## UNOLS FLEET RENEWAL

# An Implementation Plan

Draft - February 25, 2002

(Best if viewed with Internet Explorer)

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## Introduction

This webpage provides guidelines for a UNOLS Fleet renewal implementation plan. In December 2001, the Federal Oceanographic Facilities Committee (FOFC) of the National Oceanographic Partnership Program (NOPP) presented the report, the *National Academic Research Fleet - Charting the Future for the A Long-Range Plan for Renewal* to the National Ocean Research Leadership Council (NORLC). The report addresses renewals, retirements, and technology upgrades for those vessels within the national academic research fleet that are over 40 m long.

The FOFC Plan defines four basic vessel classes for the current and future fleet:

- Global Class: high-endurance vessels, operating worldwide.
- Ocean Class: Replacement for the "Intermediate" ships with vessels of increased endurance, technological capability, and number of science berths. These will be ocean-going vessels, though not globally ranging.
- **Regional Class:** ships will work in and near the continental margins and coastal zone, but with improved technology and more science berths than in current, comparably sized vessels.
- Local Class ships will fulfill nearshore needs that do not require larger or higher-endurance ships.

The general specifications of the new vessel classifications are defined in Table 2 of the report:

| Ship<br>Performance | Global<br>Class | Ocean<br>Class | Regional<br>Class | Local<br>Class |
|---------------------|-----------------|----------------|-------------------|----------------|
| Endurance           | 50 days         | 40 days        | 30 days           | 20 days        |
| Range               | 25,000 km       | 20,000 km      | 15,000 km         | 10,000 km      |
| Length              | 70-90 m         | 55-70 m        | 40-55 m           | < 40 m         |
| Science berths      | 30-35           | 20-25          | 15-20             | 15 or less     |

The baseline assumption for the FOFC Plan is to maintain fleet capacity at current use levels while increasing capability over the next 20 years and beyond. Over the next 20 years, the FOFC plan calls for construction of ten new ships: one Global Class ship, six Ocean Class ships, and three Regional Class ships. UNOLS has recommended (based on science research projections) that the fleet size and composition increase up to 13 new ships. The additional three ships could be considered if future budgets increase.

The FOFC report stated: "Building a portfolio of ship-concept designs and identifying science mission requirements (SMRs) will also be important functions undertaken to maintain a modern, technologically viable fleet capable of supporting evolving science needs." This website is intended to provide a roadmap for the development of SMRs, concept designs, preliminary designs and ship construction. It describes the elements needed to accomplish this task as well as a timeline for its completion.

### Specific Recommendations for Fleet Construction and Schedule:

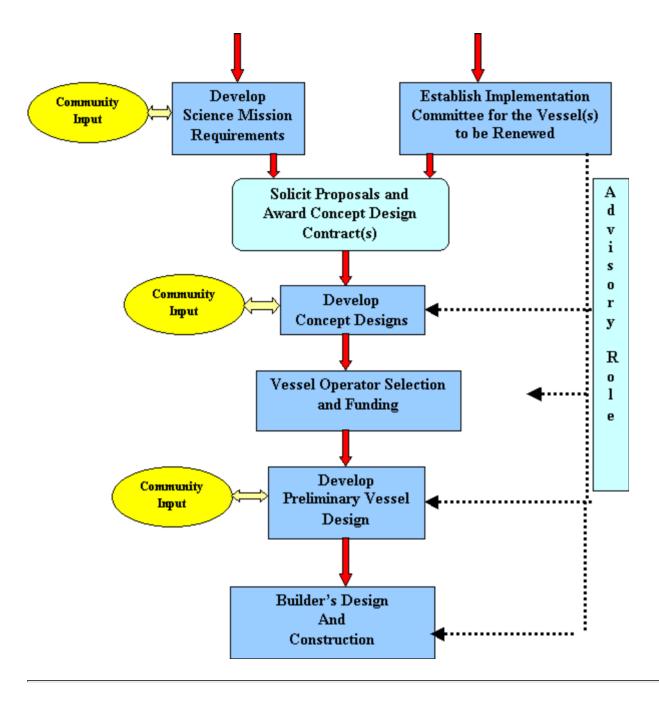
The proposed schedule for new ship construction is provided as Figure 17 of the FOFC report. The schedule calls for 10 new ships. Figure 17 is provided below:



# A Roadmap for Fleet Renewal

The Fleet Improvement Committee recommends the following process as an implementation plan for UNOLS fleet renewal. By clicking the blue boxes in the flowchart below details for that step can be obtained:

UNOLS Ship Renewal Process – Introduction and FIC's Role



# **Ship Construction Efforts In Progress**

Alaska Region R/V (ARRV)

KILO MOANA (AGOR 26)

**CAPE HELOPEN Replacement Vessel** 

# **Timelines for 2002 Renewal Projects**

Regional Vessel – SMR Development and Concept Design Timeline:

