UNOLS Small Research Vessel Compendium

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INTRODUCTION
Jack Bash

The Oceanographic community, as represented by University National Oceanographic Laboratory System (UNOLS), has provided myriad documents on research vessels. The Fleet Improvement Committee (FIC) has investigated new ship designs and developed Science Mission Requirements (SMRs) for ship classes I through IV. Missing in the FIC studies has been a comprehensive look at “small” research vessels. It is difficult to develop mission requirements that would fit all or even most cases because small vessels are most often designed for a specific mission or are designed peculiar to a specific area. Recognizing this, the UNOLS Research Vessel Operators’ Committee (RVOC) took on the challenge to write a compendium for small research vessels. This compendium or primer is provided in the papers that follow.

The authors of the papers contained herein were volunteers from the marine industry and academic oceanographic community. They represent hundreds of years of experience in research vessel operations and provide a broad perspective on vessel design, construction, safety, outfitting, and operations.

The opening paper titled Requirements and Capabilities sets the stage for this primer providing the procedure for small vessel designs. Regulatory requirements, an important consideration in building and operating a small research vessel, follows. Small boat safety followed by a comprehensive treatise on marine insurance and liability, by Dennis Nixon, provides a legal perspective to small vessel operations.

One paper on stability and one on sea-keeping for small research vessels provide an in-depth study on these subjects. Vessels of 30 feet to over 100 feet in length are addressed in the conversion paper. A generous listing of successful conversions to research vessels is provided. A list of outfitting for small research vessels, divided into three sizes of boats follows. A paper on propulsion systems for small research vessels is next.

The following three papers deal with various hull forms for small research vessels. These include monohull, small SWATH vessels and small catamaran R/V designs. The final paper is a study of research vessel procurement.
Each paper stands on its own. Together they comprise a broad spectrum of information about small research vessels. This primer is provided as a resource for the entire oceanographic community and is posted on the UNOLS web site to permit access for all interested persons.

You can access the inventory of Small Research Vessels at UNOLS Institutions on the UNOLS Website, by searching “UNOLS Small Research Vessel Inventory” in the Document Search Feature.

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