

ALASKA REGION RESEARCH VESSEL-- \$97M

In his FY07 budget request to Congress, President Bush included initial funding for the National Science Foundation to begin construction of the Alaska Region Research Vessel (ARRV).

The ARRV is ice-strengthened to allow it to work safely in moderate seasonal ice, for up to 300 days a year. This is an important feature in the often ice-choked waters of the North Pacific Ocean, Gulf of Alaska, and the Bering, Chukchi, and Beaufort Seas. With the ability to carry 26 scientists at a time, the vessel can accommodate 500 students and scientists a year.

The ARRV is proposed to replace the 40-year old R/V Alpha Helix, the vessel currently used by oceanographers to access the sub-arctic waters of the Alaska region. Delivered in 1966, the R/V Alpha Helix is the oldest UNOLS research vessel in operation. The ship's ice strengthening is modest and its suitability for arctic work is severely limited. The Alaska region is of great scientific interest, and a replacement vessel with improved research and ice capability is critical to extending the range of research. The need for a more capable ship to operate in the coastal and open ocean waters of Alaska and the Arctic has been recognized by the oceanographic community for over 25 years.

The ARRV will be the first vessel in the U.S. academic fleet to have fisheries research capability. The research vessel design is also the first with the ability to accommodate disabled scientists and students. Technical benefits of the ship include the ability for fisheries scientists, marine biologists and oceanographers to transmit real-time information to classroom students around the world, allowing them to participate in virtual expeditions with scientists on the ship.



At 236 feet long, the Alaska Region Research Vessel is 103 feet longer than the Alpha Helix.

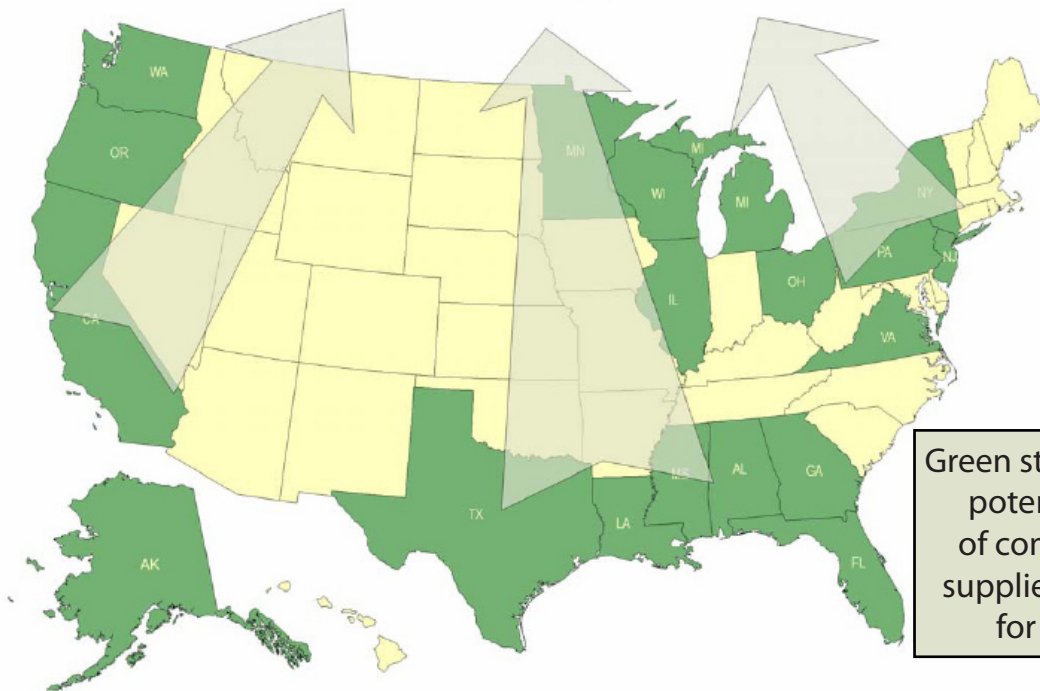
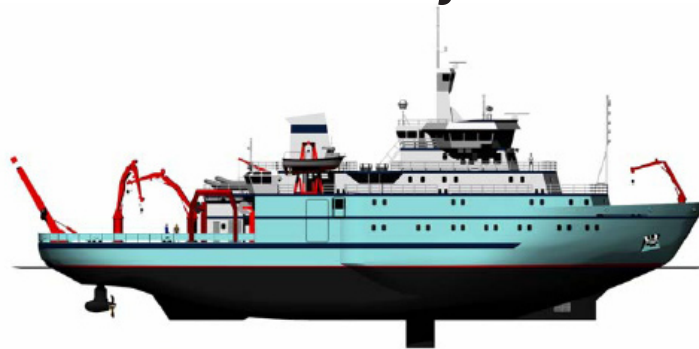


The R/V Alpha Helix in Resurrection Bay.

COMPARISON OF THE ALPHA HELIX AND THE ARRV

Characteristics	Alpha Helix	ARRV
Overall Length	133 feet	236 feet
Draft	13 feet	18 feet
Beam	31 feet	52 feet
Performance		
Speed, Calm Open Water	9.5 knots	14.2 knots
Endurance	30 days	45 days
Ice-breaking	0	2.5 feet at 2 knots
Capacities		
Scientist Berths	15	26
Crew Berths	9	17-20
Science Labs	1120 square feet	2100 square feet
Science Storage Vans (8'x20')	0	2-4 vans
Deck Working Area	1280 square feet	3690 square feet
Fresh Water Storage	5000 gallons	13,400 gallons
Water Making Capacity	800 gallons/day	6000 gallons/day
Fuel Capacity	29,250 gallons	179,000 gallons
Disability Accommodations	No	Yes: labs, galleys, staterooms

ARRV: A National Project, A National Asset



Green states represent potential origins of components or suppliers of services for the ARRV

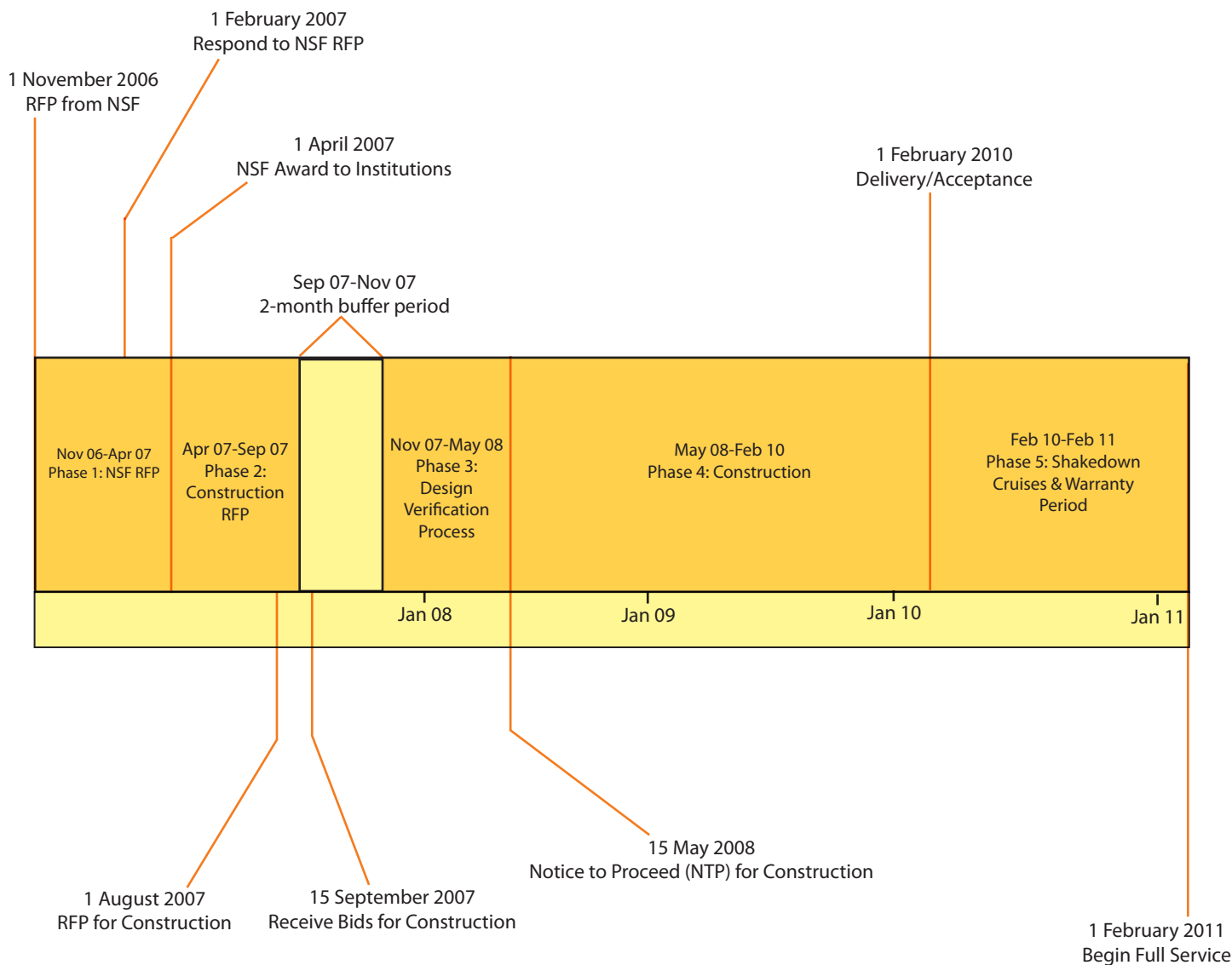
Potential Major Equipment Manufacturers (>\$1M)

State	Approx. Equipment Value
Louisiana	\$4.7 million
Washington	\$4.2 million
Georgia	\$2.8 million
Texas	\$2 million
Virginia	\$1.7 million
Pennsylvania	\$1.3 million
Michigan	\$1.2 million

Potential Shipyard Locations

City	State
Freeland	Washington
Seattle	Washington
Anacortes	Washington
Lockport	Louisiana
Morgan City	Louisiana
Mobile	Alabama
Mobile	Alabama
Moss Point	Mississippi
Jacksonville	Florida
Marinette	Wisconsin

ARRV Estimated Project Timeline



This estimated chronology is applicable if Congress approves FY07 funding for the Alaska Region Research Vessel and if the National Science Foundation sends out a Request for Proposals in November 2006.

For more information about the Alaska Region Research Vessel, please visit <http://www.sfos.uaf.edu/arrv>.