



Regional Class Research Vessel (RCRV)



NSB Information Item

February, 2015

Brian Midson, RCRV Program Officer



Project Overview



Up to 3 ships needed to conduct science in the Coastal US

Academic Research Fleet will have fewer, more capable ships operating at current funding level

Oregon State University selected as Lead Institution, January 2013





Status of Review Process



- **Independent Cost Estimate (ICE): July 2014**
- **Preliminary Design Review: August 2014**
 - Recommended project proceed to Final Design Phase
 - Ship design, construction schedule, and cost addressed post-PDR
- **Number of Vessels: up to 3 for Coastal U.S.**
 - OCE considered O&M implications of fleet modernization
 - UNOLS, University National Oceanographic Laboratory System
 - Recommended 3 ships for high priority U.S. regions
 - May require retirement of other vessels
 - Decadal Survey of Ocean Sciences
 - Recommended that no more than 2 ships be constructed
 - Based on long-term O&M costs and balance of science and ALL OCE infrastructure



Cost Proposal Review



- **Program, including Naval Architect consultant:**
 - Assess construction costs
 - Reconcile ICE with Project plan, cost and schedule
 - ICE –parametric, \$420M; delivery January 2024
 - OSU –bottom-up, \$376M; delivery September 2023

- **Budget Finance and Award (DACs, DIAS, and LFO):**
 - Program Management cost assessment
 - Labor, equipment, travel, other direct, etc. -DACs
 - Indirect, fringe benefits, etc. -DIAS
 - Risk assessment and management
 - Follows MREFC process

- **Basis to develop request for Board approval**



Remaining Project Stages



- **Design Stage: end March 2017**
 - Preliminary Design Phase: end May 2015
 - Final Design Phase
 - Acquisition Strategy Review, June 2015
 - Final Design Review, February 2017
 - Shipyard Selection, March 2017

- **Construction Stage: April 2017 target**
 - MREFC funding for new award
 - Contract options for Hulls 2 or 3 in subsequent years (off ramps are included in the plan)
 - Transition to Operations



Next Step for NSB



**Inclusion of RCRV Project in a future
budget request**

Action Item for May, 2015



Academic Research Fleet Plan



Updated: November 6, 2014					2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	End Year	
SHIP/CLASS	BUILT	Owner	LOA m (ft)	Disp (LT)	Science Berths																						
Global Class																											
<i>Melville</i>	1969	NAVY	85 (279)	2,944	38	---	---	---	---	-X																	
<i>Knorr</i>	1970	NAVY	85 (279)	2,685	34	---	---	---	---	-X																	
<i>Thomas G. Thompson</i>	1991	NAVY	84 (274)	3,528	36	---	---	---	---	M?						-X											
<i>Roger Revelle</i>	1996	NAVY	84 (274)	3,512	37	---	---	---	---													-X					
<i>Atlantis</i>	1997	NAVY	84 (274)	3,512	37	---	---	---	---														-X				
<i>Marcus G. Langseth</i>	1991	NSF	71 (235)	3,906	35	---	---	---	---																-X		
<i>Sikuliaq</i>	2014	NSF	80 (261)	3,665	26					y															->	2044	
Ocean/Intermediate Class																											
<i>Kilo Moana</i>	2002	NAVY	57 (186)	2,542	29	---	---	---	---																->	2032	
<i>Wecoma</i>	1976	NSF	56 (185)	1,150	18	---	-X																				
<i>Endeavor</i>	1976	NSF	56 (184)	756	18	---	---	---	---							-X											
<i>Oceanus</i>	1976	NSF	56 (184)	960	19	---	---	---	---							-X											
<i>Atlantic Explorer</i>	1982	BIOS	51 (168)	1,297	20	---	---	---	---														-X				
<i>New Horizon</i>	1978	SIO	52 (170)	1,007	19	---	---	---	---					-X													
<i>Neil Armstrong</i>	2015	NAVY	73 (238)	2,916	24					y															->	2045	
<i>Sally Ride</i>	2015	NAVY	73 (238)	2,916	24					y															->	2045	
Regional Class																											
<i>Point Sur</i>	1981	NSF	41 (135)	539	12	---	---	---	---	-X																	
<i>Cape Hatteras</i>	1981	NSF	41 (135)	640	14	---	---	---	X																		
<i>Hugh R. Sharp</i>	2005	UD	44 (146)	598	14	---	---	---	---							-M									->	2035	
<i>RCRV1</i>	2021	NSF	58 (191)	1,488	18											y									->	2051	
<i>RCRV2</i>	2022	NSF	58 (191)	1,488	18												y								->	2052	
<i>RCRV3</i>	2023	NSF	58 (191)	1,488	18													y							->	2053	
Coastal/Local Class																											
<i>Robert Gordon Sproul</i>	1981	SIO	38 (125)	696	12	---	---	---	---					-X													
<i>Pelican</i>	1985	LUMCON	32 (105)	514	14	---	---	---	---							-X											
<i>Walton Smith</i>	2000	Miami	30 (96)	156	16	---	---	---	---					-M											-X		
<i>Savannah</i>	2001	SKID/UG	28 (92)	351	19	---	---	---	---																->	2031	
<i>Blue Heron</i>	1985	UMINN	26 (86)	275	6	---	---	---	---																-X		
<i>Clifford Bames</i>	1966	NSF	20 (66)	86	6	---	---	---	---					-X													
Total Number of Vessels in Fleet						21	21	20	20	19	17	19	18	18	16	16	14	14	15	15	15	14	12	11	11	11	
X= Current projected Service Life End																											
M= Mid-life Refit																											



Proposed Schedule and Next Steps



CY 2014		CY2015				CY 2016				CY 2017	
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2

PDR	Post-PDR Activities & Finalization of Acquisition Strategy	Shipyard Selection - Contract "Options" for follow-on RCRV's (Adaptive Strategy)	Construction
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