

Regional Class Steering Report

Stewart Lamerdin

Moss Landing Marine Labs

R/V Point Sur

Timeline of the Regional Class Vessel Replacement Process

1999

An advisory group set up by NSF's Division of Geosciences, completes a report on the status of the academic fleet.

“The Federal agencies funding research in oceanography should prepare and maintain a long range plan for the modernization and composition of the oceanographic research fleet which reaches well into the 21st century. This will avoid the high cost of obsolescent facilities and provide the Congress with a unified roadmap for the out-year allocations for vessels to support oceanographic research..”

Timeline of the Regional Class Vessel Replacement Process

1999

An advisory group set up by NSF's Division of Geosciences, completes a report on the status of the academic fleet.

“The Federal agencies funding research in oceanography should prepare and maintain a long range plan for the modernization and composition of the oceanographic research fleet which reaches well into the 21st century. This will avoid the high cost of obsolescent facilities and provide the Congress with a unified roadmap for the out-year allocations for vessels to support oceanographic research..”

2001

Based on community input, FOFC and NOPP publish a plan to address the fleet renewal issues set forth in the Academic Research Fleet report. The need to address the replacement of the Regional Class Vessels is identified.

2002

Meeting held in Salt Lake City to create Regional Class Science Mission Requirements (SMR's).

2003

After months of community input, Regional Class SMR's are approved by UNOLS council.

2004

Conceptual designs and cost estimates (based on SMR's) presented to UNOLS council by JJMA.

Cost estimates are in 2003 dollars



	Avg Expenses Interm. Class 98/99 \$	Interm. Class Escalated to '03\$	Ratio By	Monohull Desired	Monohull Min	Monohull <300GT	SWATH Desired	SWATH Min
Year \$	1998.5	2003		2003	2003	2003	2003	2003
Payroll								
Salaries, ship	\$846,548	\$966,984	Crew Size	\$1,128,148	\$1,128,148	\$966,984	\$1,128,148	\$1,128,148
Salaries, shore	\$193,834	\$221,410	Unity	\$221,410	\$221,410	\$221,410	\$221,410	\$221,410
Payroll Subtotal	\$1,040,382	\$1,188,393		\$1,349,557	\$1,349,557	\$1,188,393	\$1,349,557	\$1,349,557
Maintenance								
Repairs & Maintenance	\$143,603	\$164,033	Vessel Displ ¹	\$179,655	\$164,033	\$140,599	\$213,242	\$196,839
Major Overhaul	\$153,713	\$175,582	Vessel Displ ²	\$192,304	\$175,582	\$150,498	\$239,125	\$220,731
Maint Subtotal	\$297,316	\$339,614		\$371,958	\$339,614	\$291,098	\$452,368	\$417,570
Other Costs								
Fuel, lube	\$132,811	\$151,706	Calculated	\$225,163	\$189,636	\$170,672	\$256,092	\$250,584
Food	\$73,375	\$83,814	Complement	\$98,264	\$86,704	\$75,143	\$98,264	\$86,704
Insurance	\$7,600	\$8,681	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Stores	\$43,002	\$49,119	Complement	\$57,588	\$50,813	\$44,038	\$57,588	\$50,813
Travel	\$8,318	\$9,501	Crew Size	\$11,084	\$11,084	\$9,501	\$11,084	\$11,084
Shore Facility	\$57,317	\$65,471	Vessel Displ	\$71,706	\$65,471	\$56,118	\$81,059	\$74,824
Misc	\$128,216	\$146,457	Vessel Displ	\$160,405	\$146,457	\$125,534	\$181,327	\$167,379
Indirect Costs	\$233,427	\$266,636	Vessel Displ	\$292,030	\$266,636	\$228,545	\$330,121	\$304,727
Other Subtotal	\$684,064	\$781,384		\$956,241	\$856,800	\$749,552	\$1,055,536	\$986,115
Total Ship Cost	\$2,021,762	\$2,309,391		\$2,677,756	\$2,545,972	\$2,229,043	\$2,857,461	\$2,753,242
Operating Days	215.75	215.75		200	200	200	200	200
Day Rate (200 days)	\$10,109	\$11,547		\$13,389	\$12,730	\$11,145	\$14,287	\$13,766
Tech Support Costs	\$2,000	\$2,285	Unity	\$2,285	\$2,285	\$2,285	\$2,285	\$2,285
Total per day Cost	\$12,109	\$13,831		\$15,673	\$15,014	\$13,430	\$16,572	\$16,051
Displacement	1050	1050		1150	1050	900	1300	1200
Crew Size	12	12		14	14	12	14	14
Scientific Complement	17	17		20	16	14	20	16

Areas of concern.....

Timeline of the Regional Class Vessel Replacement Process

1999

An advisory group set up by NSF's Division of Geosciences, completes a report on the status of the academic fleet.

“The Federal agencies funding research in oceanography should prepare and maintain a long range plan for the modernization and composition of the oceanographic research fleet which reaches well into the 21st century. This will avoid the high cost of obsolescent facilities and provide the Congress with a unified roadmap for the out-year allocations for vessels to support oceanographic research..”

2001

Based on community input, FOFC and NOPP publish a plan to address the fleet renewal issues set forth in the Academic Research Fleet report. The need to address the replacement of the Regional Class Vessels is identified.

2002

Meeting held in Salt Lake City to create Regional Class Science Mission Requirements (SMR's).

2003

After months of community input, Regional Class SMR's are approved by UNOLS council.

2004

Conceptual designs and cost estimates (based on SMR's) presented to UNOLS council by JJMA.

2004

Re-prioritization of SMR's required to better optimize ship designs and reduce proposed operating costs.

Timeline of the Regional Class Vessel Replacement Process

1999

An advisory group set up by NSF's Division of Geosciences, completes a report on the status of the academic fleet.

2001

Based on community input, FOFC and NOPP publish a plan to address the fleet renewal issues set forth in the Academic Research Fleet report. The need to address the replacement of the Regional Class Vessels is identified.

2002

Meeting held in Salt Lake City to create Regional Class Science Mission Requirements (SMR's).

2003

After months of community input, Regional Class SMR's are approved by UNOLS council.

2004

Conceptual designs and cost estimates (based on SMR's) presented to UNOLS council by JJMA.

2004

Re-prioritization of SMR's required to better optimize ship designs and reduce proposed operating costs.

2004

UNOLS forms the Regional Class Advisory Committee to review the results of the SMR survey and formalize these results in a report to NSF.

2004

Community input requested in the form of a survey, results summarized by UNOLS. JJMA presents revised design specifications.



REGIONAL Research Vessel
Impact of SMRs on Size and Cost

Concept Design Variants

	SMRs	CAPE Hatteras	900 LT Monohull	Min SMR Monohull	Max SMR Monohull	Min SMR SWATH	Max SMR SWATH
Dimensions:							
Length, OA ft	131 - 180	135	151	155	176	141	149
Length, BP, ft		124	141	145	165	135	141
Beam, MnDk, ft		32	32	36	36	58	61
Disp., Long Tons		640	900	1,050	1,150	1,200	1,300
Draft, ft		10	12	12	12	18.5	19.8
Manning:							
Crew		9	12-14 <small>(note 1)</small>	14	14	14	14
Science: Perm		12	16 <small>(note 2)</small>	16	20	16	20
w/van	16 - 20	n/a	20	20	20	20	20
Space:							
Van Spaces	2	0 <small>(note 3)</small>	2	2	2	2	2
Work Deck, ft ²	1,300 min	1,100	1,000	1,365	1,800	1,500	1,900
Labs, ft ²	1,000 - 1,500	700	900	1,015	1,690	1,000	1,510
Total Labs, WD, vans	2,660-3,160	1,800	2,300	2,780	3,890	2,900	3,810
Performance:							
Speed, max, kts	12-14	11.5	12.5	12.5	12.5	12.5	12.5
Speed, cruise, kts	12	10.0	11.5	11.5	11.5	11.5	11.5
Range, nm	8,000	7,000	8,100	8,100	8,100	8,100	8,100
Endurance, days	21-30	21	30	30	30	30	30
Day Rate:							
		\$8,000	\$11-12k	\$12,730	\$13,389	\$13,766	\$14,287
<p>Note 1: Vessel Possibly Could Be Designed To Be Under 300UST and Be Uninspected</p> <p>Note 2: SMR Limiting T/S To 4 Persons Per Unit Not Met</p> <p>Note 3: No dedicated van area. One van can be carried on WD with significant impact to work area.</p>							

Better.....

Timeline of the Regional Class Vessel Replacement Process

2005

Regional Class performance specifications are developed, based on the SMR's, and are the criteria that will be used by naval architects to develop their plans for the new vessels.

2005

NAVSEA is contracted by NSF to facilitate the RFP and proposal process and to oversee the building of the Regional Class vessels.

2005

NSF requests the formation of two groups: one to aid in the selection of the Regional Class Vessel design and a second to provide guidance in the resolution of academic, operational and technical concerns raised during the designing process.

2006 (est.)

A request for proposals (RFP) will likely go out to industry for the design and contract to build the next generation of Regional Class ships.

2006/7 (est.)

An RFP will be issued for the selection of an operating institution.