

Alaska Region Research Vessel (ARRV) Science Mission Requirements (SMR)

- 1998 - SMR Developed by Fleet Improvement Committee (FIC) of the University National Oceanographic Laboratory System (UNOLS)
- UNOLS (meets biannually, Sept and Feb)
 - Council (15 members from Vessel Operating and Non-operating Institutions)
 - Fleet Improvement Committee (9 members from Operators and Non-Operators)
 - Arctic Icebreaker Coordinating Committee (10 members)
 - RVTEC

Town Hall meetings

FIC ↔ Council ↔ UNOLS Website ↔ Ocean Community ↔ FIC
Published Articles

ARRV History

Sept 1998 - SMR developed in FIC for Alaska Region Research Vessel

Jan 1999 - "An Alaska Region Research Vessel to Replace R/V Alpha Helix: Scientific Mission Requirements for an Intermediate, Ice-Strengthened, General Purpose and Fisheries Oceanography Research Vessel" by ARRV Advisory Committee

Apr 2000 - Memo of Cooperation between University of Alaska Fairbanks and Woods Hole Oceanographic Institution for Design of Ice-Strengthened Class of UNOLS vessel(s)

July 2000 - Concept Design of ARRV started

Mar 2001 - Revisions to SMR for ARRV

May 2001 - Concept Design Final Report for ARRV

Nov 2001 - Preliminary Design and Model Testing for ARRV started

June 2002 - ARRV Preliminary Design Review Meeting at NSF

Aug 2002 - Draft Preliminary Design and Model Testing Final Report for ARRV

ARRV Design Criteria

Intermediate (Ocean) Size Class (>200')

Ice-Strengthened

General Purpose Oceanography

Fisheries Oceanography

Very Stable Working Platform in Rough Seas

Good Station-Keeping and Maneuverability

Accommodate a Large Number of Scientists

Long Endurance for Remote Study Areas

Conducive to Interdisciplinary Research

Science Objectives

Regional Needs, Multidisciplinary Requirements

- Oceanography (MG&G,PO,BO,CO)
- Fisheries research
- Coastal marine studies
- Marine mammal and bird studies
- Sea ice, water and atmospheric interactions
- Ocean engineering
- Marine Biology
- Student training