTIMUM 1994 DATES</u>	<u>SOURCE/ FUNDING</u>	<u>DAYS</u>
Aki/Heney	USC	NP9	EWING	SEP/OCT93	???	5
Allredge, A*	UCSB	NP9	POINT SUR	APR/MAY	NSF/BIO	8
Allredge, A*	UCSB	NP9	POINT SUR	AUG/OCT	NSF/BIO	8
Anderson, R	BIGELOW	NA6	CAPE HATTERAS	APR	NSF/BIO	7
Aubrey, D	WHOI	??	??	??	NSF	ANC
Azam, F*	SCRIPPS	NP9	SPROUL	JAN/FEB	NSF/BIO	20
Bacon/Frncois*	WHOI	NA6	OCEANUS	MAY/JUN	NSF/CH	12
Balch, W.	MIAMI	INI	THOMPSON	AUG	NSF/BIO	17
Barber, R	DUKE	NP13/SP3	MEDIUM	FALL	NSF/ONR	42
Barber, R	DUKE	NP6	POINT SUR	SUMMER	NSF/ONR	5
Barth, J*	OSU	NP9	WECOMA	MAY	NSF/PHY	10
Barth, J*	OSU	NP9	WECOMA	JUL/AUG	NSF/PHY	10
Batiza, R	UH	NP13	ATLANTIS II	LATE 94	NSF/MGG	14
Batiza, R*	UH	NP3/SP3	NEW HORIZON	SEP/OCT	NSF/MGG	37
Beardsley, R	WHOI	MA10	HATTERAS/ISLEN	JAN/FEB	NSF/OSR	90
Beardsley/Well	WHOI	NA6	OCEANUS/END	MAR/JUN/SEP	NSF/GLOBEC	21
Behrens, E W*	UT	NA9	GYRE/LONGHORN	MAY/JUN	NSF/MGG	16
Bender, J	UNC	NP13	ATLANTIS II	SPRING/SUM	NSF/ALV	20
Bibee, D	NRL	NA9	GYRE	JUN	ONR/NRL	15
Bidigare, R	UH	NP8	MOANA WAVE	EA MONTH	NSF/CH/BIO	74
Biesiot, P	U SO MISS	NA9/NA6	PELICAN	SEP	NSF/BIO	9
Blair, N	NCSU	NA6	SEWARD JOHNSON	MAY/AUG	NSF/CH	16
Blair, N	NCSU	NA6	ATLANTIS II	FAL	NSF/RIDGE	10
Block, B*	U OF CHI	NP9	POINT SUR	SEP	NSF/PHY	22
Blou, N*	WHOI	NA6	CAPE HENLOPEN	APR	ONR	4
Bollens/Wiebe	WHOI	NP9	BARNES	APR/MAY	NSF/BIO	40
Bond/Bangs/Die	LDEO	NP5	EWING	SUMMER	NSF/MGG	31
Bond/Mutter	LDEO	NP5	EWING	SUMMER	NSF/MGG	31
Bottjer, D	USC	NP9	VICKERS	APR/MAY	NSF/SGG	5
Bradley/Walden	WHOI	ANY	ATLANTIS II	ANY	NSF/ALV	5
Brimberg, F	WESTINGHS	NA6	CAPE HENLOPEN	FALL	NAVY	10
Bryden, H	WHOI	SP3-SP1	KNORR/MELVILLE	ANY	NSF/WOCE	100
Bucklin, A	UNH	NA6	OCEANUS	APR93?	ONR	1
Buesseler, K	WHOI	NP6	OCEANUS	APR/JUN	DOE	3
Buffler, R	UT	IN5	MOANA WAVE	MAR-MAY	NSF/MGG	34
Buffler, R	UT	NA9	EWING	SUMMER	NSF/ODP	32
Burdige, D*	ODU	NA6	CAPE HENLOPEN	APR/JUL/OCT	NSF/CH	12
Burdige, D*	ODU	NP6	POINT SUR	ANY	NSF/CH	4
Campbell, L	UH	NA6	WEATHERBIRD II	FEB-SEP	NSF/BIO	32
Campbell, L	UH	NP8/11	MOANA WAVE	MAY/DEC	NSF/BIO	8
Cande, S	SCRIPPS	SP3	ATLANTIS II	JAN	NSF/MGG	34

Cande, S	SCRIPPS	SP3	MELVILLE	OPEN	NSF/MGG	41
Cande, S	SCRIPPS	SP3	NEW HORIZON	SUMMER	NSF/MGG	34
Capone, D*	UMD	NA9/10	ISELIN	APR/MAY	NSF/BIO	35
Caron, D	WHOI	NA6	OCEANUS	JUL/AUG	NSF/BIO	21
Caron, D	WHOI	IN1	LARGE	NOV	NSF/JGOFs	30
Caron, D*	WHOI	NA6	WEATHERBIRD II	APR/MAY	NSF/BIO	15
Carpenter, E*	SUNY	NA6	ASTERIAS	SUMMER	NSF/BIO	25
Carson, B	LEHIGH	NP9	ATLANTIS II	SUMMER	NSF/MGG	15
Casey, J	HOUSTON	NA7	ATLANTIS II	JUN	NSF/RIDGE	32
Castillo, P	SCRIPPS	SP6,SP9	MELVILLE	JAN	NSF/MGG	20
Castillo, P*	SCRIPPS	SP6	MELVILLE	MAR	NSF/MGG	36
Chave, A*	WHOI	NA6	CAPE HATTERAS	MAR	NSF/EAR	7
Chave, A*	WHOI	NA6	CAPE HATTERAS	APR	NSF/EAR	6
Chave, A*	WHOI	NA6	OCEANUS	AUG/SEP	NSF/EAR	14
Chave, A*	WHOI	NP9	SPROUL	JUL/AUG	NSF/MGG	4
Childress, J	UCSB	NP3	ATLANTIS II	SPRING	NSF/BIO	12
Childress, J	UCSB	NP9	ATLANTIS II	ANY	NSF/BIO	12
Childress, J*	UCSB	NP13	NEW HORIZON	WINTER	NSF/BIO	10
Childress, J*	UCSB	NP13	POINT SUR	SUMMER	NSF/BIO	10
Childress, J*	UCSB	NP13	VICKERS	WINTER	NSF/BIO	21
Christensen, J	BIGELOW	NA6	MEDIUM	FEB/SEP	NSF/BIO	20
Christensen, J*	BIGELOW	NA6	CAPE HATTERAS	JUL/AUG	NSF/CH	33
Christie, D*	OSU	IN7-IN8	MELVILLE	JAN	NSF/MGG	48
Christie, D*	OSU	NP13	MELVILLE/EWING	ANY	NSF/MGG	23
Chrysostomids*	MIT	NP9	MEDIUM	SEP	NSF/OTD	13
Clark,*	NOAA	NP11	ANY	QUARTERLY	NOAA	25
Clarke, S*	USGS	NP6	EWING	AUG	USGS	6
Coats, D W*	SMITHSONIAN	NA6	CAPE HENLOPEN	MAY-OCT	NSF/BIO	30
Cochran, J*	LDEO	IN7	MELVILLE	WINTER	NSF/MGG	40
Cochran, J*	LDEO	SP3	MOANA WAVE	WINTER	NSF/MGG	39
Cochran/Forn*	LDEO	NP13	ATLANTIS II	FEB-JUN	NSF/MGG	10
Coffin, M	UT	SP4/SP7	MOANA WAVE	JAN	NSF/MGG	49
Collier, R	OSU	SP3	THOMPSON	JAN	NSF/MGG	40
Colwell, R	UMD	NA6	ISELIN	JAN 93?	NSF/BIO	16
Constable, S*	SCRIPPS	NP9	WECOMA	MAY/JUL	NSF/??	8
Corliss, B*	DUKE	NA6	CAPE HATTERAS	JUN	NSF/MGG	3
Cowan, E*	APP STATE U	NP6	ALPHA HELIX	AUG	NSF/GLA	15
Cowan, J H	U SO ALA	NP9	PELICAN	JUL/DEC	NSF/BIO	14
Cowen, J P*	UH	NP12	MOANA WAVE/VIC	JAN	NSF/CH	5
Cowen, R K	STONY BROOK	NP9	WEATHERBIRD II	OCT/NOV	NSF/BIO/PH	7
Cowles, D	LOMA LINDA	NP13	NEW HORIZON	WINTER	NSF/BIO	10
Cowles, D	LOMA LINDA	NP13	POINT SUR	SUMMER	NSF/BIO	10
Cowles, D	LOMA LINDA	NP13	VICKERS	WINTER	NSF/BIO	21
Cowles, T*	OSU	NP9	WECOMA	ANY	NSF/BIO	10
Craig, H	SCRIPPS	SP1-3	MELVILLE	ANY	NSF/MGG	25
Cuhel, R*	U WIS	GL4	LAURENTIAN	JUL	NSF/REU	5
Cutter, G	ODU	IN1	THOMPSON	NOV	NSF/CH	35
Cutter, G*	ODU	NA6	ENDEAVOR	AUG	NSF/CH	24
Cutter, G*	ODU	NA6	ENDEAVOR	FEB	NSF/CH	24
Dacey, J	WHOI	NA6	WEATHERBIRD II	JUN-SEP	NSF/CH	18
Dagg, M	LUMCON	NA9	PELICAN	JUL	NSF/BIO	10
Dagg, M	LUMCON	NA9	PELICAN	JUL	NSF/Y SCH	3
Davis, C	WHOI	NP9	???	APR/MAY	NUWC	??
de Angelis, M*	STONY BROOK	NA9	SEWARD JOHNSON	JUL	NSF/CH	4

Deferrari, H*	MIAMI	NA6	KNORR	MAR	ONR	14
Detrick, R	WHOI	NP9	EWING	SUM/FALL	NSF/RIDGE	25
Detrick, R*	WHOI	NA6/NA7	EWING	FALL93	NSF/MGG	
Detrick, R*	WHOI	NP13	EWING	FALL93	NSF/ODP	23
Deuser, W*	WHOI	NA6	WEATHERBIRD II	MAR/MAY/JUL	NSF/CH	6
Devol, A	UW	IN1	THOMPSON	APR/OCT	NSF/CH	60
Devol, A*	UW	NP9	NEW HORIZON	AUG	NSF/CH	30
Dick, H	WHOI	SA3A	KNORR	NOV	NSF/MGG	34
Dick, H	WHOI	IN4	KNORR/MELVILLE	ANY	NSF/ODP	35
Dick, H*	WHOI	MA10	KNORR	ANY	NSF/RIDGE	39
Dickey, T	USC	NA6	WEATHERBIRD II	FEB-OCT	NSF/JGOFs	30
Diebold, J	LDEO	NP13	EWING	MAY-SEP	ONR	4
Diebold, J*	LDEO	NA9	EWING	JUN	NSF/MGG	33
Diebold, J*	LDEO	NP9	EWING	MAY-SEP	ONR	4
Donat, J*	ODU	NA6	CAPE HENLOPEN	MAR/AUG/NOV	ONR	10
Dorman, L	SCRIPPS	IN2	MELVILLE	ANY	NSF/MGG	29
Dorman, L*	SCRIPPS	NP12	THOMPSON/NH	SUMMER	NSF/ODP	25
Driscoll, N*	LDEO	NA6	CAPE HENLOPEN	JUL/AUG	ONR	11
Ducklow, H*	HORN POINT	NA5/NA7	MEDIUM/LARGE	APRIL	NSF/CH/BIO	24
Dugdale, R*	USC	NP9	POINT SUR	APR/MAY/JUN	NSF/BIO	15
Durbin, E*	URI	NA6	ENDEAVOR	JAN-JUL	NSF/BIO	66
Edmondson, W	UW	NP9	BARNES	ANY	NSF	8
Emerson, S*	UW	NP9	BARNES	MAR	NSF/CH	7
Ertel, J	GEORGIA	NA6	BLUEFIN	JUN/SEP	NSF/CH	14
Estes, J*	UCSC	NP5	ALPHA HELIX	SUMMER	NSF/BIO	14
Etter, R	UMASS	NA6	OCEANUS	AUG	NSF/BIO	3
Felbeck	UCSD	NP3	ATLANTIS II	SPRING	NSF/RIDGE	12
Fell, J*	RSMAS	NA6	CALANUS	MAY	NSF/BIO	16
Fenical, W*	SCRIPPS	NA9	ISELIN	JUL	NSF/CH	21
Firing, E	UH	SP	THOMPSON	JAN/APR	NSF/PHY	79
Fisher, C	PENN STATE	NP13	ATLANTIS II	JUL/AUG	NSF/BIO	3
Fisher, C	PENN STATE	NP9	ATLANTIS II	JULY	NSF/BIO	20
Fisher, C	PENN STATE	SP3	ATLANTIS II	SUMMER	NSF/BIO	6
Fisher, C*	PENN STATE	NA9	EDWIN LINK	SUMMER	NSF/BIO	4
Flood, R*	STONY BROOK	SA2	EWING	ANY	NSF/MGG	30
Frank, T*	HBOI	NA9	SEWARD JOHNSON	MAY/AUT	NSF/BIO	20
Frank, T*	HBOI	NA9	SEWARD JOHNSON	JAN-SEP	NSF/BIO	20
Frew, N	WHOI	NA6	CAPE HENLOPEN	SEP	ONR	12
Fryer, P	UH	NP10	MOANA WAVE	JAN/AUG	NSF/MGG	25
Fuhrman, J*	USC	NP9	POINT SUR	JUN/AUG	NSF/BIO	7
Garcia, M	UH	NP11	ATLANTIS II	JUL/AUG	NSF/ALV	7
Gardner, W	TAMU	IN1	THOMPSON?	ANY	NSF/JGOFs	20
Garzoli, S	LDEO	SA24	EWING	JAN/FEB	NSF/PHY	22
Gee/Kent	LDEO	NP3	ATLANTIS II	JAN	NSF/MGG	20
Gee/Langmuir	LDEO	SP3	ATLANTIS II	APR	NSF/RIDGE	24
Geider, R*	DEL	NA6	CAPE HENLOPEN	SUMMER	NSF/BIO	5
George, R*	UNC	NA6	CAPE HATTERAS	JUL/DEC	NSF/BIO	16
Goericke, R	SCRIPPS	NP9	NEW HORIZON	ANY	NSF/BIO	2
Gorsline, D	USC	NP9	EWING	SEP/OCT	NSF/CONT.L	10
Gowing, M	UCSC	NA6	WEATHERBIRD II	MAY	NSF/BIO	??
Grebmeier, J*	U TENN	NP5	ALPHA HELIX	MAY/JUN	NSF/POLBIO	30
Guza/Herbers	UCSD	NA6	CAPE HATTERAS	SEP	ONR	4
Guza/Herbers	UCSD	NA6	CAPE HATTERAS	NOV	ONR	5
Guza/Herbers*	UCSD	NA6	CAPE HATTERAS	JUL	ONR	2

Guza/Largier	UCSD	NA6	CAPE HATTERAS	SEP/NOV	NSF/ICS	39
Guza/Largier	UCSD	NA6	CAPE HATTERAS	JUL/AUG	NSF/ICS	37
Guza/Largier	UCSD	NA6	OCEANUS	JUL/NOV	NSF/ICS	17
Halfman, J*	NOTRE DAME	GL4	LAURENTIAN	AUG	NSF/MGG	12
Hall, M	WHOI	IN5/NP7/10	THOMPSON	NOV	NSF/WOCE	41
Hallock, Z	NRL	NP7	MOANA WAVE	JUL	NRL	13
Hansell, D	BBS	NP9	NEW HORIZON	NOV/DEC	NSF/CH	30
Hansell, D*	BBS	NP9	WEATHERBIRD II	FEB-OCT	NSF/CH	30
Haury, L*	SCRIPPS	NP9	NEW HORIZON	SPRING/SUM	ONR/BIO	2
Haymon/Mdnaid*	USSB	SP3	KNORR	FALL	NSF/RIDGE	35
Henrichs, S	UA	NP6	ALPHA HELIX	AUG	NSF/CH	7
Henry, T	USC	SP4	EWING	FEB	NSF/CONT	10
Highsmith, R	UA	NP2/4	ALPHA HELIX	SUMMER	NSF/DPP	52
Hildebrand, J*	SCRIPPS	SP1	LARGE	FALL	NSF/MGG	27
Hill, R	U MD	NA6	CAPE HEN/HAT	EACH MONTH	NSF/BIO	12
Hochstaedter, A	U SO FL	NP7	MELVILLE	SPRING	NSF/MGG	32
Holbrook/Tuch*	WHOI	NA6	EWING	JUL	NSF/ODP	33
Hollister, L	PRINCETON	NP9	WECOMA	OCT	NSF/CONT	8
Hollister, L*	PRINCETON	NP6	EWING	SUMMER	NSF/CONT	10
Honjo, S	WHOI	IN1	THOMPSON	OCT	NSF/JGOFS	
Iliffe, T	TAMU	NA9/NP13/	ANY	ANY	NSF/BIO	ANC
Jackson, G	TAMU	NP4	BARNES	APR/MAY	ONR	18
Jannasch, H	WHOI	NP13	ATLANTIS II	SPRING	NSF/ALV	15
Jenkins, W*	WHOI	NA6	CAPE HENLOPEN	APR/JUN/AUG	NSF/CH	21
Jenkins, W*	WHOI	NA6	WEATHERBIRD II	ANY	NSF/CH	6
Johnson, K*	MLML	NP9	POINT SUR	OCT	NSF/CH	21
Johnson, M	UA	NP6	ALPHA HELIX	MAY/NOV	NSF/PO	45
Johnson, P	UW	NP9	ATLANTIS II	JUL/AUG	NSF/MGG	15
Johnson, P*	UW	NP10	THOMPSON/MEL	SUMMER	NSF/MGG	28
Joyce, T*	WHOI	NP9	WECOMA	MAY	NSF/RIDGE	8
Jumars, P*	UW	NP6	BARNES	ALL SEASONS	NSF/BIO	16
Kamykowski, D*	NCSU	NA6	CAPE HATTERAS	SEP	NSF/BIO	4
Katz, E*	LDEO	NA4-7	MEDIUM	SPRING/SUM	NSF??	40
Keeling, C	SCRIPPS	SP2	MEDIUM	MAR/APR	NSF/ATM	6
Keigwin, L	WHOI	NP4	AKADEMIK	AUG/SEP	NSF/MGG	25
Keigwin, L	WHOI	NA6	KNORR	NOV/DEC93	NSF/ODP	20
Kelly, J	UA	NP5	ALPHA HELIX	APR	STATE	1
Kemp, W M*	UMD	NA6	CAPE HENLOPEN	ANY	NSF/?	26
Kleinrock, M*	WHOI	NA10	KNORR	FALL	NSF/MGG	44
Klimley, A P*	SCRIPPS	NP9	SPROUL	JAN/OCT	NSF/OT	4
Klinkhammer, G	OSU	IN10	MELVILLE	AUS SUMMER	NSF/MGG	35
Knap, A*	BBS	NA6	WEATHERBIRD II	MONTHLY	NSF/CH	110
Kosro, P M	OSU	SP1/SP2	MELVILLE	EARLY 94	NSF/WOCE	85
Kramer, J	U MD	NA6	OCEANUS	APR/MAY	NSF/BIO	5
Kramer, J	U MD	NA6	WEATHERBIRD II	JUL	NSF/BIO	5
Kremer, P	USC	NA6	???	??	NSF/BIO	6
LaBrecque, J	LDEO	SA3	EWING/LARGE	JAN/MAY	NSF/??	30
Largier, J	SCRIPPS	NA6	CAPE HATTERAS	JUL-SEP	NSF/COAST	37
Largier, J*	SCRIPPS	NA6	CAPE HATTERAS	SEP-NOV	NSF/COAST	39
Largier, J*	SCRIPPS	NA6	CAPE HATTERAS	JUL-AUG	NSF/COAST	6
Lavoie, D	NRL	NA9	ISELIN	JAN/FEB	ONR	27
Lee, T*	RSMAS	NA7	CALANUS	APR/NOV	NOAA	10
Lee, T*	RSMAS	NA7	ISELIN	APR	NOAA	20
Lehman, J*	MI	GL4	LAURENTIAN	SUMMER	NSF/BIO	24

Leinen, M	URI	NA6	ENDEAVOR	JUL	NSF	3
Lentz, S	WHOI	NA6	OCEANUS	AUG/OCT	NSF/PHY	12
Levin, L	SCRIPPS	??	???	???	NSF/BIO	??
Lilley, M	UW	NP6	ATLANTIS II	JUL/AUG	NSF/MGG	23
Lilley, M	UW	NP13	ATLANTIS II	WINTER	NSF/RIDGE	31
Lilley, M	UW	SP3	THOMPSON	JAN	NSF/RIDGE	37
Lin, J	WHOI	SA6	MELVILLE	DEC93-JAN	NSF/RIDGE	38
Lindstrom, E	WOCE	IN5	LARGE	NOV/DEC	NSF/WOCE	19
Lindstrom, E	WOCE	IN5	LARGE	DEC/JAN	NSF/WOCE	53
Lipschultz, F	BBS	NA6	WEATHERBIRD II	SPRING/SUM	NSF/BIO	28
Littler X 2	HBOI	NA9	CAPE HATTERAS	MAY	NSF/BIO	28
Long, D*	MI	GL4	LAURENTIAN	JUN	SEA GRANT	2
Lonsdale, P*	SCRIPPS	SP9	MELVILLE	DEC93-JAN	NSF/MGG	46
Lukus, R*	UH	NP12	MOANA WAVE	EACH MONTH	NSF/WOCE	
Luther, G	DEL	NA6	CAPE HENLOPEN	APR/OCT	NSF/CH	20
Lutz, R	RUTGERS	NP13	ATLANTIS II	SEP	NSF/BIO	35
Lyle, M*	BOISE ST	NP9	THOMPSON/EWING	SEP	NSF/ODP	28
Lynch/Duda	WHOI	NA4/NA6	OCEANUS	AUG	NSF/PHY	7
Lynch/Irish	WHOI	NP9	WECOMA	SEP	ONR	9
Madin, L	WHOI	NA6	WEATHERBIRD II	ANY	NSF/BIO	??
Madin/Bollens	WHOI	IN1	THOMPSON	OCT-NOV	NSF/JGOFS	19
Madsen, J	DEL	SA4/6 IN6/9	MELVILLE	DEC	NSF/RIDGE	39
Mann, P	UT	SP1	EWING	JAN/DEC93	NSF/??	28
Martens, C*	UNC	NA6	CAPE HATTERAS	SEP	NSF/BIO?	14
Martin/Sayles*	WHOI	NA10	OCEANUS	JAN/FEB	NSF/CH	16
Martinez, F*	UH	NP10	MOANA WAVE	JUN	NSF/MGG	28
Matrai, P	MIAMI	IN1	LARGE	NOV	NSF/JGOFS	30
Mayer, L	MAINE	NA6	MEDIUM	APR-AUG	NSF/CH	3
McIntosh, K*	UT	NP9/NP13	EWING	DEC	NSF/MGG	32
McKee, B	LUMCON	NA9	PELICAN	APR	NSF/CH	14
McMillan, J	WHOI	NP6	ALPHA HELIX	??	NSF/?	20
Memery, L*	FRANCE	SA3-NA10	EWING/LARGE	JAN-MAR	??	81
Messing, C*	NOVA	NA9	SEWARD JOHNSON	JAN-OCT	NSF/PAL	12
Michael, P*	U TULSA	SA1-SA4	EWING	DEC93-JAN	NSF/MGG	41
Michael, P*	U TULSA	SP3	KNORR	NOV/DEC	NSF/MGG	27
Michaels, A	BBS	NA6	WEATHERBIRD II	JUN-OCT	NSF/CH	ANC
Miller, E*	STANFORD	NP5	EWING	SEP	NSF/CONT	23
Miller/Coffin	OK STATE	NA9	GYRE	JUL/DEC	NSF/BIO	10
Molfino, B	LDEO	SA1/2NA10	SHIP OF OP	MAR-MAY	NSF/MGG	??
Montoya, J	HOLYOKE C	NA6	CAPE HATTERAS	MAR-JUL	NSF/BIO	17
Moore, G	UH	NA9	GYRE	JUN	NSF/ODP	33
Moore, W*	U SO CAR	NA6	CAPE HATTERAS	JUL	NSF/CH	12
Moore/Stakes	U SO CAR	NP9	ATLANTIS II	SUMMER	NSF	14
Morgan et al	SCRIPPS	IN8/IN11	MELVILLE	FALL/WINT	NSF/RIDGE	15
Morgan, J P	SCRIPPS	SP7/AN6/IN1	LARGE	JAN/FEB	NSF/MGG	50
Morse, J*	TAMU	NA9	GYRE	JUN	NSF/CH	14
Mottl, M	UH	NP9	ATLANTIS II	JUL/AUG	NSF	15
Moun, J*	OSU	NP9	WECOMA	AUG/OCT	NSF/PHY	8
Mullin, M*	SCRIPPS	NP9	NEW HORIZON	SPRING	NSF/BIO	5
Mullineaux, L	WHOI	NP13	ATLANTIS II	JUN/OCT	NSF/BIO	21
Mullineaux, L	WHOI	NP9	ATLANTIS II	AUG	NSF/BIO	17
Munk, W	SCRIPPS	AR6	ALPHA HELIX	JUN	ARPA	14
Munk, W	SCRIPPS	NP9	PT SUR	FEB/MAR/AUG	ARPA	9
Munk, W	SCRIPPS	SP1/2HP9	MOANA WAVE	JUN	ARPA	97

Munk, W	SCRIPPS	SP4/2/9	MEDIUM/LARGE	JUN	ARPA	39
Muramoto/Noris	WHCI	IN1	THOMPSON	NOV-DEC	NSF/JGOFs	
Murray, J*	UW	NP9	BARNES	??	NSF/CH	5
Niiler, P	SCRIPPS	NP11	THOMPSON/M W	JAN-MAR	NSF/COARE	19
Niiler, P*	SCRIPPS	NP9	SPROUL	MAY/JUN	NSF/GLOBAL	10
Niiler, P*	SCRIPPS	NP9	SPROUL	MAY	ONR	10
Niiler, P*	SCRIPPS	NP9	NEW HORIZON	AUG	ONR/PHY	12
Norris, R	WHOI	IN1	THOMPSON	NOV/DEC	NSF/JGOFs	??
Olson, R	WHOI	IN1	THOMPSON	NOV	NSF/JGOFs	30
Orcutt, J*	SCRIPPS	NP9	SPROUL	JAN/JUN	NSF/TECH	7
Orcutt/MClain*	SCRIPPS	NP13	MELVILLE	JAN	NSF/MGG	31
Ortner, P*	RSMAS	NA9	CALANUS	ANY	ONR	2
Paerl, H*	UNC	NA6	CAPE HATTERAS	MAR	NSF/BIO	12
Paul, J	U SO FL	NA9	PELICAN	JUN	NSF/BIO	9
Peterson R	SCRIPPS	NA9	NEW HORIZON	JUL/OCT	NSF/WOCE	17
Peterson/Cher	SCRIPPS	NP9	NEW HORIZON	JUL/OCT	NSF/WOCE	6
Pickart, R	WHOI	NA6	OCEANUS	OCT	NSF/PHY?	22
Pickart, R	WHOI	NA6	OCEANUS	JUL	ONR	5
Pickart, R*	WHOI	NA6	OCEANUS	APR	NSF/PHY?	22
Pickart, R*	WHOI	NA6	OCEANUS	MAR	NSF/PHY?	
Pieper, R*	USC	NP9	LARGE	GLOBEC	NSF/BIO	2
Pieper, R*	USC	NP9	NEW HORIZON	GLOBEC	NSF/BIO	36
Porter, R*	UW	NP4	WECOMA	SEP	ONR	13
Prahl, F	OSU	NP9	WECOMA	APR	NSF/CH	10
Prahl, F*	OSU	NP9	NEW HORIZON	JAN	NSF/CH	10
Purdy, G	WHOI	NA6	WEATHERBIRD II	SUMMER	NSF/TECH	2
Ramanathan/Cut	SCRIPPS	NP9	VICKERS	MAR	NSF/ATM	3
Reimers, C	SCRIPPS	NP9	SPROUL	JAN	NSF/CH	5
Reommich/Bray	SCRIPPS	SP1/SP2	MELVILLE	MAY	NSF/PHY	26
Repeta, D	WHOI	NA6	ENDEAVOR	APR	DOE	14
Repeta/Eglintn	WHOI	NA6	OCEANUS	APR	DOE	5
Repeta/Eglintn	WHOI	NA6	OCEANUS	JUN	DOE	8
Repeta/Eglntn	WHOI	NA6	OCEANUS	MAR	DOE	5
Richardson, P*	WHOI	SA2	MEDIUM/LARGE	SEP/OCT	NSF/PHY	44
Rine, J	U SO CAR	NA9	CAPE HATTERAS	JUN	NSF/MGG	10
Roberts/Aharon	LSU	NA9	ATLANTIS II	ANY	NSF/NOAA	15
Rosenfeld, L*	MBARI	NP9	POINT SUR	APR-AUG	NSF	13
Rosenfeld, L*	MBARI	NP9	POINT SUR	JUL/AUG	ONR	4
Rossby/Hebert*	URI	NA6	ENDEAVOR	AUG/SEP	NSF/PHY	17
Rowe, G	TAMU	NA9	GYRE	JUN	NSF	5
Rudnick, D*	UW	SP1	THOMPSON	JUN	NSF/WOCE	3
Sager, W*	TAMU	NP7	EWING	MAY/AUG	NSF/ODP	37
Sansone, F	UH	NP11	ATLANTIS II	SEP/OCT	NSF/	13
Sansone, F	UH	NP9	ATLANTIS II	SUMMER	NSF/MGG	4
Santschi, P	TAMU	NA9	GYRE	JUL	DOE	14
Santschi, P*	TAMU	NA9	GYRE	JAN	NSF/CH	5
Santschi, P*	TAMU	NA9	GYRE	JUN	NSF/CH	5
Sasaki, Y	JAPAN	NP5/2	ALPHA HELIX	SEP	JAMSTEC	41
Sautter, L	USC	NA10	ANY	ANY	NSF/MGG	ANC
Sayles, F*	WHOI	NA6	WEATHERBIRD II	ALL YEAR	NSF/??	38
Schelske, C*	U FL	GL4	LAURENTIAN	APR	NSF/MGG	7
Schelske, C*	U FL	GL4	LAURENTIAN	AUG	NSF/MGG	6
Schelske, C*	U FL	GL4	LAURENTIAN	SEP	NSF/MGG	7
Scheltema/Buck	WHOI	NP10,11	THOMPSON	ANY	NSF/BIO?	18

Sclater, J*	SCRIPPS	NP7,8,9	THOMPSON/MEL	JUL	NSF/MGG	41
Sempere, JC*	UW	NP9	KNORR	MAY/OCT	NSF/MGG	26
Shaprio, L	U OR	NP9	MEDIUM	SUMMER	NSF/BIO	7
Shaprio, L	U OR	NP9	MEDIUM	FALL	NSF/BIO	7
Sharp, J*	DEL	NA6	CAPE HENLOPEN	TBA	NSF/BIO?	50
Shenker, J*	FIT	NA6/NA9	ISELIN	JAN/FEB	NSF/BIO	18
Showers, W	NCSU	NA10	EWING	MAR	NSF/MGG	30
Siegel, D	UCSB	NA6	WEATHERBIRD II	JUL	NSF/?	5
Sigurdsson, H	URI	NA9	EWING	ANY	NSF/MGG	25
Silver, E	UCSC	NP13	ATLANTIS II	EARLY 94	NSF/ODP	28
Simoneit, BRT	OSU	NP9/13	ATLANTIS II	SUMMER	NSF/CH	10
Sinton, J	UH	SP3	MOANA WAVE	WINTER	NSF/MGG	33
Smethie, W*	LDEO	NA6	OCEANUS	MAR	NSF/PHY	10
Smethie, W*	LDEO	SA1	KNORR/MELVILLE	ANY	NSF/WOCE	46
Smith, C	UH	NP13/NP9	ATLANTIS II	JAN-MAR	NSF/BIO	12
Smith, C	UH	NP9	SPROUL	JAN-JUN	NSF/BIO	12
Smith, K	SCRIPPS	NP9	ATLANTIS II	SEP/NOV	NSF/BIO	30
Smith, K	SCRIPPS	NP9	ATLANTIS II	APR	NSF/TECH	5
Smith, K	SCRIPPS	NP9	ATLANTIS II	JUL	NSF/TECH	5
Smith, K*	SCRIPPS	NP9	NEW HORIZON	FEB	NSF/TECH	4
Smith, S*	BROOKHAVEN	IN1/IN3	THOMPSON	OCT/DEC	NSF/CH/BIO	90
Spiess, F*	SCRIPPS	NP11	THOMPSON	JAN	JOI	6
Spindel, R	UW/APL	NA6/9/10/7	ENDEAVOR/OCE	JUN/JUL	UCSD	35
Stanton, T*	WHOI	NA6	OCEANUS	AUG	NSF/BIO	10
Stephen, R	WHOI	NP12	THOMPSON/MEL	SEP	NSF/ODP	48
Stern, R*	UT	NP10	MOANA WAVE	SPRING	NSF/MGG	20
Suttle, C*	UT	NA9	LONGHORN	APR/JUL	NSF/BIO	21
Szmant, A	MIAMI	NA9	CALANUS	FEB/APR	??	12
Tivey, M	WHOI	NP9	ATLANTIS II	JUN/SEP	NSF/RIDGE	4
Toole, J	WHOI	NA6	WEATHERBIRD II	JUL/OCT	NSF/INST	6
Townsend, D*	BIGELOW	NA6	MEDIUM	MAY	NSF/BIO	10
Townsend, D*	BIGELOW	NA6	MEDIUM	APR	NSF/BIO	
Trefry, J	FIT	NA6	ATLANTIS II	AUG	NSF/CH	7
Trehu, A	OSU	NP9	WECOMA	AUG93?	NSF/CONT	10
Trehu, A*	OSU	NP9	EWING	AUG93?	NSF/CONT	10
Tsuji, F	SCRIPPS	NP9	POINT SUR	APR/JUL	NSF/BIOCH	10
Twilley, R	U SW LA	NA9	PELICAN	AUG	NSF/LMER	14
Twilley, R	U SW LA	NA9	PELICAN	JAN	NSF/LMER	14
Twilley, R	U SW LA	NA9	PELICAN	MAY	NSF/LMER	14
Urabe, T*	GS/JAPAN	SP3	MELVILLE	NOV93	NSF/JAPAN	38
Ustach, J	DUKE	NA6	CAPE HATTERAS	AUG	NSF/REU	10
Valenzuela, G*	NRL	NA6	CAPE HATTERAS	APR	NRL	14
Van Dover, C	WHOI	NP13	ATLANTIS II	EARLY/LATE	NSF/ALV	6
Van Dover, C	WHOI	NP9	ATLANTIS II	JUN/JUL	ONR/NASA	3
Vogt, P	NRL	NA2/AR2	EWING	JUL/AUG	NRL	33
Von Damm, K	UNH	NP13	ATLANTIS II	??	NSF	25
Von Herzen, R	WHOI	SP1	MEDIUM/LARGE	ANY	NSF/FAC	3
Von Herzen, R	WHOI	NA10	SHINKAI 6500	AUG/SEP	NSF/ODP	29
Von Herzen, R	WHOI	NA7	ATLANTIS II	APR/NOV	NSF/ODP	30
Vrijenhoek, R	RUTGERS	SP3	ATLANTIS II	JAN/FEB	NSF/RIDGE	19
Washburn, L	UCSB	NA6	ENDEAVOR	JUL	NSF	18
Waterbury, J	WHOI	NA9	OCEANUS	APR/MAY	NSF/BIO	10
Weatherly, G	FSU	SA1	MEDIUM/LARGE	MAR-JUN	NSF/PHY	12
Weingartner, T	UA	NP5	ALPHA HELIX	SEP/OCT	NSF/OPP	20

Weisberg, R*	U SO FL	SP1-NP11	MOANA WAVE	JAN/FEB	NSF/TOGA	25
Weller, R	WHOI	IN1	LARGE	OCT	ONR	10
Welschmeyer, N*	MLML	NP9	POINT SUR	JUN/JUL	NSF/BIO	21
White, J*	UMD	NA6	OCEANUS	JUL/AUG	NSF/BIO	21
Whitehead, J*	WHOI	NA10/SA1	ISELIN	OCT	NSF/WOCE	11
Wilcock, W*	UW	NP9	THOMPSON/WEC	JUL	NSF/RIDGE	
Wilcock, W*	UW	NP9	WECOMA/NEW HOR	SEP	NSF/RIDGE	
Wilkins, R*	UH	NP12	MOANA WAVE	MONTHLY	NSF/TEC	ANC
Williams, A*	WHOI	NP9	SPROUL	AUG/DEC	NSF/TEC	10
Wilson, D	UCSB	NP13/SP3A	MELVILLE	ANY	NSF/MGG	28
Winant, C*	SCRIPPS	NP9	SPROUL	APR	MMS	6
Wishner, K	URI	NP13	ATLANTIS II	ANY	NSF/BIO	28
Wishner, K	URI	NP13	ATLANTIS II	3-6 MOS AFT	NSF/BIO	14
Witman, J	NEASTERN	NA6	CAPE HATTERAS	JUL	NSF/BIO	21
Yamamoto, T*	MIAMI	NA6	OCEANUS	MAY/SEP	ONR	6
Yayanos, A	UCSD	NP9	SPROUL	APR	NSF/TECH	
Yayanos, A*	UCSD	NP9	NEW HORIZON	SEP	NSF/TECH	7
Young, C*	HBOI	NA9	SEWARD JOHNSON	JAN	NSF/BIO	4
Young, C*	HBOI	NA9	SEWARD JOHNSON	APR	NSF/BIO	4
Young, C*	HBOI	NA9	SEWARD JOHNSON	AUG	NSF/BIO	4
Young, D	NRL	IN1	THOMPSON	OCT	ONR/NRL	23
Zaneveld, J R	OSU	NP9	WECOMA	AUG-OCT	NSF/TECH	10
Zika, R	RSMAS	NA9	ISELIN	MAY	ONR	14
Zumberge, M	SCRIPPS	NP9	NEW HORIZON	AUG	NSF/TECH	3

APPENDIX V

UNIVERSITY - NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM

DATE: 8/30/93
TO: Schedulers
FROM: UNOLS Office *Jack*
SUBJECT: Ship Time Requests for 1995

Here is a first cut of the inventory of 1995 Ship Time Requests held by the UNOLS Office. They have been sorted by PI, Ship requested and Area. Although we will not be addressing 1995 at the upcoming scheduling meeting this may be useful in positioning your ship at the latter end of 1994.



1995 SHIPTIME REQUESTS

30 AUG 1993

<u>PI</u>	<u>INSTITUTION</u>	<u>AREA</u>	<u>SHIP REQUESTED</u>	<u>OPTIMUM 1995 DATES</u>	<u>SOURCE/FUNDING</u>	<u>DAY</u>
Coffin, M	UT	AN2/3/IN9	PALMER	FEB/MAR	NSF/OPP	5
Bradley/Walden	WHOI	ANY	ATLANTIS II	ANY	NSF	1
Goad, L	U MICH	GL4	LAURENTIAN	JUL	NSF/TEP	6
Halfman, J	NOTRE DAME	GL4	LAURENTIAN	AUG	NSF/MGG	4
Lehman, J	U MICH	GL4	LAURENTIAN	JUN/JUL/AUG	NSF/BIO	24
Schelske, C	U FL	GL4	LAURNETIAN	APR/AUG/SEM	NSF/MGG	20
Simoneit, B	OSU	HP9/13	ATLANTIS II	SUMMER	NSF/CHEM	9
Gardner, W	TAMU	IN	THOMPSON	ANY	NSF/JGOFS	53
Honjo, S	WHOI	IN	THOMPSON	MAY/OCT		ANC
Caron, D	WHOI	IN1	LARGE	FEB	NSF/JGOFS	21
Lessard, E	UW	IN1	LARGE	APR	NSF/JGOFS	32
Lessard, E	UW	IN1	LARGE	AUG	NSF/JGOFS	32
Matrai, P	MIAMI	IN1	LARGE	NOV	NSF/CHEM	30
Waterbury, J	WHOI	IN1	LARGE	FEB/AUG	NSF/JGOFS	128
Balch, W	MIAMI	IN1	THOMPSON	NOV	NSF/BIO	17
Madin et al	WHOI	IN1	THOMPSON	FEB-MAR	NSF/JGOFS	10
Muramoto, J	WHOI	IN1	THOMPSON	APR/AUG	NSF/JGOFS	21
Norris, R	WHOI	IN1	THOMPSON	APR/AUG	NSF/JGOFS	21
Olson, R	WHOI	IN1	THOMPSON	APR	NSF/JGOFS	30
Lindstrom, E	WOCE	IN1/2	MELVILLE	SEP-OCT	NSF/WOCE	54
Smith, S	BROOKHAVEN	IN1/3	THOMPSON	FEB-DEC	NSF/JGOFS	210
Klinkhammer, G	OSU	IN10	MELVILLE	AUST SUM	NSF/MGG	35
Lindstrom, E	WOCE	IN2/4/7	MELVILLE	MAR-APR	NSF/WOCE	42
Lindstrom, E	WOCE	IN3/1	MELVILLE	JUL-SEP	NSF/WOCE	45
Lindstrom, E	WOCE	IN3/6	MELVILLE	JUN-JUL	NSF/WOCE	35
Lindstrom, E	WOCE	IN4/3	MELVILLE	NOV-DEC	NSF/WOCE	57
Lindstrom, E	WOCE	IN5/4/3	MELVILLE	APR-JUN	NSF/WOCE	53
Lindstrom, E	WOCE	IN7/4/2	MELVILLE	JAN-MAR	NSF/WOCE	46
Tindale, N	TAMU	IN8/11/SP4	LARGE	JAN	ONR/NSF	45
Beardsley, R	WHOI	NA10	CAPE HATTERAS	JUL/AUG/OCT	NSF/OSR	90
Holbrook, S	WHOI	NA1/4	EWING	SEP	NSF/MGG	39
Von Herzen, R	WHOI	NA10	ATLANTIS II	JAN/MAR	NSF/MGG	14
Flood, R	STONY BROOK	NA10	EWING	MAR	NSF/MGG	30
Katz, E	LDEO	NA4-7	MEDIUM	SPRING/SUM	NSF/PHY	8
Ducklow, H	HORN PT	NA5/NA7	MEDIUM/LARGE	APR	NSF/CHEM	24
Becker, K	MIAMI	NA6	ATLANTIS II	SPRING/SUM	NSF/ODP	3
Vrijenhoek/Ltz	RUTGERS	NA6	ATLANTIS II	JUL	NSF/RIDGE	18
Ammerman, J	TAMU	NA6	CAPE HATTERAS	FEB	NSF/BIO	7
Burdige, D	ODU	NA6	CAPE HATTERAS	APR/JUL/OCT	NSF/CHEM	12
Christensen, J	BIGELOW	NA6	CAPE HATTERAS	JUL/AUG	NSF/CHEM	30
George, R	UNC	NA6	CAPE HATTERAS	JUL/DEC	NSF/BIO	16
Kiene, R	U GEORGIA	NA6	CAPE HATTERAS	JUN	NSF/BIO	10
Martens, C	UNC	NA6	CAPE HATTERAS	SEP	NSF	14
Pearl, H	UNC	NA6	CAPE HATTERAS	MAY/AUG	NSF/BIO	12
Paul, J	U SO FL	NA6	CAPE HATTERAS	JUN	NSF/BIO	9

Rine, J	U SO CAR	NA6	CAPE HATTERAS	JUN	NSF/MGG	12
Coats, W	SMITHSONIAN	NA6	CAPE HENLOPEN	MAY/OCT	NSF/BIO	30
Geider, R	U DEL	NA6	CAPE HENLOPEN	SPRING/SUM	NSF/BIO	17
Hill, R	U MD	NA6	CAPE HENLOPEN	ALL MOS	NSF/BIO	12
Luther, G	U DEL	NA6	CAPE HENLOPEN	EACH QTR	NSF/CHEM	20
Sharp, J	U DEL	NA6	CAPE HENLOPEN	TBA	NSF	50
Cutter, G	ODU	NA6	ENDEAVOR	APR	NSF/CHEM	24
Rossby/Hebert	URI	NA6	ENDEAVOR	MAR/APR	NSF/PHY	17
Washburn, L	UCSB	NA6	ENDEAVOR	JUL	NSF	16
Wong/Dunstan	ODU	NA6	ENDEAVOR	APR/MAY	NSF	10
Watts, R	URI	NA6	ENDEAVOR/LARGE	JAN/JUL	NSF/ONR/NO	31
Caron, D	WHOI	NA6	OCEANUS	JUL/AUG	NSF/BIO	21
Chisholm, S	MIT	NA6	OCEANUS	JUN	NSF/BIO	10
Pickart, R	WHOI	NA6	OCEANUS	JUL	ONR	7
Waterbury, J	WHOI	NA6	OCEANUS	OCT	NSF/BIO	10
Waterbury, J	WHOI	NA6	OCEANUS	APR/MAY	NSF/BIO	10
White, J	HORN POINT	NA6	OCEANUS	MAR/APR	NSF/BIO	21
Jannasch, H	WHOI	NA6	OCEANUS CLASS	ANY	NSF/BIO	6
Biesiot, P	U SO MISS	NA6	PELICAN	MAY	NSF/BIO	3
Blair, N	NCSU	NA6	SEA LINK	JUL	NSF/CHEM	4
Deuser, W	WHOI	NA6	WEATHERBIRD II	JAN	NSF/CHEM	6
Hansell, D	BBS	NA6	WEATHERBIRD II	ALL MOS	NSF/CHEM	12
Kramer, J	U MD	NA6	WEATHERBIRD II	JUL	NSF/BIO	5
Lipschultz, F	BBS	NA6	WEATHERBIRD II	WINT/SP/SUM	NSF/BIO	28
Michaels, A	BBS	NA6	WEATHERBIRD II	APR-JUL	NSF/CHEM	15
Toole, J	WHOI	NA6	WEATHERBIRD II	MAR/JUN	NSF/INST	2
Cowen, R	STONY BROOK	NA6/9	ENDEAVOR	AUG	NSF/BIO	25
Shenker, J	FIT	NA6/9	ISELIN	JAN/FEB	NSF/BIO	14
Cochran/et al	LDEO	NA8	EWING	JAN/DEC	NSF/MGG	35
Fisher, C	PENN STATE	NA9	ATLANTIS II	SUMMER	NSF/BIO	6
Littler, D&M	HBOI	NA9	CAPE HATTERAS	MAY	NSF/BIO	28
Behrens, W	UT	NA9	GYRE	MAY	NSF/MGG	16
Cifuentes, L	TAMU	NA9	GYRE	MAY	NSF/BIO	10
Miller/Coffin	OKLAHOMA ST	NA9	GYRE	JUL/DEC	NSF/BIO	14
Santschi, P	TAMU	NA9	GYRE	APR/DEC	NSF/CHEM	20
Zehr, J	STONY BROOK	NA9	ISELIN	JAN/FEB	NSF/BIO	21
Suttle, C	UT	NA9	LONGHORN	APR/JUL	NSF/BIO	21
Dagg, M	LUMCON	NA9	PELICAN	AUG	NSF/BIO	10
Dagg, M	LUMCON	NA9	PELICAN	JUL	NSF/YSCHO	3
Shiller, A	U SO MISS	NA9	PELICAN	NOV	NSF/CHEM	15
Twilley, R	U SW LA	NA9	PELICAN	JAN/MAY/AUG	NSF/LMER	48
Johnson, P	UW	NP10	EWING/A II	SUMMER	NSF/MGG	15
Lukas, R	HAWAII	NP12	MOANA WAVE	EACH MOS	NSF/HOTS	60
Purdy, M	WHOI	NP13	ALTAIR	EARLY 95	NSF/CD	12
Fisher, C	PENN STATE	NP13	ATLANTIS II	MID YEAR	NSF/BIO	3
Lilley, M	UW	NP13	ATLANTIS II	???	NSF/CHEM	4
Mullineau, L	WHOI	NP13	ATLANTIS II	OCT	NSF/BIO	10
Smith, C	HAWAII	NP13/9	ATLANTIS II	JUL-DEC	NSF/BIO	12
Wiengartner, T	UA	NP2/3	ALPHA HELIX	SEP/OCT	NSF/OPP	20
Highsmith, R	UA	NP2/4	ALPHA HELIX	JUN-SEP	NSF/DPP	52
Chave, A	WHOI	NP6	ATLANTIS II	JUL	NSF/IDP	10
Jumars, P	UW	NP6	BARNES	EACH QTR	NSF/BIO	16
Murray, J	UW	NP6	BARNES	ANY	NSF/CHEM	5
Burdige, D	ODU	NP6	VICKERS	ANY	NSF/CHEM	3

Klinkhammer, G	OSU	NP6	WECOMA	SUMMER	ONR	3
Spiess/Hbrand	SCRIPPS	NP6/9	MEL/THOMP/NH	SPRING	NSF	9
Spiess/Hbrand	SCRIPPS	NP6/9	MEL/THOMP/NH	SUMMER	NSF	14
Warren, B	WHOI	NP7	MEDIUM/LARGE	JUN	NSF/OSR	10
Campbell, L	HAWAII	NP8/11	MOANA WAVE/A H	JAN/FEB	NSF/BIO	4
Fisher, C	PENN STATE	NP9	ATLANTIS II	JUL	NSF/BIO	18
Sansone, F	HAWAII	NP9	ATLANTIS II	SUMMER	NSF/MGG	4
Smith, K	SCRIPPS	NP9	ATLANTIS II	FEB/JUN/OCT	NSF/BIO	10
Frank, T	HBOI	NP9	EDWIN LINK	MAY/AUG	NSF/BIO	10
Pieper, R	USC	NP9	NEW HORIZON	EVEN MOS	NSF/BIO	30
Smith, K	SCRIPPS	NP9	NEW HORIZON	FEB/JUN/OCT	NSF/BIO	19
Yayanos, A	SCRIPPS	NP9	NEW HORIZON	JUL	NSF/INST	7
Lynch/Irish	WHOI	NP9	OCEANUS CLASS	MAY	ONR	9
Alldrige, A	UCSB	NP9	POINT SUR	APR/MAY	NSF/BIO	8
Dugdale, R	USC	NP9	POINT SUR	APR/MAY/JUN	NSF/BIO	19
Frank, T	HBOI	NP9	SEA DIVER	FEB/OCT	NSF/BIO	6
Klimley, P	SCRIPPS	NP9	SPROUL	JAN/APR	NSF/TECH	4
Johnson, K	MLML	NP9	VICKERS	JUN	NSF/CHEM	20
Cowles, T	OSU	NP9	WECOMA	APR/MAY	NSF/BIO	24
Cande, S	SCRIPPS	NP9/SP3	MELVILLE	ANY	NSF/MGG	26
Weatherly, G	FSU	SA1	MEDIUM/LARGE	MAR/JUN	NSF/PHY	12
Chave, A	WHOI	SA3	MEDIUM	MAR	NSF/PHY	32
Hildebrand, J	SCRIPPS	SP1	LARGE/MEDIUM	JAN/FEB	NSF/MGG	12
Keeling, C	SCRIPPS	SP2	MEDIUM	MAR/APR	NSF/ATM	6
Edmond, J	MIT	SP3	ATLANTIS II	AUST SUM	NSF/RIDGE	30

1995 SHIPTIME REQUESTS

30 AUG 1993

<u>PI</u>	<u>INSTITUTION</u>	<u>AREA</u>	<u>SHIP REQUESTED</u>	<u>OPTIMUM 1995 DATES</u>	<u>SOURCE/ FUNDING</u>	<u>DAYS</u>
Alldrige, A	UCSB	NP9	POINT SUR	APR/MAY	NSF/BIO	8
Ammerman, J	TAMU	NA6	CAPE HATTERAS	FEB	NSF/BIO	7
Balch, W	MIAMI	IN1	THOMPSON	NOV	NSF/BIO	17
Beardsley, R	WHOI	MA10	CAPE HATTERAS	JUL/AUG/OCT	NSF/OSR	90
Becker, K	MIAMI	NA6	ATLANTIS II	SPRING/SUM	NSF/ODP	3
Behrens, W	UT	NA9	GYRE	MAY	NSF/MGG	16
Biesiot, P	U SO MISS	NA6	PELICAN	MAY	NSF/BIO	3
Blair, N	NCSU	NA6	SEA LINK	JUL	NSF/CHEM	4
Bradley/Walden	WHOI	ANY	ATLANTIS II	ANY	NSF	5
Burdige, D	ODU	NP6	VICKERS	ANY	NSF/CHEM	3
Burdige, D	ODU	NA6	CAPE HATTERAS	APR/JUL/OCT	NSF/CHEM	12
Campbell, L	HAWAII	NP8/11	MOANA WAVE/A H	JAN/FEB	NSF/BIO	4
Cande, S	SCRIPPS	NP9/SP3	MELVILLE	ANY	NSF/MGG	26
Caron, D	WHOI	IN1	LARGE	FEB	NSF/JGOFs	??
Caron, D	WHOI	NA6	OCEANUS	JUL/AUG	NSF/BIO	21
Chave, A	WHOI	NP6	ATLANTIS II	JUL	NSF/IDP	10
Chave, A	WHOI	SA3	MEDIUM	MAR	NSF/PHY	32
Christensen, J	BIGELOW	NA6	CAPE HATTERAS	JUL/AUG	NSF/CHEM	30
Chisholm, S	MIT	NA6	OCEANUS	JUN	NSF/BIO	10
Cifuentes, L	TAMU	NA9	GYRE	MAY	NSF/BIO	10
Coats, W	SMITHSONIAN	NA6	CAPE HENLOPEN	MAY/OCT	NSF/BIO	30
Cochran/et al	LDEO	NA8	EWING	JAN/DEC	NSF/MGG	35
Coffin, M	UT	AN2/3/IN9	PALMER	FEB/MAR	NSF/OPP	52
Cowen, R	STONY BROOK	NA6/9	ENDEAVOR	AUG	NSF/BIO	25
Cowles, T	OSU	NP9	WECOMA	APR/MAY	NSF/BIO	24
Cutter, G	ODU	NA6	ENDEAVOR	APR	NSF/CHEM	24
Dagg, M	LUMCON	NA9	PELICAN	AUG	NSF/BIO	10
Dagg, M	LUMCON	NA9	PELICAN	JUL	NSF/YSCHO	3
Deuser, W	WHOI	NA6	WEATHERBIRD II	JAN	NSF/CHEM	6
Ducklow, H	HORN PT	NA5/NA7	MEDIUM/LARGE	APR	NSF/CHEM	24
Dugdale, R	USC	NP9	POINT SUR	APR/MAY/JUN	NSF/BIO	15
Edmond, J	MIT	SP3	ATLANTIS II	AUST SUM	NSF/RIDGE	30
Frank, T	HBOI	NP9	SEA DIVER	FEB/OCT	NSF/BIO	6
Frank, T	HBOI	NP9	EDWIN LINK	MAY/AUG	NSF/BIO	10
Fisher, C	PENN STATE	NA9	ATLANTIS II	SUMMER	NSF/BIO	6
Fisher, C	PENN STATE	NP9	ATLANTIS II	JUL	NSF/BIO	16
Fisher, C	PENN STATE	NP13	ATLANTIS II	MID YEAR	NSF/BIO	3
Flood, R	STONY BROOK	NA10	EWING	MAR	NSF/MGG	30
Gardner, W	TAMU	IN	THOMPSON	ANY	NSF/JGOFs	5X
Geider, R	U DEL	NA6	CAPE HENLOPEN	SPRING/SUM	NSF/BIO	17
George, R	UNC	NA6	CAPE HATTERAS	JUL/DEC	NSF/BIO	16
Goad, L	U MICH	GL4	LAURENTIAN	JUL	NSF/TEP	6
Halfman, J	NOTRE DAME	GL4	LAURENTIAN	AUG	NSF/MGG	4
Hansell, D	BBS	NA6	WEATHERBIRD II	ALL MOS	NSF/CHEM	12
Highsmith, R	UA	NP2/4	ALPHA HELIX	JUN-SEP	NSF/DPP	52

Hildebrand, J	SCRIPPS	SP1	LARGE/MEDIUM	JAN/FEB	NSF/MGG	1
Hill, R	U MD	NA6	CAPE HENLOPEN	ALL MOS	NSF/BIO	1
Holbrook, S	WHOI	NA1/4	EWING	SEP	NSF/MGG	3
Honjo, S	WHOI	IN	THOMPSON	MAY/OCT		AN
Jannasch, H	WHOI	NA6	OCEANUS CLASS	ANY	NSF/BIO	
Johnson, P	UW	NP10	EWING/A II	SUMMER	NSF/MGG	1
Johnson, K	MLML	NP9	VICKERS	JUN	NSF/CHEM	2
Jumars, P	UW	NP6	BARNES	EACH QTR	NSF/BIO	1
Katz, E	LDEO	NA4-7	MEDIUM	SPRING/SUM	NSF/PHY	
Keeling, C	SCRIPPS	SP2	MEDIUM	MAR/APR	NSF/ATM	
Kiene, R	U GEORGIA	NA6	CAPE HATTERAS	JUN	NSF/BIO	1
Klimley, P	SCRIPPS	NP9	SPROUL	JAN/APR	NSF/TECH	
Klinkhammer, G	OSU	NP6	WECOMA	SUMMER	ONR	
Klinkhammer, G	OSU	IN10	MELVILLE	AUST SUM	NSF/MGG	3
Kramer, J	U MD	NA6	WEATHERBIRD II	JUL	NSF/BIO	
Lehman, J	U MICH	GL4	LAURENTIAN	JUN/JUL/AUG	NSF/BIO	2
Lessard, E	UW	IN1	LARGE	APR	NSF/JGOFs	3
Lessard, E	UW	IN1	LARGE	AUG	NSF/JGOFs	3
Lilley, M	UW	NP13	ATLANTIS II	???	NSF/CHEM	
Lindstrom, E	WOCE	IN7/4/2	MELVILLE	JAN-MAR	NSF/WOCE	4
Lindstrom, E	WOCE	IN2/4/7	MELVILLE	MAR-APR	NSF/WOCE	4
Lindstrom, E	WOCE	IN5/4/3	MELVILLE	APR-JUN	NSF/WOCE	5
Lindstrom, E	WOCE	IN3/6	MELVILLE	JUN-JUL	NSF/WOCE	3
Lindstrom, E	WOCE	IN3/1	MELVILLE	JUL-SEP	NSF/WOCE	4
Lindstrom, E	WOCE	IN1/2	MELVILLE	SEP-OCT	NSF/WOCE	5
Lindstrom, E	WOCE	IN4/3	MELVILLE	NOV-DEC	NSF/WOCE	5
Lipschultz, F	BBS	NA6	WEATHERBIRD II	WINT/SP/SUM	NSF/BIO	28
Littler, D&M	HBOI	NA9	CAPE HATTERAS	MAY	NSF/BIO	28
Lukas, R	HAWAII	NP12	MOANA WAVE	EACH MOS	NSF/HOTS	60
Luther, G	U DEL	NA6	CAPE HENLOPEN	EACH QTR	NSF/CHEM	20
Lynch/Irish	WHOI	NP9	OCEANUS CLASS	MAY	ONR	5
Madin et al	WHOI	IN1	THOMPSON	FEB-MAR	NSF/JGOFs	10
Martens, C	UNC	NA6	CAPE HATTERAS	SEP	NSF	14
Matrai, P	MIAMI	IN1	LARGE	NOV	NSF/CHEM	30
Michaels, A	BBS	NA6	WEATHERBIRD II	APR-JUL	NSF/CHEM	15
Miller/Coffin	OKLAHOMA ST	NA9	GYRE	JUL/DEC	NSF/BIO	14
Mullineau, L	WHOI	NP13	ATLANTIS II	OCT	NSF/BIO	10
Muramoto, J	WHOI	IN1	THOMPSON	APR/AUG	NSF/JGOFs	??
Murray, J	UW	NP6	BARNES	ANY	NSF/CHEM	5
Norris, R	WHOI	IN1	THOMPSON	APR/AUG	NSF/JGOFs	??
Olson, R	WHOI	IN1	THOMPSON	APR	NSF/JGOFs	30
Pearl, H	UNC	NA6	CAPE HATTERAS	MAY/AUG	NSF/BIO	12
Paul, J	U SO FL	NA6	CAPE HATTERAS	JUN	NSF/BIO	9
Pickart, R	WHOI	NA6	OCEANUS	JUL	ONR	7
Pieper, R	USC	NP9	NEW HORIZON	EVEN MOS	NSF/BIO	36
Purdy, M	WHOI	NP13	ALTAIR	EARLY 95	NSF/CD	12
Rine, J	U SO CAR	NA6	CAPE HATTERAS	JUN	NSF/MGG	12
Rosby/Hebert	URI	NA6	ENDEAVOR	MAR/APR	NSF/PHY	17
Sansone, F	HAWAII	NP9	ATLANTIS II	SUMMER	NSF/MGG	4
Santschi, P	TAMU	NA9	GYRE	APR/DEC	NSF/CHEM	20
Schelske, C	U FL	GL4	LAURNETIAN	APR/AUG/SEM	NSF/MGG	20
Sharp, J	U DEL	NA6	CAPE HENLOPEN	TBA	NSF	50
Shenker, J	FIT	NA6/9	ISELIN	JAN/FEB	NSF/BIO	14
Shiller, A	U SO MISS	NA9	PELICAN	NOV	NSF/CHEM	15

Simoneit, B	OSU	HP9/13	ATLANTIS II	SUMMER	NSF/CHEM	5
Smith, C	HAWAII	NP13/9	ATLANTIS II	JUL-DEC	NSF/BIO	12
Smith, K	SCRIPPS	NP9	NEW HORIZON	FEB/JUN/OCT	NSF/BIO	15
Smith, K	SCRIPPS	NP9	ATLANTIS II	FEB/JUN/OCT	NSF/BIO	10
Smith, S	BROOKHAVEN	IN1/3	THOMPSON	FEB-DEC	NSF/JGOFS	210
Spiess/Hbrand	SCRIPPS	NP6/9	MEL/THOMP/NH	SPRING	NSF	5
Spiess/Hbrand	SCRIPPS	NP6/9	MEL/THOMP/NH	SUMMER	NSF	14
Suttle, C	UT	NA9	LONGHORN	APR/JUL	NSF/BIO	21
Tindale, N	TAMU	IN8/11/SP4	LARGE	JAN	ONR/NSF	45
Toole, J	WHOI	NA6	WEATHERBIRD II	MAR/JUN	NSF/INST	2
Twilley, R	U SW LA	NA9	PELICAN	JAN/MAY/AUG	NSF/LMER	48
Von Herzen, R	WHOI	NA10	ATLANTIS II	JAN/MAR	NSF/MGG	14
Vrijenhoek/Ltz	RUTGERS	NA6	ATLANTIS II	JUL	NSF/RIDGE	18
Warren, B	WHOI	NP7	MEDIUM/LARGE	JUN	NSF/OSR	10
Washburn, L	UCSB	NA6	ENDEAVOR	JUL	NSF	16
Waterbury, J	WHOI	NA6	OCEANUS	OCT	NSF/BIO	10
Waterbury, J	WHOI	NA6	OCEANUS	APR/MAY	NSF/BIO	10
Waterbury, J	WHOI	IN1	LARGE	FEB/AUG	NSF/JGOFS	128
Watts, R	URI	NA6	ENDEAVOR/LARGE	JAN/JUL	NSF/ONR/NO	31
Weatherly, G	FSU	SA1	MEDIUM/LARGE	MAR/JUN	NSF/PHY	12
Wiengartner, T	UA	NP2/3	ALPHA HELIX	SEP/OCT	NSF/OPP	20
White, J	HORN POINT	NA6	OCEANUS	MAR/APR	NSF/BIO	21
Wong/Dunstan	ODU	NA6	ENDEAVOR	APR/MAY	NSF	10
Yayanos, A	SCRIPPS	NP9	NEW HORIZON	JUL	NSF/INST	7
Zehr, J	STONY BROOK	NA9	ISELIN	JAN/FEB	NSF/BIO	21

1995 SHIPTIME REQUESTS

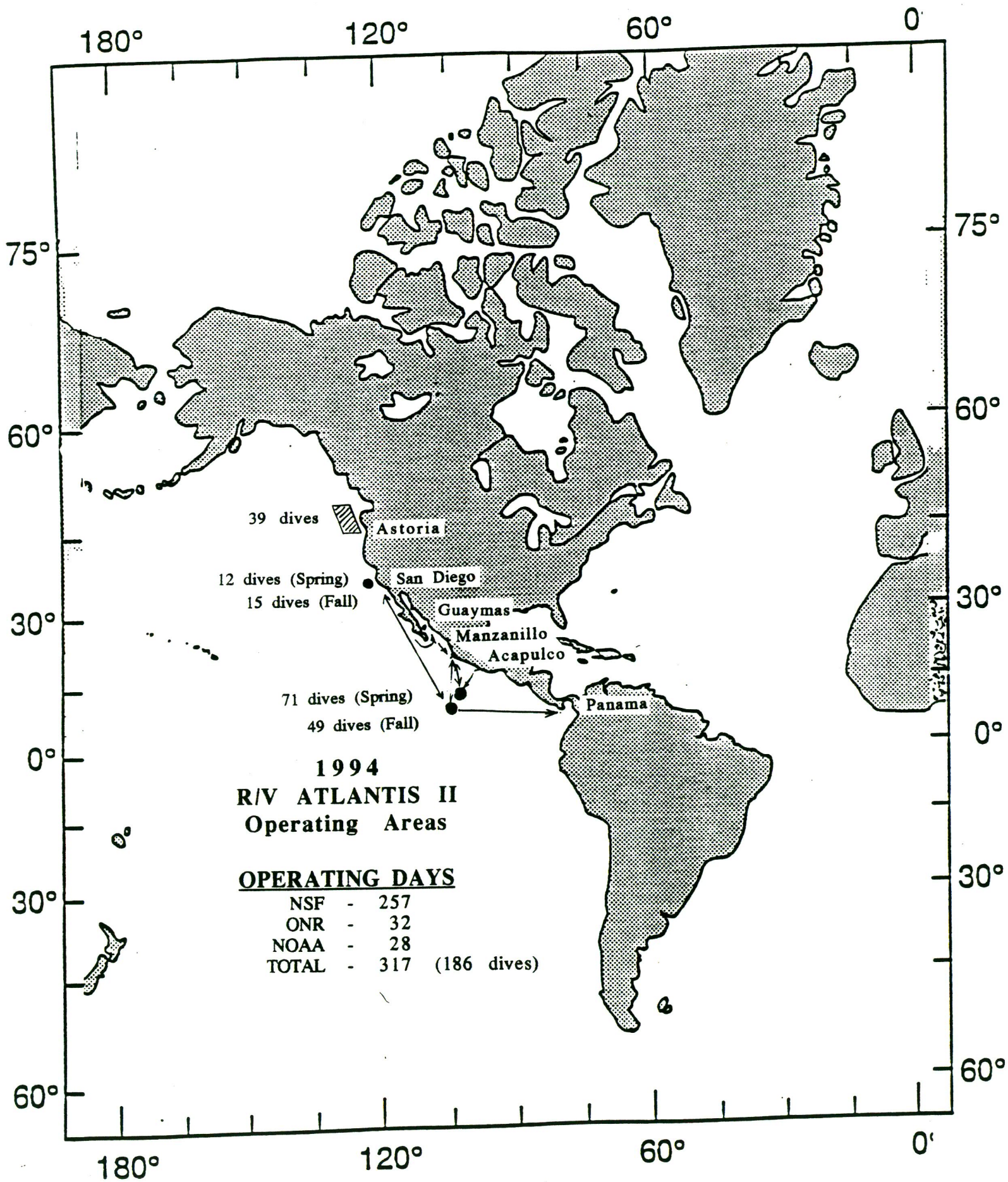
30 AUG 1993

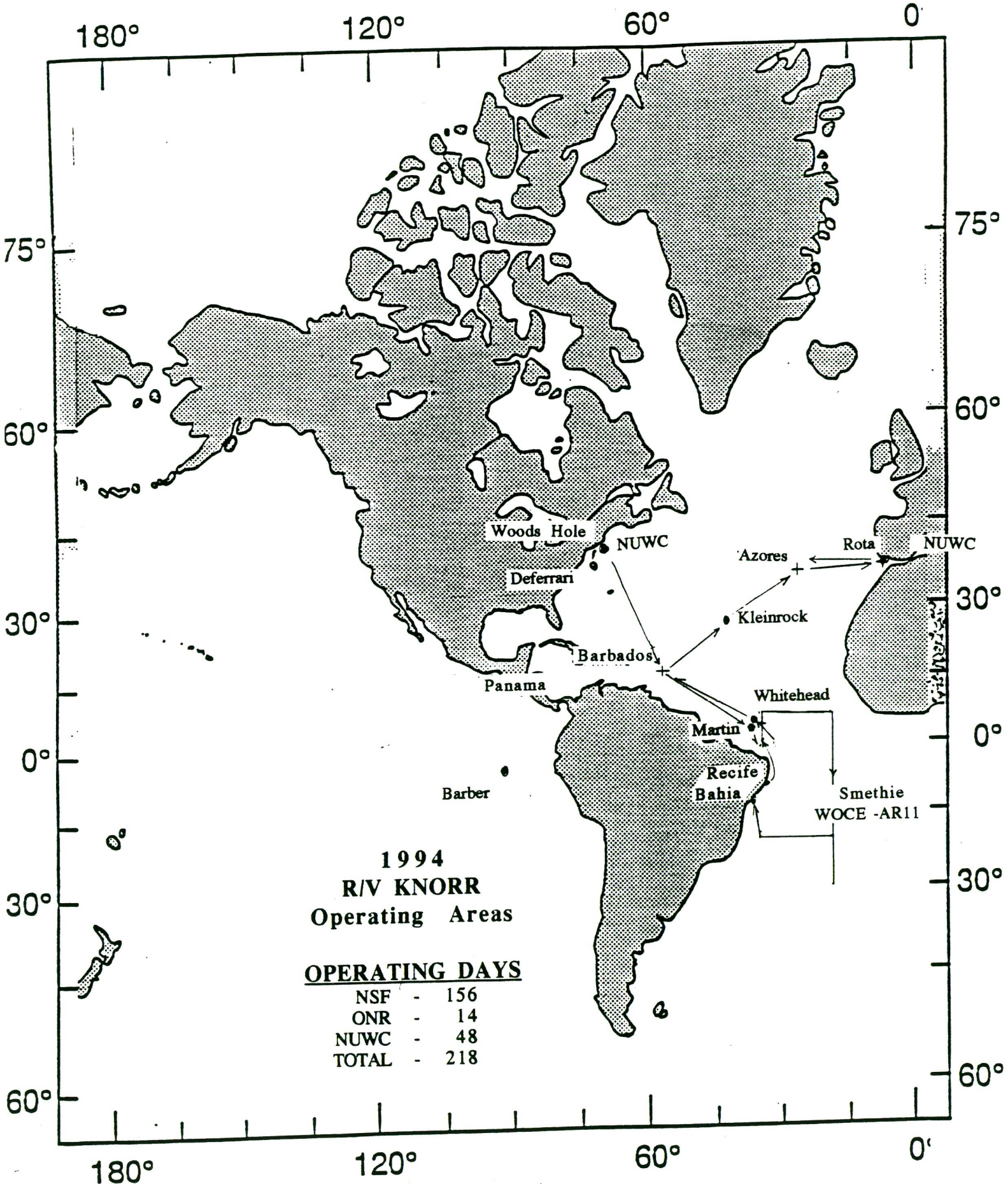
<u>PI</u>	<u>INSTITUTION</u>	<u>AREA</u>	<u>SHIP REQUESTED</u>	<u>OPTIMUM 1995 DATES</u>	<u>SOURCE/FUNDING</u>	<u>DAY</u>
Highsmith, R	UA	NP2/4	ALPHA HELIX	JUN-SEP	NSF/DPP	5
Wiengartner, T	UA	NP2/3	ALPHA HELIX	SEP/OCT	NSF/OPP	20
Purdy, M	WHOI	NP13	ALTAIR	EARLY 95	NSF/CD	1
Becker, K	MIAMI	NA6	ATLANTIS II	SPRING/SUM	NSF/ODP	
Bradley/Walden	WHOI	ANY	ATLANTIS II	ANY	NSF	
Chave, A	WHOI	NP6	ATLANTIS II	JUL	NSF/IDP	10
Edmond, J	MIT	SP3	ATLANTIS II	AUST SUM	NSF/RIDGE	30
Fisher, C	PENN STATE	NA9	ATLANTIS II	SUMMER	NSF/BIO	6
Fisher, C	PENN STATE	NP9	ATLANTIS II	JUL	NSF/BIO	16
Fisher, C	PENN STATE	NP13	ATLANTIS II	MID YEAR	NSF/BIO	
Lilley, M	UW	NP13	ATLANTIS II	???	NSF/CHEM	4
Mullineau, L	WHOI	NP13	ATLANTIS II	OCT	NSF/BIO	10
Sansone, F	HAWAII	NP9	ATLANTIS II	SUMMER	NSF/MGG	4
Simoneit, B	OSU	HP9/13	ATLANTIS II	SUMMER	NSF/CHEM	9
Smith, C	HAWAII	NP13/9	ATLANTIS II	JUL-DEC	NSF/BIO	12
Smith, K	SCRIPPS	NP9	ATLANTIS II	FEB/JUN/OCT	NSF/BIO	10
Von Herzen, R	WHOI	NA10	ATLANTIS II	JAN/MAR	NSF/MGG	14
Vrijenhoek/Ltz	RUTGERS	NA6	ATLANTIS II	JUL	NSF/RIDGE	18
Jumars, P	UW	NP6	BARNES	EACH QTR	NSF/BIO	16
Murray, J	UW	NP6	BARNES	ANY	NSF/CHEM	9
Ammerman, J	TAMU	NA6	CAPE HATTERAS	FEB	NSF/BIO	7
Beardsley, R	WHOI	NA10	CAPE HATTERAS	JUL/AUG/OCT	NSF/OSR	90
Burdige, D	ODU	NA6	CAPE HATTERAS	APR/JUL/OCT	NSF/CHEM	12
Christensen, J	BIGELOW	NA6	CAPE HATTERAS	JUL/AUG	NSF/CHEM	30
George, R	UNC	NA6	CAPE HATTERAS	JUL/DEC	NSF/BIO	16
Kiene, R	U GEORGIA	NA6	CAPE HATTERAS	JUN	NSF/BIO	10
Littler, D&M	HBOI	NA9	CAPE HATTERAS	MAY	NSF/BIO	28
Martens, C	UNC	NA6	CAPE HATTERAS	SEP	NSF	14
Pearl, H	UNC	NA6	CAPE HATTERAS	MAY/AUG	NSF/BIO	12
Paul, J	U SO FL	NA6	CAPE HATTERAS	JUN	NSF/BIO	9
Rine, J	U SO CAR	NA6	CAPE HATTERAS	JUN	NSF/MGG	12
Coats, W	SMITHSONIAN	NA6	CAPE HENLOPEN	MAY/OCT	NSF/BIO	30
Geider, R	U DEL	NA6	CAPE HENLOPEN	SPRING/SUM	NSF/BIO	17
Hill, R	U MD	NA6	CAPE HENLOPEN	ALL MOS	NSF/BIO	12
Luther, G	U DEL	NA6	CAPE HENLOPEN	EACH QTR	NSF/CHEM	20
Sharp, J	U DEL	NA6	CAPE HENLOPEN	TBA	NSF	50
Frank, T	HBOI	NP9	EDWIN LINK	MAY/AUG	NSF/BIO	10
Cowen, R	STONY BROOK	NA6/9	ENDEAVOR	AUG	NSF/BIO	25
Cutter, G	ODU	NA6	ENDEAVOR	APR	NSF/CHEM	24
Rossby/Hebert	URI	NA6	ENDEAVOR	MAR/APR	NSF/PHY	17
Washburn, L	UCSB	NA6	ENDEAVOR	JUL	NSF	16
Wong/Dunstan	ODU	NA6	ENDEAVOR	APR/MAY	NSF	10
Watts, R	URI	NA6	ENDEAVOR/LARGE	JAN/JUL	NSF/ONR/NO	31
Cochran/et al	LDEO	NA8	EWING	JAN/DEC	NSF/MGG	35

Dagg, M	LUMCON	NA9	PELICAN	JUL	NSF/YSCHO	3
Shiller, A	U SO MISS	NA9	PELICAN	NOV	NSF/CHEM	15
Twilley, R	U SW LA	NA9	PELICAN	JAN/MAY/AUG	NSF/LMER	48
Alldrige, A	UCSB	NP9	POINT SUR	APR/MAY	NSF/BIO	8
Dugdale, R	USC	NP9	POINT SUR	APR/MAY/JUN	NSF/BIO	15
Frank, T	HBOI	NP9	SEA DIVER	FEB/OCT	NSF/BIO	6
Blair, N	NCSU	NA6	SEA LINK	JUL	NSF/CHEM	4
Klimley, P	SCRIPPS	NP9	SPROUL	JAN/APR	NSF/TECH	4
Balch, W	MIAMI	IN1	THOMPSON	NOV	NSF/BIO	17
Gardner, W	TAMU	IN	THOMPSON	ANY	NSF/JGOFS	5X
Honjo, S	WHOI	IN	THOMPSON	MAY/OCT		ANC
Madin et al	WHOI	IN1	THOMPSON	FEB-MAR	NSF/JGOFS	10
Muramoto, J	WHOI	IN1	THOMPSON	APR/AUG	NSF/JGOFS	??
Norris, R	WHOI	IN1	THOMPSON	APR/AUG	NSF/JGOFS	??
Olson, R	WHOI	IN1	THOMPSON	APR	NSF/JGOFS	30
Smith, S	BROOKHAVEN	IN1/3	THOMPSON	FEB-DEC	NSF/JGOFS	210
Burdige, D	ODU	NP6	VICKERS	ANY	NSF/CHEM	3
Johnson, K	MLML	NP9	VICKERS	JUN	NSF/CHEM	20
Deuser, W	WHOI	NA6	WEATHERBIRD II	JAN	NSF/CHEM	6
Hansell, D	BBS	NA6	WEATHERBIRD II	ALL MOS	NSF/CHEM	12
Kramer, J	U MD	NA6	WEATHERBIRD II	JUL	NSF/BIO	5
Lipschultz, F	BBS	NA6	WEATHERBIRD II	WINT/SP/SUM	NSF/BIO	28
Michaels, A	BBS	NA6	WEATHERBIRD II	APR-JUL	NSF/CHEM	15
Toole, J	WHOI	NA6	WEATHERBIRD II	MAR/JUN	NSF/INST	2
Cowles, T	OSU	NP9	WECOMA	APR/MAY	NSF/BIO	24
Klinkhammer, G	OSU	NP6	WECOMA	SUMMER	ONR	3

Flood, R	STONY BROOK	NA10	EWING	MAR	NSF/MGG	3
Holbrook, S	WHOI	NA1/4	EWING	SEP	NSF/MGG	3
Johnson, P	UW	NP10	EWING/A II	SUMMER	NSF/MGG	1
Behrens, W	UT	NA9	GYRE	MAY	NSF/MGG	1
Cifuentes, L	TAMU	NA9	GYRE	MAY	NSF/BIO	1
Miller/Coffin	OKLAHOMA ST	NA9	GYRE	JUL/DEC	NSF/BIO	1
Santschi, P	TAMU	NA9	GYRE	APR/DEC	NSF/CHEM	2
Shenker, J	FIT	NA6/9	ISELIN	JAN/FEB	NSF/BIO	1
Zehr, J	STONY BROOK	NA9	ISELIN	JAN/FEB	NSF/BIO	2
Caron, D	WHOI	IN1	LARGE	FEB	NSF/JGOFs	?
Lessard, E	UW	IN1	LARGE	APR	NSF/JGOFs	3
Lessard, E	UW	IN1	LARGE	AUG	NSF/JGOFs	3
Matrai, P	MIAMI	IN1	LARGE	NOV	NSF/CHEM	3
Tindale, N	TAMU	IN8/11/SP4	LARGE	JAN	ONR/NSF	4
Waterbury, J	WHOI	IN1	LARGE	FEB/AUG	NSF/JGOFs	12
Hildebrand, J	SCRIPPS	SP1	LARGE/MEDIUM	JAN/FEB	NSF/MGG	1
Goad, L	U MICH	GL4	LAURENTIAN	JUL	NSF/TEP	
Halfman, J	NOTRE DAME	GL4	LAURENTIAN	AUG	NSF/MGG	
Lehman, J	U MICH	GL4	LAURENTIAN	JUN/JUL/AUG	NSF/BIO	2
Schelske, C	U FL	GL4	LAURNETIAN	APR/AUG/SEM	NSF/MGG	2
Suttle, C	UT	NA9	LONGHORN	APR/JUL	NSF/BIO	2
Chave, A	WHOI	SA3	MEDIUM	MAR	NSF/PHY	3
Katz, E	LDEO	NA4-7	MEDIUM	SPRING/SUM	NSF/PHY	
Keeling, C	SCRIPPS	SP2	MEDIUM	MAR/APR	NSF/ATM	
Ducklow, H	HORN PT	NA5/NA7	MEDIUM/LARGE	APR	NSF/CHEM	2
Warren, B	WHOI	NP7	MEDIUM/LARGE	JUN	NSF/OSR	1
Weatherly, G	FSU	SA1	MEDIUM/LARGE	MAR/JUN	NSF/PHY	1
Spiess/Hbrand	SCRIPPS	NP6/9	MEL/THOMP/NH	SPRING	NSF	
Spiess/Hbrand	SCRIPPS	NP6/9	MEL/THOMP/NH	SUMMER	NSF	1
Cande, S	SCRIPPS	NP9/SP3	MELVILLE	ANY	NSF/MGG	2
Klinkhammer, G	OSU	IN10	MELVILLE	AUST SUM	NSF/MGG	3
Lindstrom, E	WOCE	IN7/4/2	MELVILLE	JAN-MAR	NSF/WOCE	4
Lindstrom, E	WOCE	IN2/4/7	MELVILLE	MAR-APR	NSF/WOCE	4
Lindstrom, E	WOCE	IN5/4/3	MELVILLE	APR-JUN	NSF/WOCE	5
Lindstrom, E	WOCE	IN3/6	MELVILLE	JUN-JUL	NSF/WOCE	3
Lindstrom, E	WOCE	IN3/1	MELVILLE	JUL-SEP	NSF/WOCE	4
Lindstrom, E	WOCE	IN1/2	MELVILLE	SEP-OCT	NSF/WOCE	5
Lindstrom, E	WOCE	IN4/3	MELVILLE	NOV-DEC	NSF/WOCE	5
Lukas, R	HAWAII	NP12	MOANA WAVE	EACH MOS	NSF/HOTS	6
Campbell, L	HAWAII	NP8/11	MOANA WAVE/A H	JAN/FEB	NSF/BIO	4
Pieper, R	USC	NP9	NEW HORIZON	EVEN MOS	NSF/BIO	3
Smith, K	SCRIPPS	NP9	NEW HORIZON	FEB/JUN/OCT	NSF/BIO	1
Yayanos, A	SCRIPPS	NP9	NEW HORIZON	JUL	NSF/INST	7
Caron, D	WHOI	NA6	OCEANUS	JUL/AUG	NSF/BIO	2
Chisholm, S	MIT	NA6	OCEANUS	JUN	NSF/BIO	1
Pickart, R	WHOI	NA6	OCEANUS	JUL	ONR	7
Waterbury, J	WHOI	NA6	OCEANUS	OCT	NSF/BIO	1
Waterbury, J	WHOI	NA6	OCEANUS	APR/MAY	NSF/BIO	1
White, J	HORN POINT	NA6	OCEANUS	MAR/APR	NSF/BIO	2
Jannasch, H	WHOI	NA6	OCEANUS CLASS	ANY	NSF/BIO	6
Lynch/Irish	WHOI	NP9	OCEANUS CLASS	MAY	ONR	5
Coffin, M	UT	AN2/3/IN9	PALMER	FEB/MAR	NSF/OPP	5
Biesiot, P	U SO MISS	NA6	PELICAN	MAY	NSF/BIO	3
Dagg, M	LUMCON	NA9	PELICAN	AUG	NSF/BIO	1

APPENDIX VI

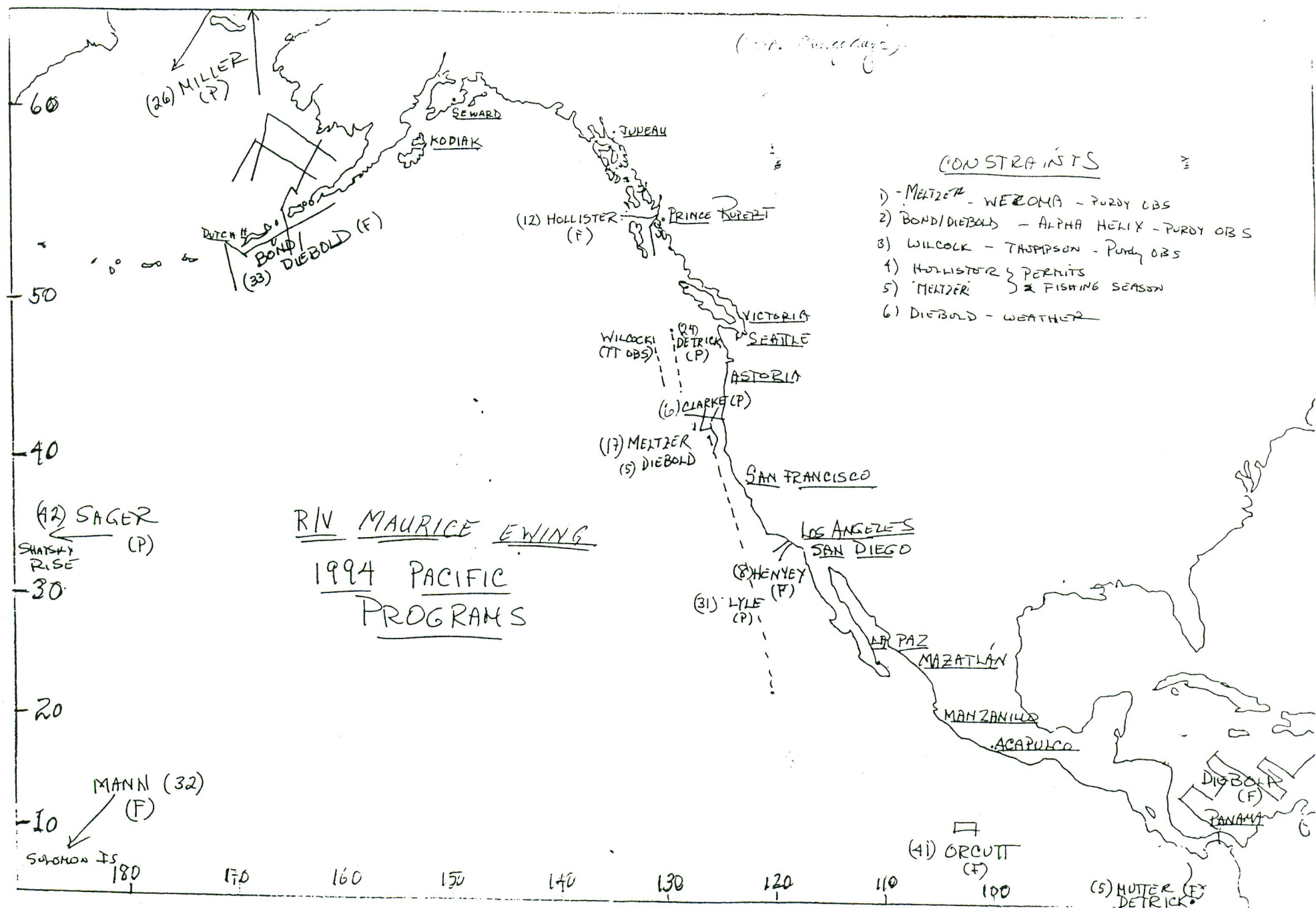


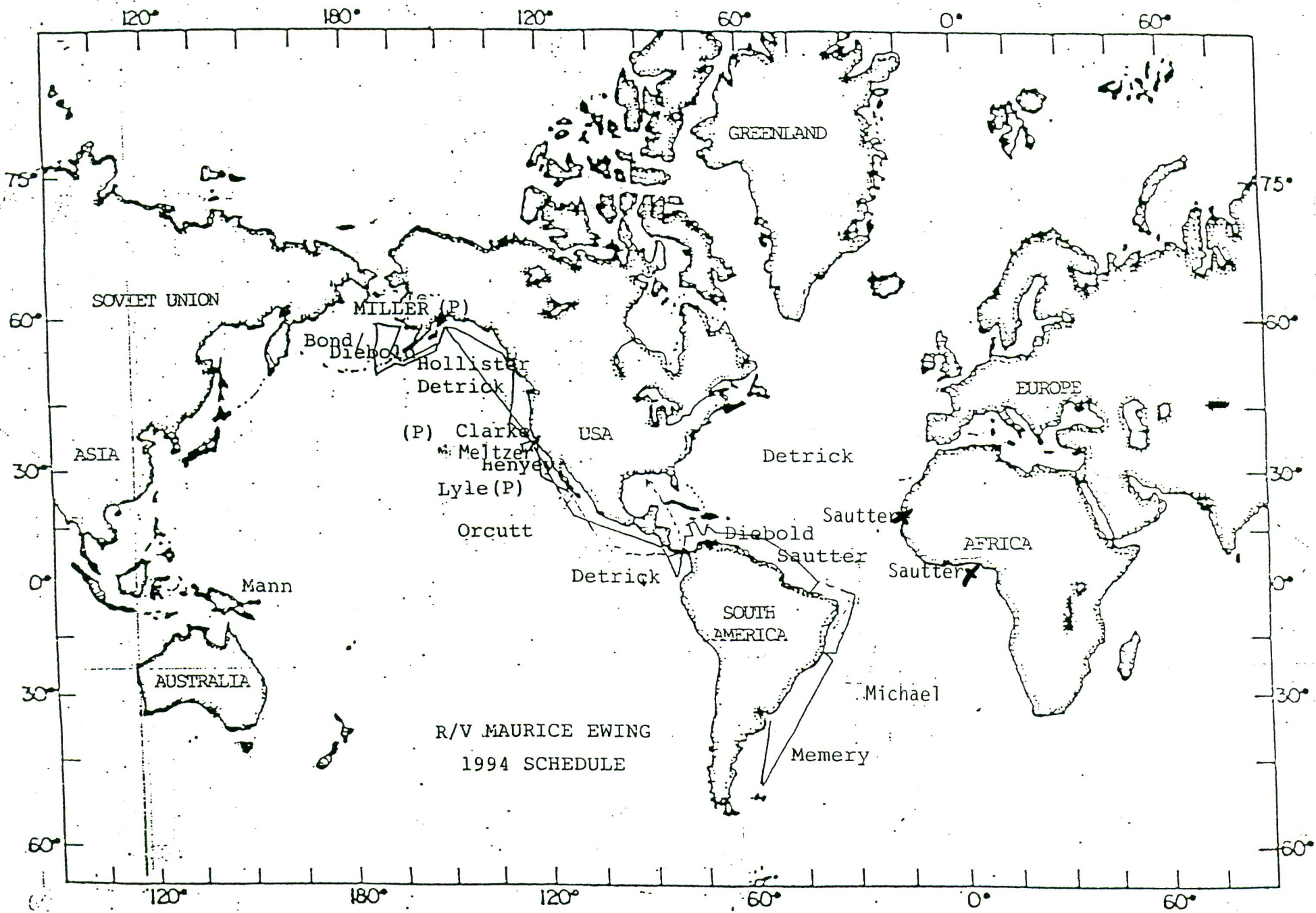


**1994
R/V KNORR
Operating Areas**

OPERATING DAYS

NSF	-	156
ONR	-	14
NUWC	-	48
TOTAL	-	218





TRACK CHART

CAPE HATTERAS

Duke/UNC Oceanographic Consortium
Beaufort, North Carolina 28516
919-728-2111

C A N A D A

U N I T E D
S T A T E S

NEWFOUNDLAND

NOVA SCOTIA

BOOTHBAY

PORTSMOUTH

WOODS HOLE

NARRAGANSETT

Guza
Largier

Martens
Kamykowski

Chave
Valenzuela

Corliss
Moore

Paerl

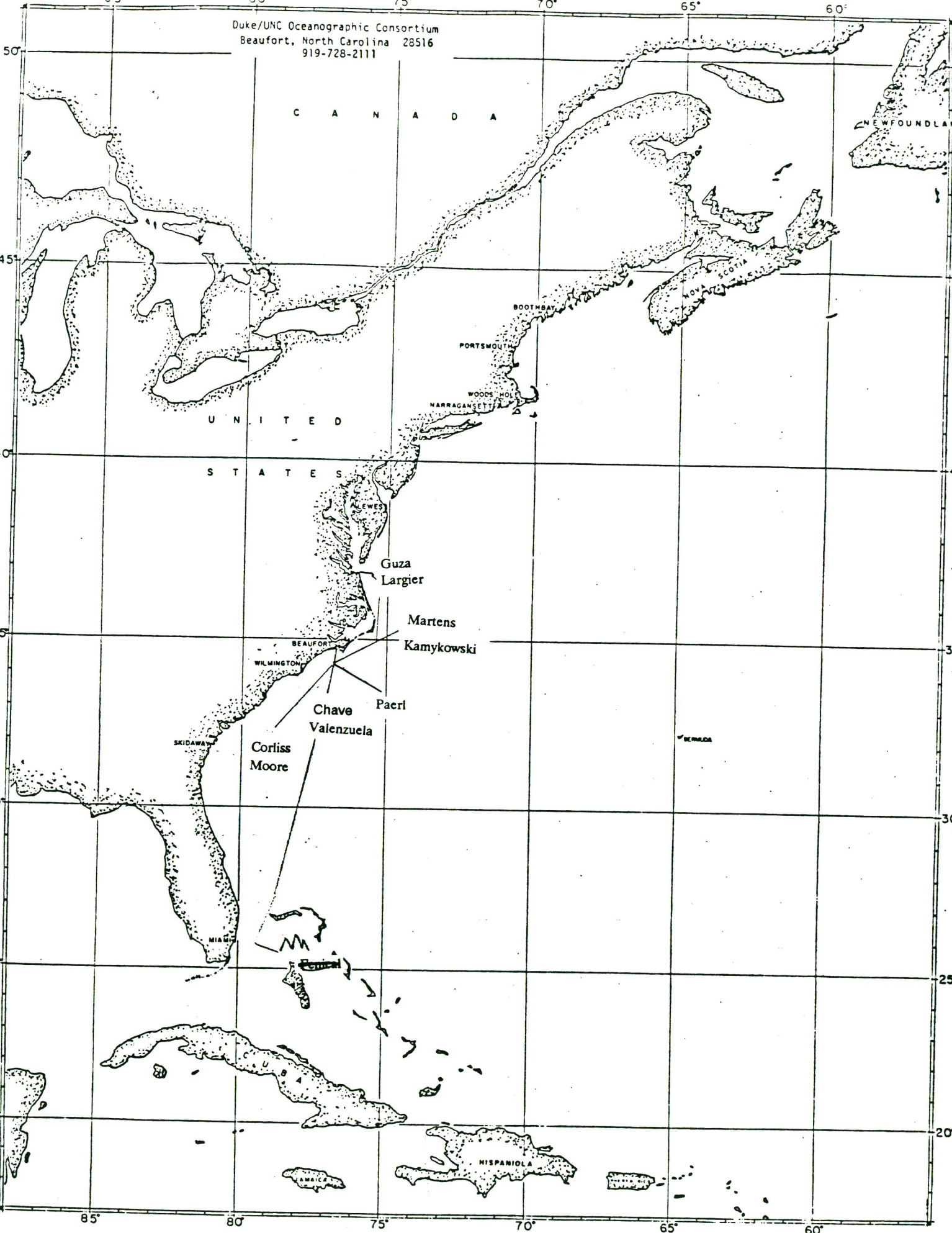
BERMUDA

SKIDAWAY

JAMAICA

HISPANIOLA

CUBA

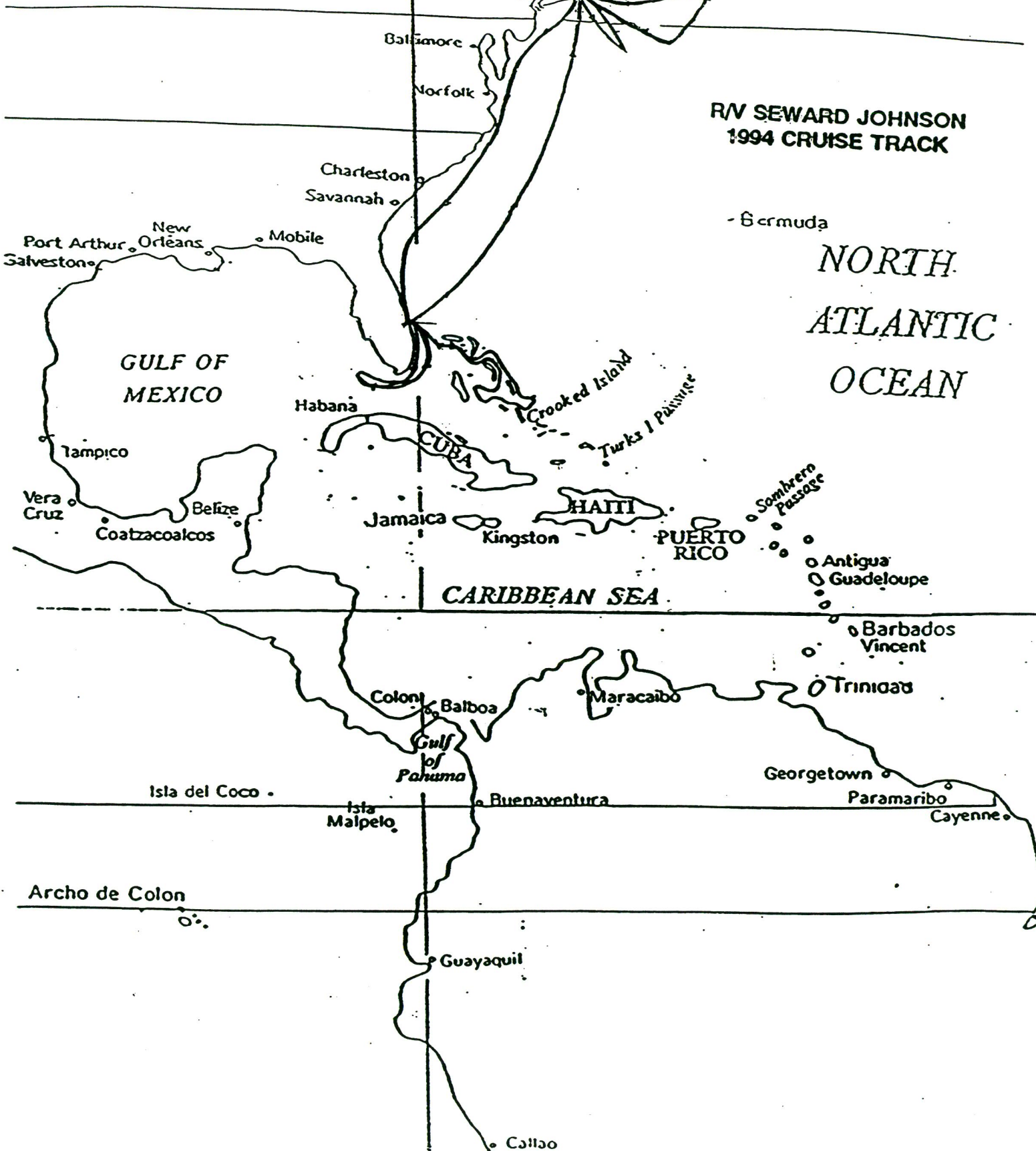


NORTH AMERICA



R/V SEWARD JOHNSON
1994 CRUISE TRACK

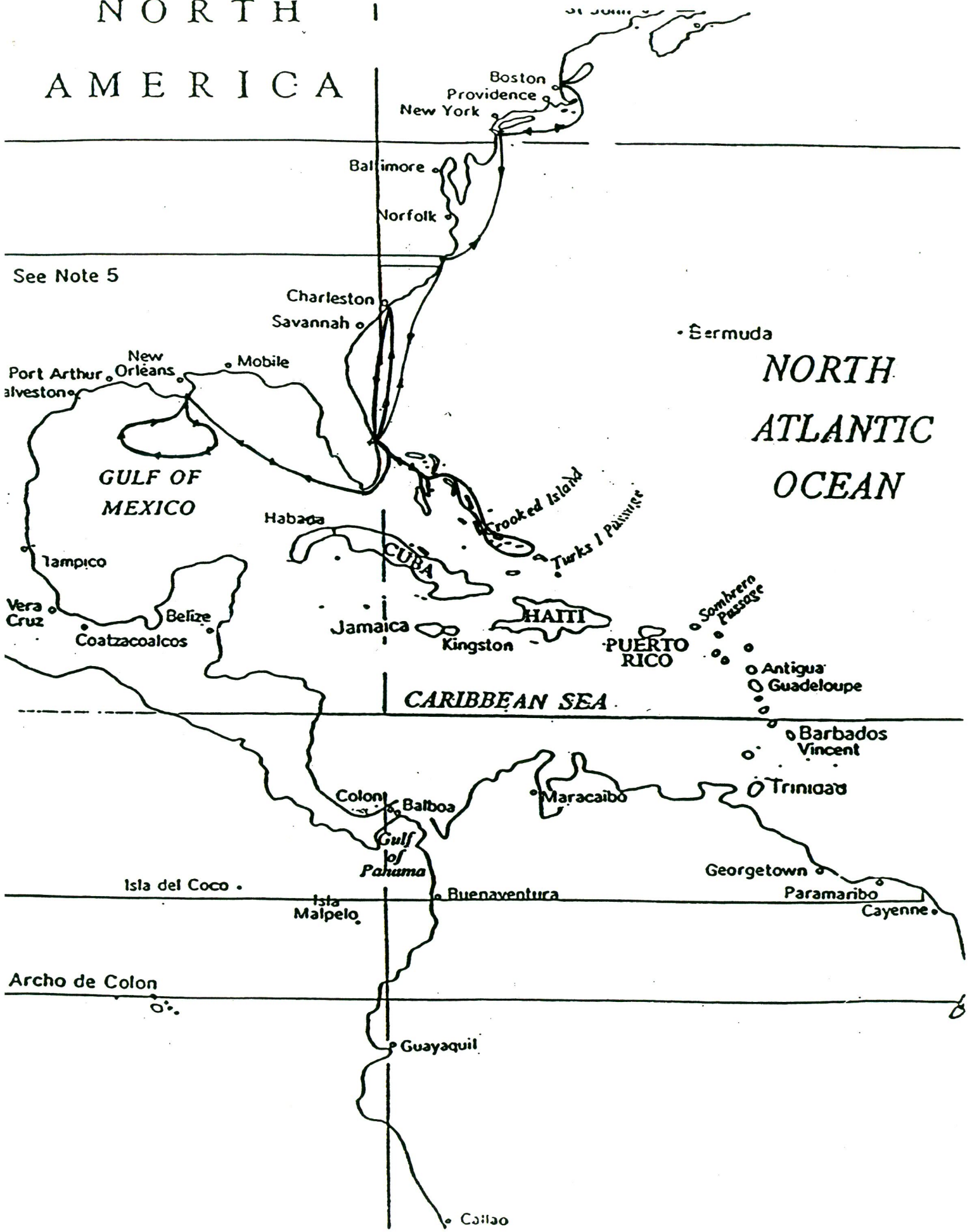
NORTH ATLANTIC OCEAN



Archo de Colon

R/V EDWIN LINK
1994 CRUISE TRACK

NORTH
AMERICA



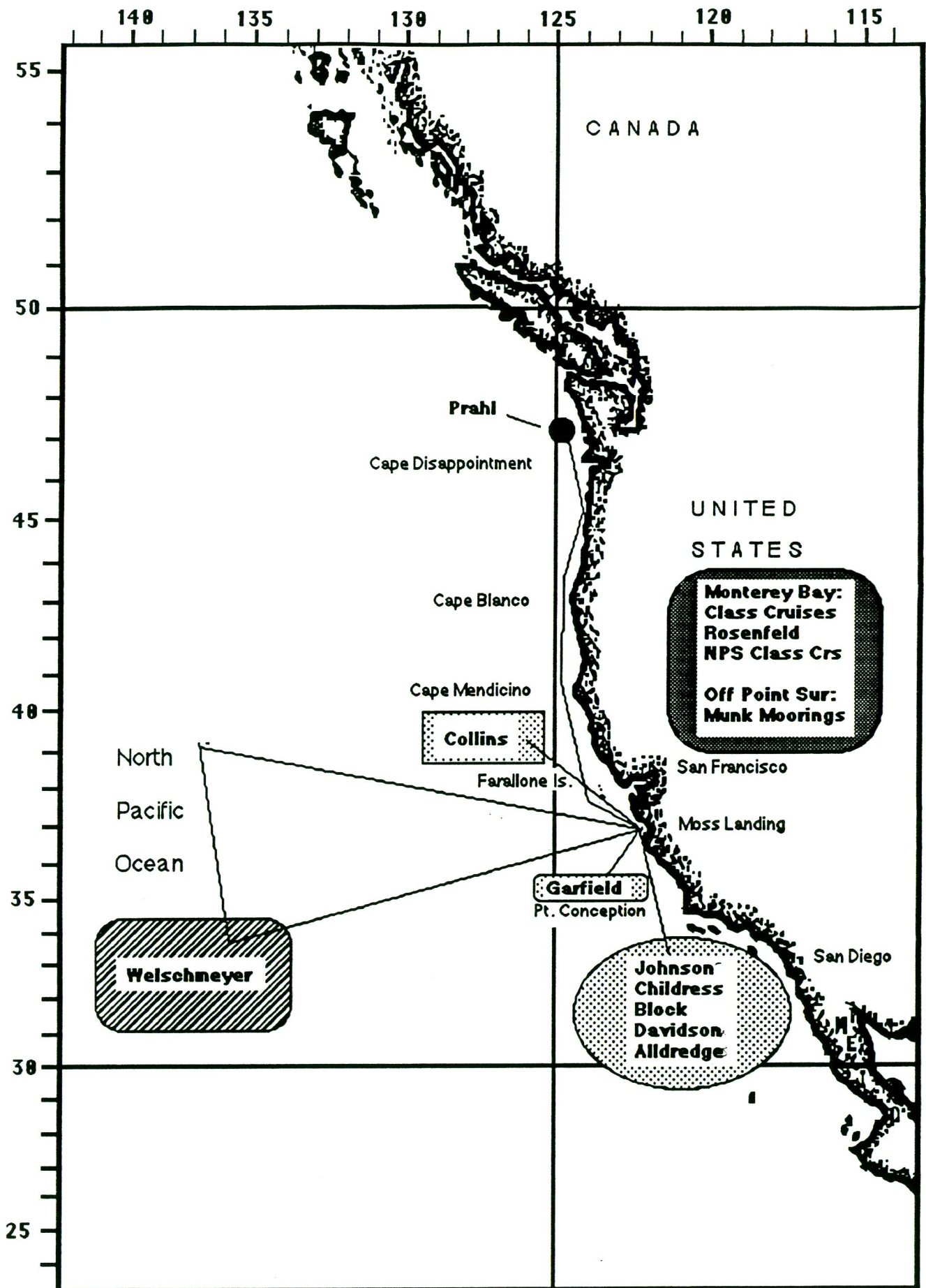
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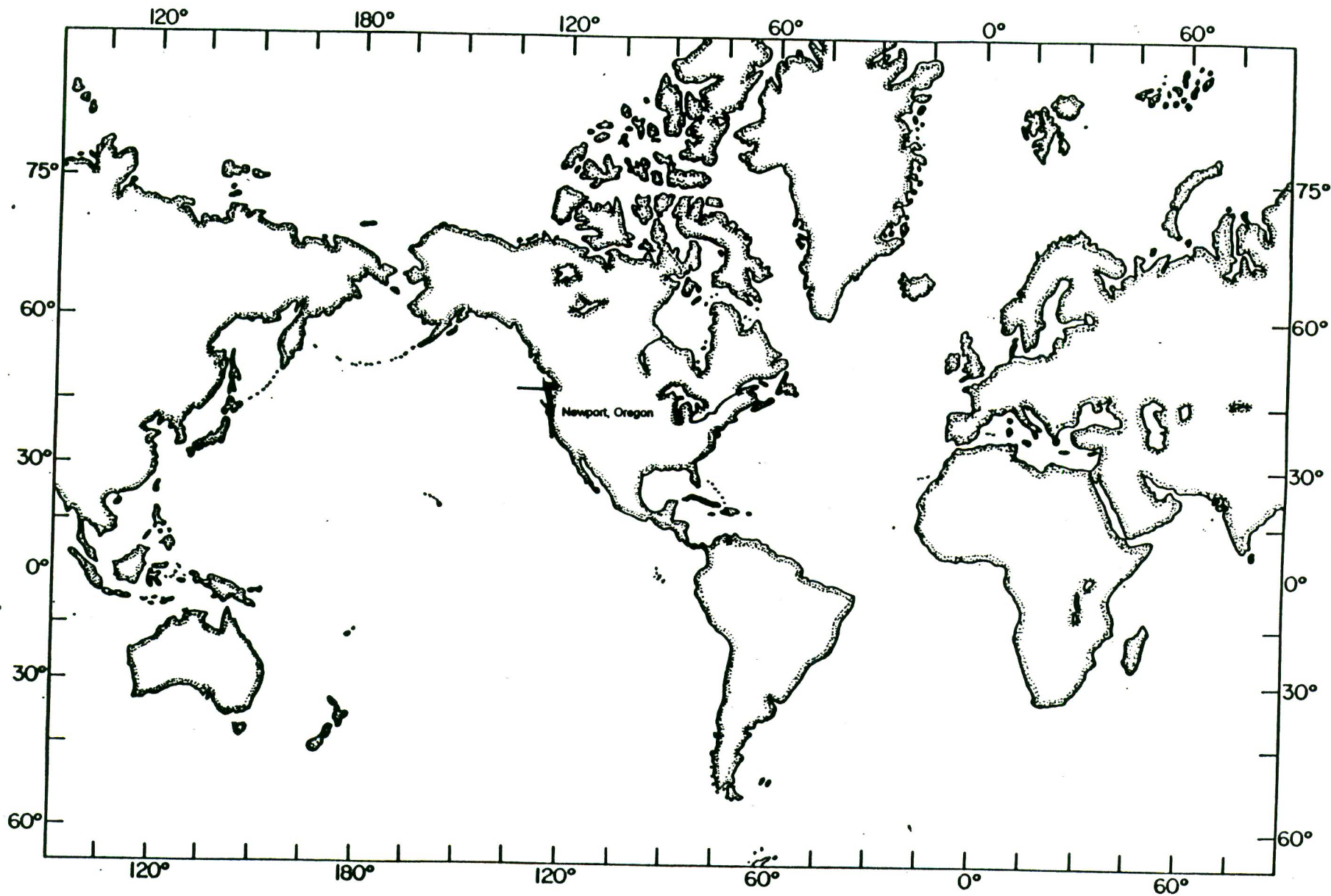
NORTH
ATLANTIC
OCEAN

CARIBBEAN SEA

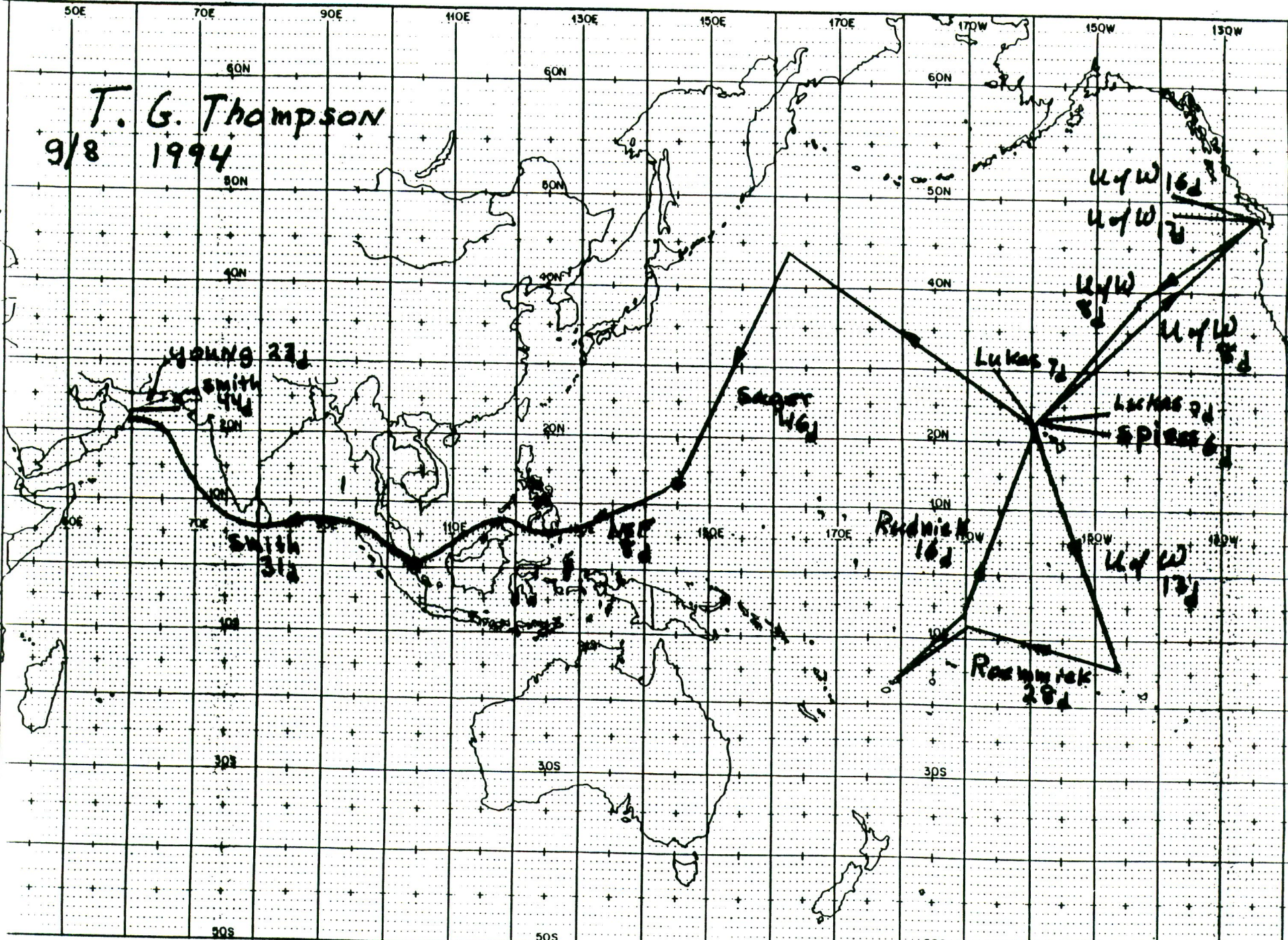
Gulf
of
Panama

Cruise Tracks For R/V POINT SUR IN 1994





**1994
PROPOSED CRUISE TRACKS
R/V WECOMA
OREGON STATE UNIVERSITY**



T. G. Thompson
9/8 1994

Young 27

Smith 44

Saitoh 31

Sagar 46

Rudnick 16

Lukas 7

Lukas 9
Spiess 6

Rachnick 28

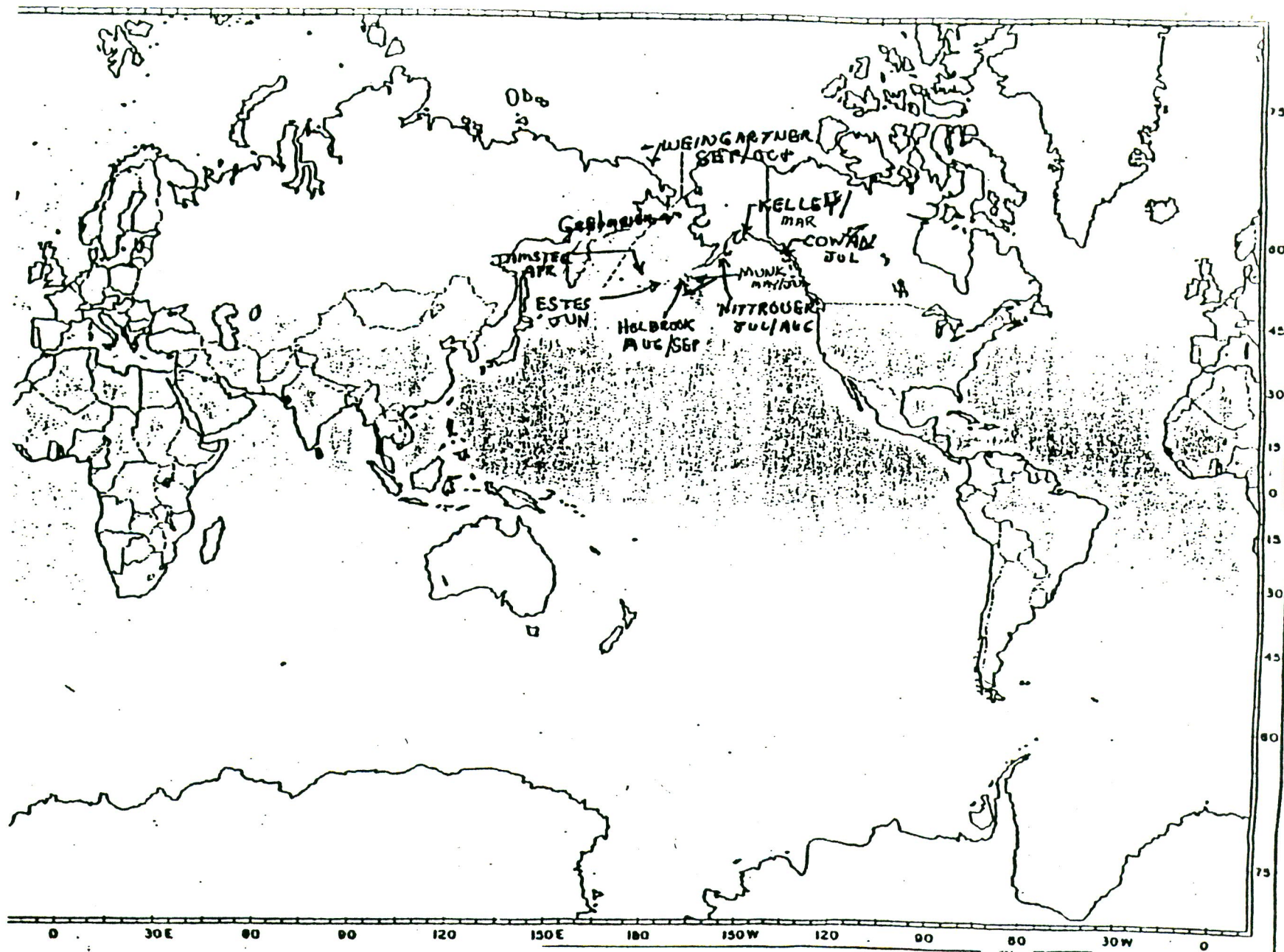
U of W 16

U of W 7

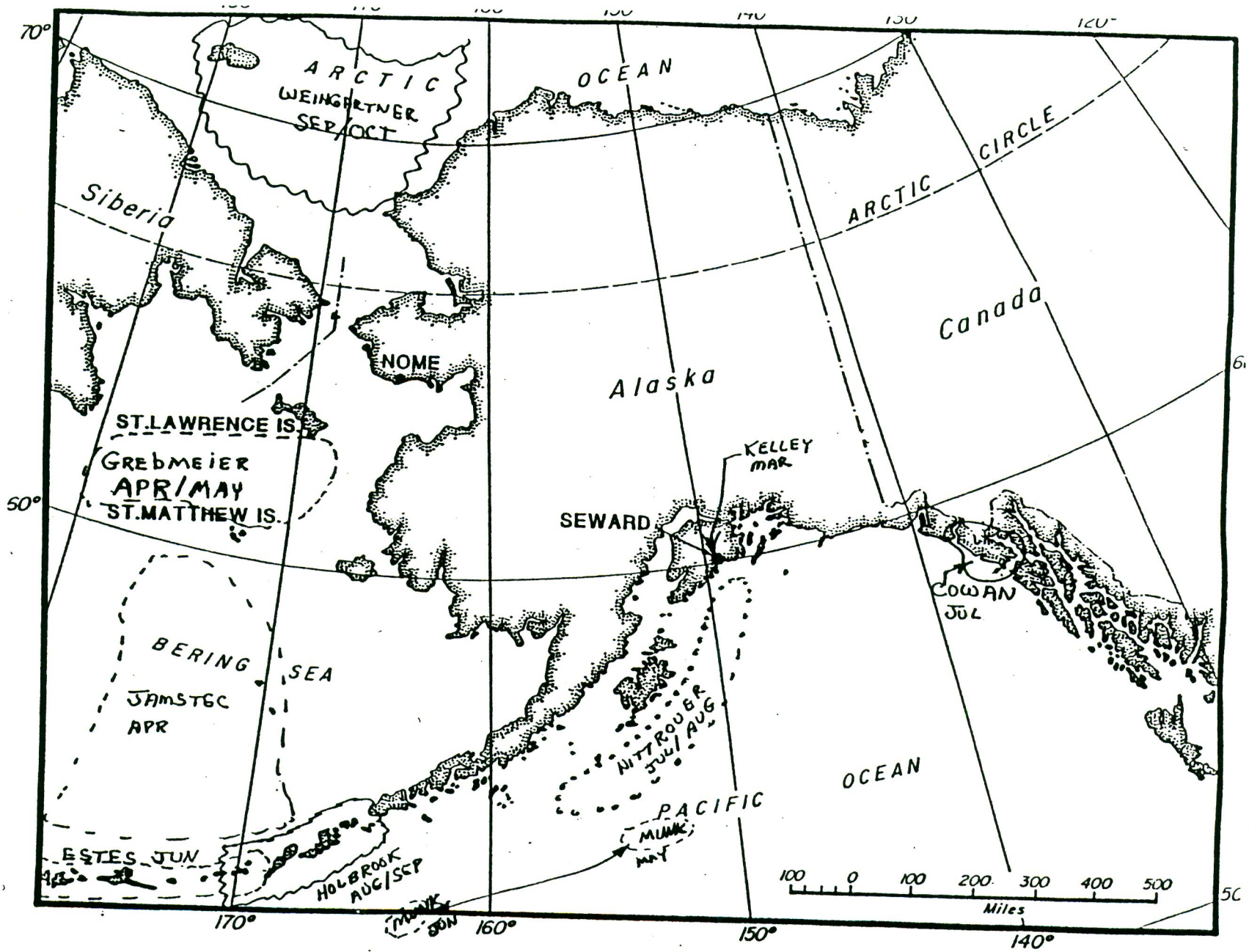
U of W 5

U of W 8

U of W 13



ALPHA HELIX



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APPENDIX VII

PROPOSED TRIAL CHANGES TO UNOLS SHIP SCHEDULING MEETINGS

BACKGROUND: The annual UNOLS Ship Scheduling process has become highly efficient due in a large part to the hard work and effective consultation of and among the institutional schedulers. The present day rapid communications capability available through fax and electronic mail has also served to further enhance the process. It appears possible to reduce the number of Ship Scheduling Committee meetings each year and reduce the number of participants in each, thus conserving travel funds without detriment to the scheduling process.

FIRST ANNUAL MEETING: It has been customary to hold separate Atlantic and Pacific (Indian) Ocean scheduling meetings each year to review preliminary schedules in the presence of science program managers at Washington, D.C. These meetings have usually taken place during late June over two consecutive days. This year we reduced the meeting to two half-day sessions on the same day. It appears the preliminary scheduling meeting with the expected attendance of all UNOLS schedulers may no longer serve the useful purpose it did in the past. It is proposed therefore to eliminate this first committee meeting on a trial basis. In lieu of this June meeting a UNOLS schedule review meeting would be held at Washington during late June. Participants would be the Scheduling Committee Chair and Vice Chair, UNOLS Executive Secretary (with staff support), representatives of NSF, Navy and NOAA (including concerned science program managers). A preliminary report of this meeting with guidance to schedulers would still be published by E-Mail with a formal UNOLS report to follow by mail.

ANNUAL FULL UNOLS SCHEDULING MEETING: It has also been customary to hold in conjunction with the fall, annual UNOLS meeting a full Ship Scheduling Committee meeting, in a single one day session, usually in September, as required by the Charter. The continued attendance by the schedulers for the smaller UNOLS vessels (less than 100') and for those vessels who exclusively operate regionally under straight forward schedules may no longer be necessary or economical. Thus it is proposed that attendance at the fall Scheduling Committee meeting be optional for these schedulers.

QUALIFIER: For these new procedures to work it will be essential, nay **MANDATORY**, that each scheduler post on the appropriate electronic bulletin board the best and most up-to-date schedule and cost figures for each UNOLS vessel. Preliminary annual schedules shall be posted not later than 1 June. Best final schedules shall be posted by 1 September. At this stage, schedules with multiple options serve little useful purpose and are strongly discouraged. Late or missing schedules compromise the process and place schedule endorsements by UNOLS in considerable jeopardy, nay at **EXTREME RISK**.