UNOLS Ship Scheduling Review Group Meeting Room 340 National Science Foundation Arlington, VA

9 September, 1999

1.	Meeting Announcement
п.	List of Attendees

III. Cost Figures for 1999 and 2000

IV. Cruise Tracks

INTRODUCTION: The Ship Scheduling Review Group met in Room 340 of the National Science Foundation, Arlington, VA on 9 September 1999 as per the Meeting Announcement, *Appendix I*. The minutes that follow reflect the deliberations of that meeting.

Joe Ustach, Ship Scheduling Committee Vice Chair, called the meeting to order at 0900. A list of attendees is included as *Appendix II*. Cost figures were presented by Jack Bash and are included as *Appendix III*. Cruise tracks submitted by the schedulers are included as *Appendix IV*.

REVIEW OF SCHEDULES: The Review Group examined the 2000 schedules of the UNOLS Fleet. Below is a summary of the comments for each ship.

ALPHA HELIX - University of Alaska - The ALPHA HELIX schedule shows 146 days with 78 of these days funded. The cruises of both Estes and Weingartner (September) remain pending. The August Church cruise has been declined.

BARNES - University of Washington - A very light schedule of 74 days has been submitted for BARNES. The ECOHAB cruise of Frost has been declined.

BLUE FIN - Skidaway - BLUE FIN's schedule indicates 117 days with 91 funded. Paffenhofer/Lee, and Hollibaugh's proposals will be reviewed at a future panel. They are unlikely to be funded in 2000. Miller has 14 days funded NRL time that needs to be scheduled.

CALANUS - University of Miami - The CALANUS schedule reflects 173 days of which 136 are funded. Johns (OCE 9819506) remains pending as does the NAVO work.

GYRE -Texas A & M - GYRE has a tentative schedule of 146 days with 79 days funded. The LWAD work is funded, however, many factors are driving their schedule presenting a degree of uncertainty. The Santschi work (OCE 9906823) is funded.

CAPE HATTERAS Duke/NC State - The CAPE HATTERAS schedule shows 200 days with 83 of these days funded. Driscoll will move from 1999 to 2000 and will be added to the schedule. Paffenhofer is a carry-over from the 1999 schedule. The ECOHAB work in the Gulf of Maine is pending.

CAPE HENLOPEN - University of Delaware - HENLOPEN schedule shows 188 days with 174 funded. Boyd NRL work has been funded for April, the July and September work is declined.

LAURENTIAN - University of Michigan - A total of NSF 232 days are scheduled for LAURENTIAN, all are funded.

PELICAN - LUMCON - The PELICAN schedule lists 238 days, all funded. Funding for the Dagg NOAA work needs to be checked. NAVO programs should remain as pending until funding is resolved by Congress. Fanning AUV (ONR) work is still pending. Kineke is funded but should not be scheduled until 2001. The ECOHAB cruise for Vargo in September and October is pending.

PT SUR - MLML - The POINT SUR schedule lists 173 days with 90 currently funded. MBARI requests an additional 20 days. Garfield (OCE 9907884) is funded. The GLOBEC work of Rosenfeld is declined.

SEA DIVER - Harbor Branch Oceanographic Institution - The SEA DIVER schedule of 88 days is all funded.

SPROUL - Scripps - SPROUL has a very light schedule of 109 days. Yayanos work (OCE 9907651) is in question as to how the days are split for 2000 and 2001. Whalen's 23 Oct work is declined. Checkly (ONR) will be evaluated at the October site visit. The Dorman ONR work scheduled for 3 Oct is in the early stages of consideration with funding unlikely for 2000.

URRACA - Smithsonian - The Glynn cruise of 15 days is the only NSF funded work scheduled for URRACA.

WEATHERBIRD II - Bermuda Biological Research Station - WEATHERBIRD II's 130 days of NSF work are all funded.

NEW HORIZON - Scripps - The NEW HORIZON schedule includes 145 days of which 92 are funded. The NAVO work remains pending. The Davis NOPP work should be added if still viable. There is a possible need for an additional ship for GLOBEC in September for a possible 20-30 days. This issue is being resolved by NSF and NOAA. The Hunter NOAA work is funded.

WECOMA - Oregon State University - A total of 208 days have tentatively been scheduled for WECOMA. The GLOBEC funding is uncertain at this time. Huyer should have two days added to the cruises scheduled for February, April and August. The August cruise may need to move later. Barth's OCE number is 9907854. The December Huyer work is likely to be postponed to 2001. Rosenfeld's GLOBEC work has been declined.

SEWARD JOHNSON - Harbor Branch Oceanographic Institution - The schedule for SEWARD JOHNSON indicates 259 days with 172 of these days currently funded. Carpenter should be added for October. The numbers of days are still in question but are likely to exceed 30. All NOAA/AMOL work is funded.

EDWIN LINK - Harbor Branch Oceanographic Institution - A schedule of 170 days has been proposed for EDWIN LINK. The NAVY/NRL work of Grabowski remains pending. Widder funding remains pending waiting on a decision from NSF/NAVY concerning other related work. Widder, if funded, will be run back to back with Frank. Both will be working out of Woods Hole. Transit costs will be shared by ONR and NSF.

ENDEAVOR - University of Rhode Island - ENDEAVOR schedule indicates 229 days of which 164 are listed as funded. Discussion of an ONR cruises off New Jersey is unlikely for 2000. The NAVO and LWAD work remains pending. Durbin's ECOHAB cruises have been declined. This should leave time in the schedule to pick up OCEANUS work, see below.

OCEANUS - WHOI - OCEANUS has a very weak schedule for 2000 and should consider a lay up for the year or a major portion thereof. The Price work is likely to be picked up by the British. McEachern's LWAD 002 work is still pending and the dates of the work remain fluid. The schedules of OCEANUS, ENDEAVOR, CAPE HATTERAS and EWING should be examined to determine what cruises can be rescheduled to permit cost effective scheduling with a goal towards a full or near full lay up of OCEANUS for 2000.

LONGHORN - University of Texas - The proposal for Lavrentyev will go to the November panel as such it will be considered for 2001. The NAVO work is funded and should be scheduled.

ATLANTIS - WHOI - The ATLANTIS schedule includes 227 funded and 76 pending days. ALVIN is scheduled for overhaul at the end of the year. Felbeck has asked to move his work into the May timeframe. The Taylor instrument proposal is funded for science only and should be included as an ancillary program. McDonald's 16 Oct work is under consideration for funding by the NOAA/NURP Centers. If McDonald drops out Blackman can move earlier which would advance the overhaul for earlier in the year.

KNORR - WHOI - KNORR's schedule remains solid for the first part of year (through 19 July). Druffel (OCE 9815130) has requested to join the ship in Norfolk. This adds four days to the schedule. The Prod Drill work is dependent on successful testing earlier in the year. If unsuccessful, this cruise will be cancelled. Johns (OCE 9819506) should be scheduled for winter 2000/2001. A second cruise in September 2001 will be needed. The program is funded but needs to go 2001. LWAD should be scheduled in September as requested. This new schedule change would permit doing the Dutch work in October. There may be a problem with transit for the work of Henry Dick (OCE 9819194). Six weeks will be open in July to make room for Ballard in the Black Sea.

THOMPSON - University of Washington - THOMPSON'S schedule includes 266 days of ship time, however, several of the cruises are problematical. Johnson's Prod drill program will not be ready until March. The NAVO work in March is highly unlikely and should not be scheduled at this

time. Jason is not available for Levin in April making the September window the first opportunity to start the program. The second cruise is to be scheduled after 4 months taking it into March/April 2001 time frame. JASON will be need to be shipped from the Indian Ocean after KNORR has completed its work. Clark must depend on the satellite schedule that could cause delays. A partial lay-up should be considered for the first quarter.

REVELLE/MELVILLE - Scripps - The REVELLE and MELVILLE schedules have been switched to accommodate investigators. MELVILLE will take the work in the western Pacific. The Crawford work on MELVILLE remains pending.

EWING - LDEO - The EWING schedule is funded with the exception of 7 New Zealand days for Davy that is still pending. The ship will end its work in September that will permit time in 2000 for overhaul plans. The dual ship work of Tulcholke will need coordination with OCEANUS (or a substitute ship).

RON BROWN - NOAA - PMEL will be utilizing BROWN for work in the Pacific. A shipyard period is scheduled for March. All work on BROWN for 2000 will be NOAA funded.

BLUE HERON - University of Minnesota, Duluth - The 2000 schedule of BLUE HERON was not discussed by the Schedule Review Group.

APPENDIX I

To: Ship Schedulers Subject: September Scheduling Review Meeting.

Resent-Date: Mon, 23 Aug 1999 12:15:26 -0400 (EDT)

Resent-From: ssc@diu.cms.udel.edu

To: UNOLS Ship Scheduling Committee

From: Mike Prince, Chair

- 1. The next meeting planned as part of the ship scheduling process is the Ship Scheduling Review meeting on September 9th. This meeting normally involves the Chair. Vice Chair and UNOLS Executive Secretary meeting with the Funding Agency Representatives to review the schedules and costs. Ship schedulers do not need to attend this meeting unless it is decided that it is necessary to have an open, face to face meeting of certain schedulers to resolve a specific important issue or you feel it is important for you to meet with the Funding Agency representatives. It is my intention and hope that we will have identified and resolved all such issues prior to this meeting or that we have a plan for resolving those issues at some later date if necessary. Towards that end, any scheduler, PI or Agency representative that is aware of an unresolved issue or problem with any schedules should make sure that the UNOLS office and I are aware of it. We should do this as soon as possible with the idea that we can resolve many of these issues by phone calls, email or conference call.
- 2. The next step for the SSC is to provide updated schedules for 1999 and 2000. If your schedule is set, please go ahead and publish the latest edition. If you do not have any changes to make since you last published your schedule, please send a note to that effect with the date of the schedule that you consider current for both 1999 and 2000. If you are waiting for results of the GLOBEC panel or other decisions/input please publish a schedule as soon as you can and in any case no later than September 1st. If you are still waiting for information on September 1st, please publish a schedule anyway with a note about what might change. One of the things we need to do is make an assessment of where we stand in terms of the cost and utilization of the fleet and we need your schedules to do that. We also need your schedules to ensure that there are no conflicts, double bookings and missing projects. If you are going to have to update the schedule again just before the meeting, please let us know that and try your best to provide just one update by the 8th of September.
- 3. For any vessels with operations outside their immediate area, please send a cruise track map to the UNOLS office by September 1st.
- 4. We also need your cost estimates for 1999 and 2000 in the usual format by September 1st.

CY 1999	NSF	NAVY	NOAA	OTHER	TOTAL
Ship Days	XXX	XX	XX	XX	XXX
Cost \$K	XXX	XXX	XXX	XXX	XXXX
Daily Rate:	\$x.xxx				

Navy includes: Other includes:

JY 2000 NSF NOAA OTHER TOTAL Ship Days XXXXXXX XX XXX Cost &K XXX XXXXXXXXXXXXX Daily Rate: \$x,xxx

Navy includes Other includes

- 5. Lastly, I will need to step down as the Chair of the Scheduling committee because I will be stepping down as the Marine Superintendent and Scheduler for the POINT SUR to become the UNOLS Executive Secretary on May 1st of next year. Since we will not be having a general meeting of the Scheduling Committee until July of next year and the 2001 process will be well under way by then we should hold an election by email or mail in the near future. I would recommend that we try to complete an election of a new west coast representative and select either Joe Ustach or the new representative as Chair before the UNOLS Council and Annual meetings on September 20 and 21 so they could be officially appointed. I would suggest that we solicit nominations for west coast representative immediately and ask Joe whether he would like to run for Chair. We should then hold an election, preferably by email to the UNOLS office. Any suggestions or nominations are welcome.
- 6. Please feel free to call either me or Joe if you have any scheduling issues that you would like to discuss. We will be checking with each of you as we get the schedules to be sure we are up to date on any problems you may have. Also if you have any suggestions for improving the scheduling process, those are always welcome.

Regards. Mike Prince

Mike Prince Marine Superintendent Moss Landing Marine Labs P.O. Box 450 Moss Landing, CA 95039

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831-633-4580 Fax
prince@mlml.calstate.edu
http://color.mlml.calstate.edu/www/marinops/marinops.htm

APPENDIX II

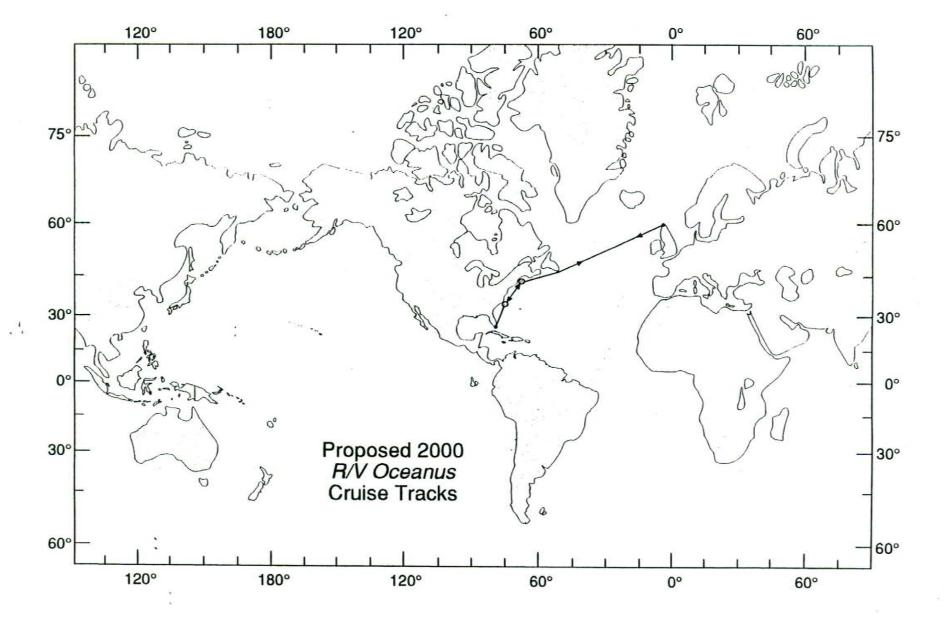
NAME	ORGANIZATION	PHONE/e-mail
Jon Alberts John Bash Dolly Dieter Bob Knox Scott McKellar Julie Neander Bill O'Clock Kenric Osgood Tim Pfeiffer Holly Smith Joe Ustach Beth White	WHOI UNOLS NSF SIO NOAA/ONCO NOAA/NOS NOAA/ONCO NOAA/LOP ONR NSF Duke NOAA/NSF	508-289-2277/jalberts@whoi.edu 401-874-6825/unols@gso.uri.edu 703-306-1577/edieter@nsf.gov 858-534-4729/rknox@ucsd.edu 301-713-3435x135/Scott.McKellar@noaa.gov 301-713-3656x185/Julia.Neander@noaa.gov 301-713-3435x146/James.W.O'Clock@noaa.gov 301-713-3338x130/Kenric.Osgood@noaa.gov 703-696-6999/Timothy_Pfeiffer@onr.navy.mil 703-306-1576/hesmith@nsf.edu 252-504-7579/joeu@duke.edu 301-713-2465x184/elizabeth.white@noaa.gov
		703-306-1579x7235/eawhite@nsf.gov

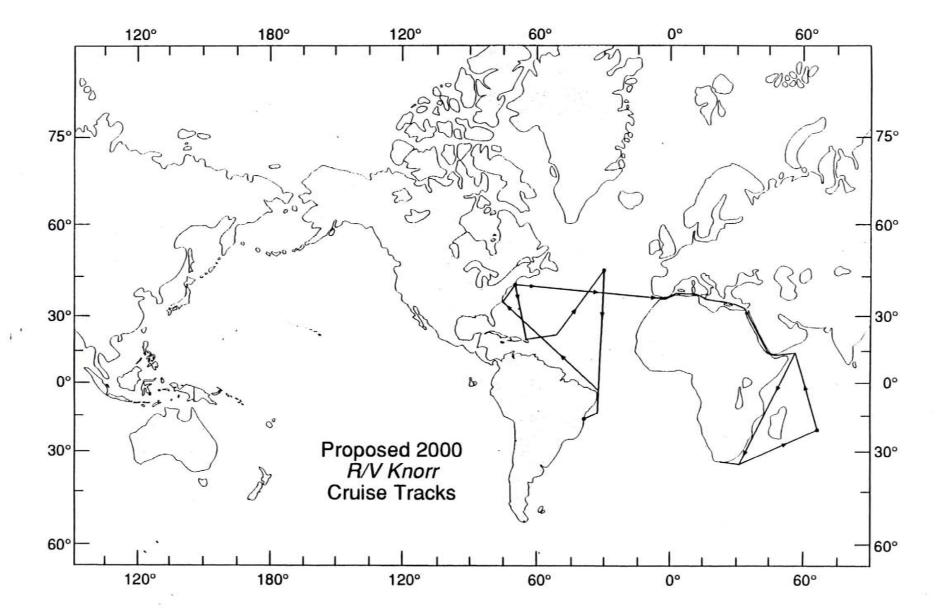
APPENDIX III

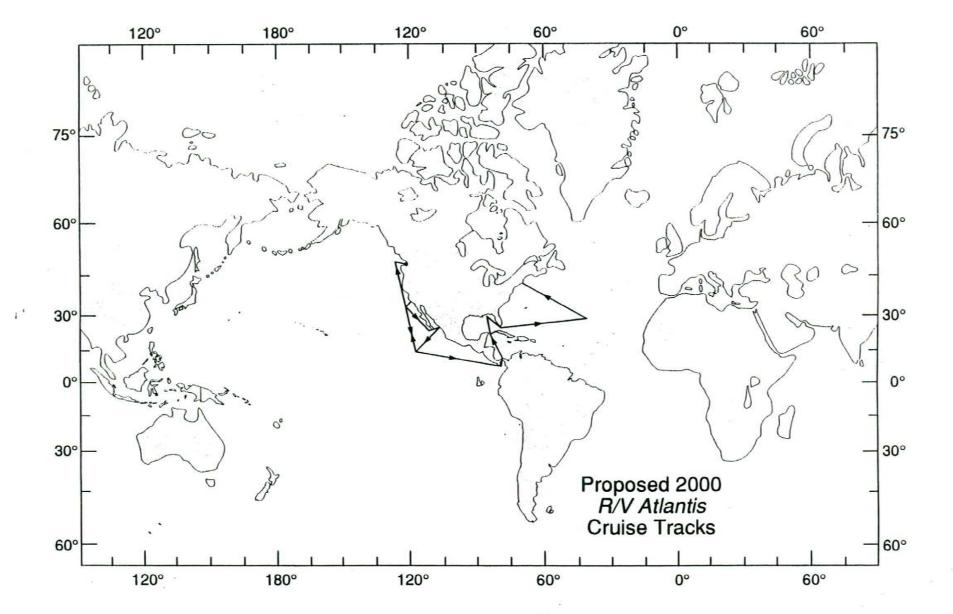
		YE	AR:	1999							
As of:9/8/99							-+				
		NSF		NAVY		NOAA		OTHER			
SHIP/CLASS	DAY		DAY		DAY	8	DAY	4		TOTAL	DAILY
R. REVELLE .	2	34	262	4,258	0				DAY		RATE
MELVILLE *	185	3,035	86		21		21		276	4,647	16,88
KNORR .	0	0	0		1 0				300	4,920	16,40
ATLANTIS .	277	4,377	1 0	2,000	56				0	2,066	#DIV/OI
EWING *	307	4,654	0		0		2		335	5,293	15,80
T.G. THOMPSON **	58	984	77		55		24		331	4,910	14,83
MOANA WAVE *	38	518	11		12	163	36		226	3,810	16,97
CLASS I/II	867	13,500	426		144	2,317	- 0		81	828	13,67
AVE: (7)	124	1,929	61	1,313	21	331	90		1,527	28,472	18,65
				1,010		331	13	210	218	3,782	#DIV/OI
EDWIN LINK .	73	884									
ENDEAVOR	189	1,881	12		- 0		76	683	160	1,458	9,100
OCEANUS .	150	1,695	0		24	239	0	0	213	2,120	9,95
GYRE •	10	72	19	2.0	0		5	58	174	1,967	11,30
NEW HORIZON .	94	818	80		0	0	97	753	187	1,449	7,74
SEWARD JOHNSON .	131	1,284	72		23	200	40	348	229	1,992	8,69
WECOMA **	41	449	60		22	216	0	0	213	2,088	9,80
CLASS III	688	6,863	44		92	1,008	0	0	177	1,939	10,95
AVE: (7)	98	980	287	2,644	161	1,663	217	1,840	1,353	13,010	9,616
7.102. (77)	90	960]	41	378	23	238	31	263	193	1,859	9,652
DELICAN AN										.,000	0,002
PELICAN **	71	267	101	379	37	139	29	109	238		
LONGHORN	14	68	0	0	0	0	35	140	49	894 196	3,756
POINT SUR .	49	332	79	536	2	14	49	332	179		4,000
CAPE HATTERAS **	52	431	92	762	0	0	19	167	163	1,214	6,782
ALPHA HELI .	145	1,307	0	0	14	126	6	54	165	1,350	8,282
	97	592	11	67	0	0	43	262	161	1,487	9,012
CAPE HENLOPEN	108	585	67	370	0	0	11	61		921	6,099
WEATHERSIRD II **	138	1,038	0	0	0	0	4	31	184	1,016	6,622
SEA DIVER .	26	120	36	173	0	0	. 0	0	142	1,069	7,528
CLASS IV - TOTAL	697	4,728	386	2,287	53	279	196	1,146	1,332	293	4,803
AVE: (9)	77	525	43	254	6	31	22	127	1,332	8,440	6,336
								- '2'	148	938	6,198
BLUE FIN .	66	164	14	35	27	67					
LAURENTIAN **	208	915	0	0	0		8	20	115	286	2,487
BARNES	78	125	0	0	7	11	7	31	216	946	4,400
CALANUS .	36	103	26	71	80		26	40	110	176	1,600
URRACA	16	68	0	0		229	6	14	138	414	3,000
CLASS IV TOTAL	403	1,375	39	106	114	0	94	491	109	559	5,128
AVE: (5)	81	275	8	21		307	139	596	695	2,384	3,430
					23	61	28	119	137	476	3,466
Fleet Total	2,655	26,468	1 100	10.005							
AVE: (28)	2,000	20,700	1,138	16,225	472	4,566	642	5,049	4,907	52,306	10,661
7. 12.7									1	32,000	.0,001

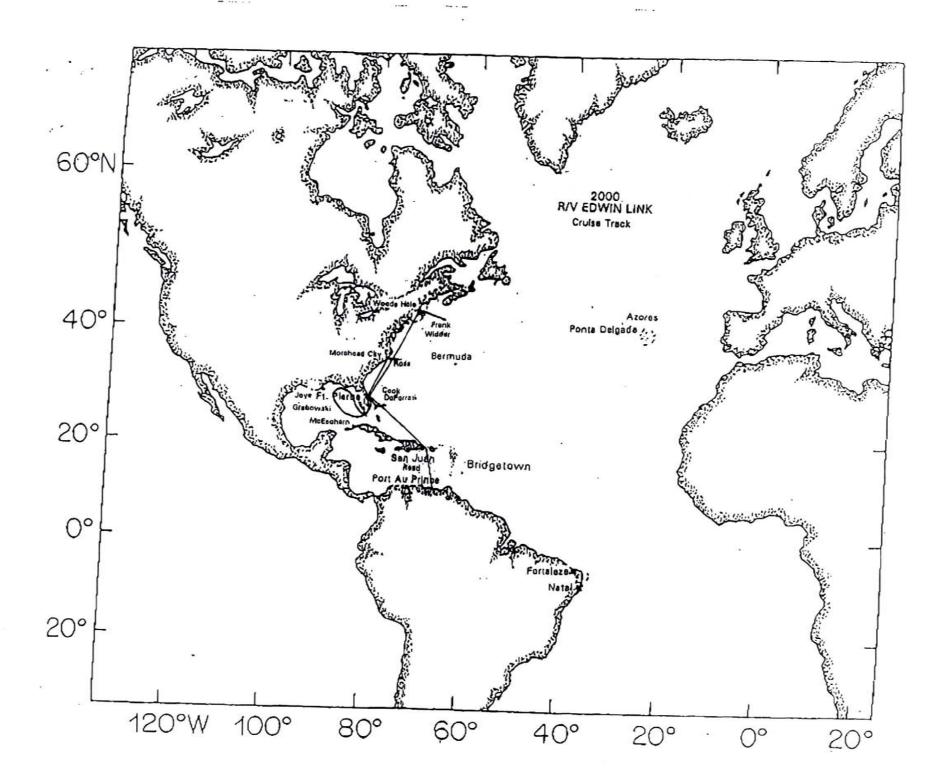
9	EAR:			2,000							
As of:9/8/99											
		NSF		NAVY		NOAA		OTHER	_	TOTAL	DAILY
SHIP/CLASS	DAY	\$	DAY	\$	DAY	\$	DAY	\$	DAY	e e	RATE
R. REVELLE	206	3,399	107	1,766	0	0	0	0	313	5,165	-
MELVILLE	248	4,092	0		11		4	66	263		_
KNORR	265	4,346	67	935	0	0			322		16,4
ATLANTIS	262	4,506	0	0	19	327	22	378	303		17,1
EWING	263	4,174	0	0	0		7	116	260		
T.G. THOMPSON	81	1,375	70	1,188	21	356	83	1,409	255		16,97
ANA WAVE									0		-
CLASS I/II	1,315	21,892	234	3,889	51	865	116	1.969	1,716		16.6
AVE: (7)	219	3,649	39	648	9		23	394	286	4,769	_
		5,5.0				- 144	23	384	280	4,769	#DIV/0!
EDWIN LINK	63	482	72	656		0	46	410	170	1,647	9,10
ENDEAVOR	98	1,009	86		26		20	206	229		10,30
OCEANUS	110	1,232	91	1,019	6	67	5	56	212	2,369	11,11
GYRE **	10	90	56		0		81	729	146	1,314	9,00
NEW HORIZON	54	524	30	291	23	223	38	369	145	1,407	9,70
SEWARD JOHNSON	168	1,646	4	39	86	843	1	10	259	2,538	9.79
WECOMA	147	1,523	21	218	42	435	<u>-</u>		210	2,176	10,36
CLASS III	640	6,506	358	3,593	183	1,836	190	1,780			
AVE: (7)	91		21	513	26	262	32	297	1,371	13,715	10,00
				0.0	20	202	32	287	196	1,959	9,92
PELICAN	80	300	42	158	40	150	78	293	240	901	
LONGHORN	34	136	0	0	0	0	13	62	47	188	3,76
POINT SUR	42	286	56	381	6	41	69	469	173	1,177	6,80
CAPE HATTERAS	103	812	47	371	31	246	16	126	197	1,664	7,88
ALPHA HELIX	95	961	0		21	210	30	300	146	1,461	10,00
R. SPROUL	49	299	33	201	0	0	27	165	109	665	6,10
CAPE HENLOPEN	147	821	37	207	0		4	22	188	1,050	3,90
WEATHERBIRD II	138	1,038	0	0	0	0	4	32	142	1,070	7,53
SEA DIVER	26	125	62	298	0	0	Ö	0	88	423	4,80
CLASS IV - TOTAL	714	4.768	277	1,616	98	646	241	1,459			
AVE: (9)	79	630	31	180	11	72	27	162	1,330	8,489 943	6,38
	1	- 555	- 1	100		12	21	162	148	943	6,08
BLUE FIN	79	208	8	21	26	66	5	13	117	308	
AURENTIAN	232	1,044			0	0	0	0	232	1,044	2,63 4,60
BARNES	36	74	6	10	10	21	39	81	90	1,044	2,06
CALANUS	45	292	61	397	61	397	6	39	173	1,125	
URRACA **	15	79	0	0	- 0	337	93	477	108	556	6,60 5,14
BLUE HERON	65	254	0	0	14	55	27	105	106	414	3,90
< CLASS IV TOTAL	472	1,951	74	428	110	539	170	715			_
AVE: (5)	79	339	15	86	110	97		7.3.5	826	3,633	4,39
7,72. (0)	,,,	333	15	80	19	9/	29	122	144	644	4,47
Fleet Total	3,141	35117	943	9,526	442	3886	743				
AVE: (28)	5,.41		843	8,020	442	3000	717	5,923	5,243	54,452	10,38
**Estimated Co	ost/day										

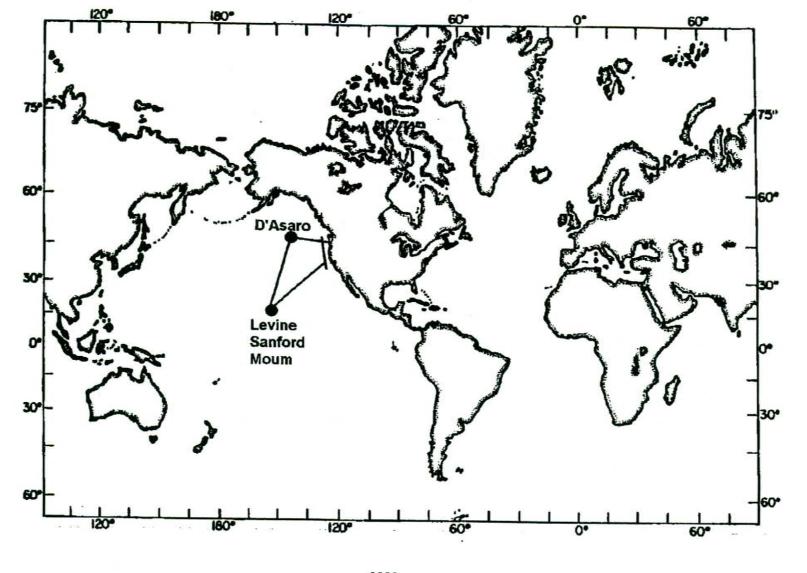
APPENDIX IV



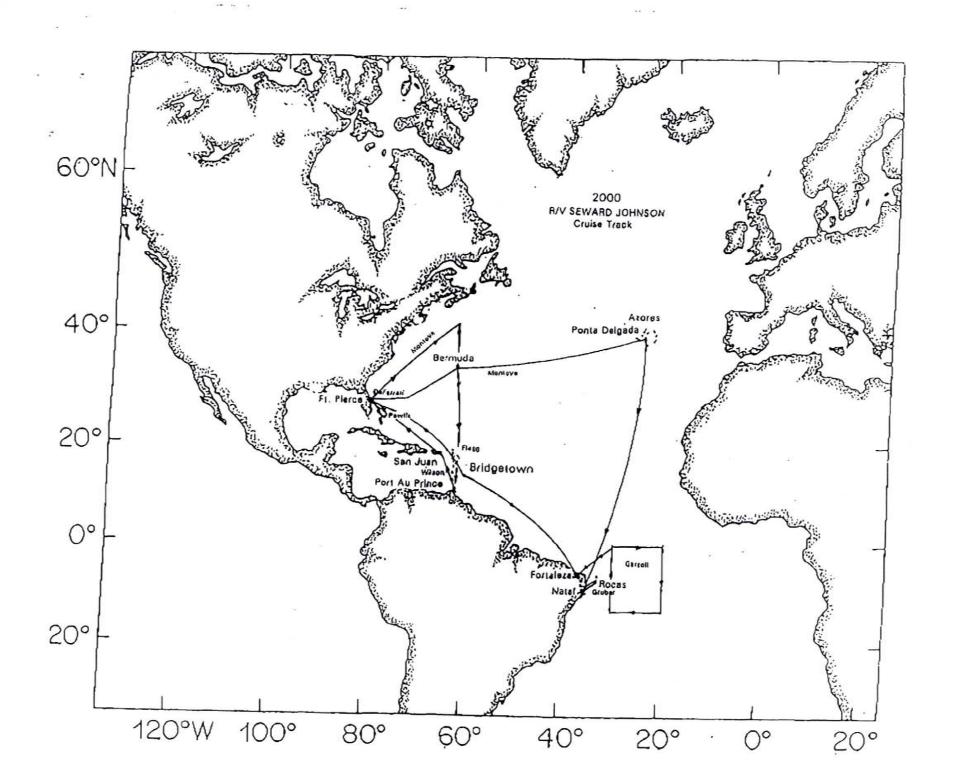


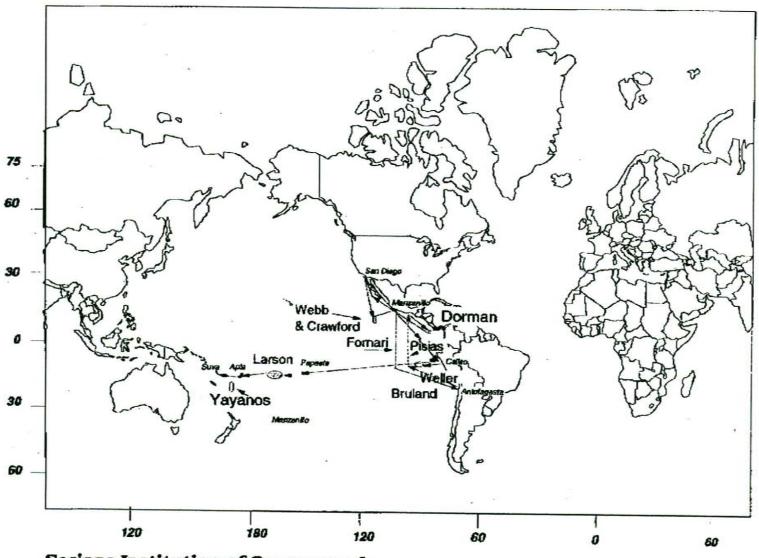




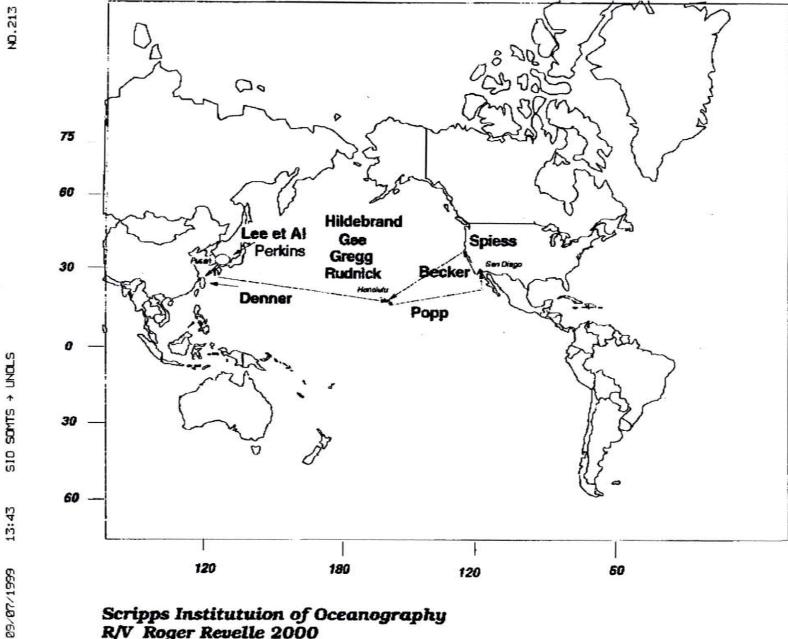


2000 CRUISE TRACKS R/V WECOMA OREGON STATE UNIVERSITY





Scripps Institution of Oceanography R/V Melville 2000



Scripps Institutuion of Oceanography R/V Roger Revelle 2000

R/V Ewing 2000

