Appendix V

NSF Fleet Review Information

ACADEMIC RESEARCH FLEET OPERATIONS AND MANAGEMENT REVIEW

Terms of Reference

 Review and evaluate the current and projected research vessel fleet required for research sponsored by the National Science Foundation within a national framework that includes research requirements of other federal agencies, state and local governments, and private sources.

This review should be done in the context of environmental and geoscience research, in general, and the specific contributions the Academic Research Fleet provides to the research enterprise as a whole.

Specific issues include:

- Do the capabilities and operating modes of the academic ships meet research requirements?
- Are the number of ships overall, and distribution within size categories, consistent with the level of research support and type of seagoing research projects expected in the future?
- Are specialized capabilities required to meet research priorities adequately included in the overall fleet profile?

ACADEMIC RESEARCH FLEET OPERATIONS AND MANAGEMENT REVIEW

Terms of Reference

2) Review and evaluate overall management structure of the Academic Research Fleet; review and evaluate existing capabilities and services provided by the operating organizations; and review and evaluate possible future changes in academic fleet operations to ensure optimal operations of the academic fleet to support research requirements.

The review context should include consideration of the distributed ownership of the fleet, cost sharing for both capital acquisition and operations and requirements of multiple research sponsors who participate in scientific, operational and financial support.

Specific issues include:

- Are organizational arrangements and structures appropriate?
- Can the Academic Research Fleet system be managed in a more cost-effective manner?
- Should elements of the research fleet be recompeted?

ACADEMIC RESEARCH FLEET OPERATIONS AND MANAGEMENT REVIEW

Terms of Reference

3) Provide recommended actions by NSF to improve the organization, management, and cost effective operation of the Academic Research Fleet in support of scientific capabilities required to maintain world leadership in ocean and environmental science research.

The recommendations should be formulated in the context of the results of the review and evaluations of the first two terms of reference. Key elements include providing a perspective on Academic Research Fleet operations within a national context, relevance and quality of scientific, educational, and technical support; and benefits and added value of any recommended actions for peer reviewed competition or recompetition of research fleet components.

ACADEMIC RESEARCH FLEET OPERATIONS AND MANAGEMENT REVIEW

<u>Action</u>

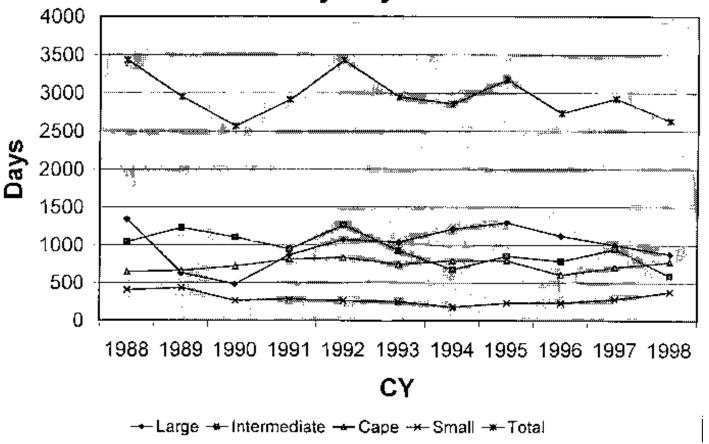
- Establish Academic Research Fleet Operations Review Panel
 - Six to eight members
 - Academic, industry, and government representatives
- Provide a comprehensive and balanced evaluation of science support services and capabilities, ship operations, and size and organizational structure for the support of the academic research fleet.
- Recommend actions by NSF to ensure the most cost-effective means of organizing and managing the research fleet for support of research requirements.

ACADEMIC RESEARCH FLEET OPERATIONS AND MANAGEMENT REVIEW

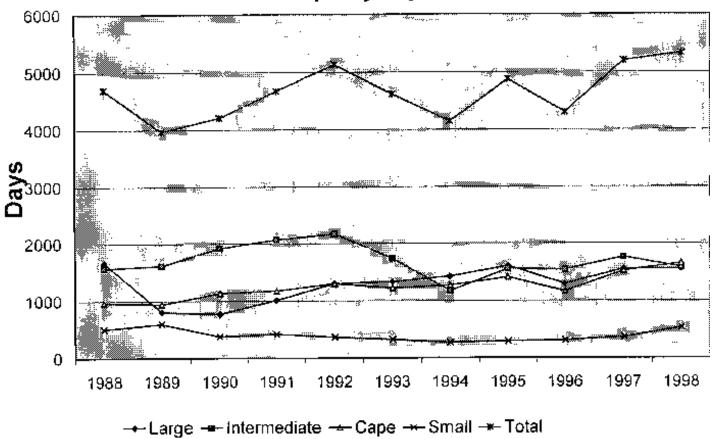
Context

- National Science Board reviewed request for continuation of Oceanographic Research Vessel and Submersible Operations awards for 5 years in November, 1997.
- Operations awards were approved for a shorter duration -- 2 years, 1998 and 1999.
- NSF staff are to review and report back on the cost-effectiveness of the present and possible alternative methods of managing ship operations
- Review procedures will follow principles outlined in NSB Resolution concerning Competition, Recompetition, and Renewal of NSF Awards for facilities operations (NSB 97-224).

NSF Days by Class



Total Ship Days by Class



NSF Total Days

Ship Melville	Length 270	1968 145	1989 148 mil	1890 m	1996 °	1902 137	1993 24:	1994 302	1995 206	1996 291	1967 200	1998 154
Knon	279	260 mil	l m/l	г	el.	271	167	218	350	207	153	190
Triompso	274 -					231	723	146	215	1/1	62	131
Revele	274				_		71.2		2 3	11	233	128
Atlantis	274									- 1		
	239			1:1	300	****			- 5-		157	207
Ewrig		/·F -				190	221	292	180	311	192	76
A.I	210	254	154	147	247	146	183	253	25%	ra w	9	
Cornad	208	275	58 n/s									
Thompso	208	121 a/a										
Washingl	235	788	229	224	320	94 oh						
	Sub Idal	1344	629	487	807	1009	1035	1211	1297	1119	997	981
Victors	230			10	86	65	115 a5	s				
M Wave	210	281	266	156	218	223	163	142	1/1	105	179	111
Ju^nson	204	12	0	12	12	36	31	50	21	208	179	124
Wecome	185	169	15/	12C	154	229	135	76	70	1C3	116	70
Endeavor	154	144	150	134	67	150 m3		127	191	78	117	0
Суг е	182	10	⊇1	118	7	51	23	49	, a	. D	ģ	31
Осевния	177	148	227	ა6	91	171	57 m/		124	75	155	161
N Horzan		164	E7	105	89	130	170	· 4/6	193	148	143	60
Iselin	170	1G4	:72	271	228	197	159	4 02		146	140	70
Link	168	7	37	2.1	34	24	21	51	, 22	65	40	37
Carre	Sub Total	1009	1229	1102	946	1266	924	872	852	781		
	250 10.21	111.15	1227	1102	3.40	1200	924	67.2	an _Z	701	941	594
P.Sur	135	41	HII	70	49	79	S 3	118	110	48	<u>"</u> 1	121
Hatteras	135	137	176	146	197	168	168	130	133 Vu	-	:20	111
Hela	133	194	115	105	109	102	129	145	69	27	71	139
Sprou	125	121	83	10-	12"	96	30	64	78	79	·18	G5
Hentapen	120	30	101	36	135	125	126	117	167	158	84	108
Woire II	115		-	725	193	215	99	140	151	144	.30	134
Sea.Diver	113 -					2.0		9	30	57	-70	18
Warfield	105	111	107 a/s						55		•	10
Pelican	105	9	16	26	0	34	56	29	э	23	54	47
Longhorn	105	ó	a	5	15	14	39	39	36	70		
Urraca	96 -		.,	.,	15	13	79	19	AKA.		4	€
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	270 (0(3)	643	60.1	7.09	610	833	742	79:	794	604	/06	777
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විlueFin	72	51	37	51	25	72	53	26	72	34	68	76
Calanus	6B	118	94	55	/2	85	91	50	22	28	75	90
Sames	GG	60	70	129	139	75	48	45	57	€1	101	72
WBI	65	130	189 a/s								••••	
-	Sub Total	403	433	260	288	260	246	181	230	229	280	378
	Total	3429	2951	2003	2909	342B	2947	2965	3173	2733	2524	2530

Total Days

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