

# **Draft SOW For REGIONAL Class AGOR Concept Development**

## **JJMA Phase II – Task Statement**

### **I. Summary:**

The purpose of this task is to further develop the REGIONAL Class AGOR program by:

- 1) Refining the Phase I REGIONAL Class (rough-order-of-magnitude) ROM designs below a \$25M cost cap and feeding the results back into the requirements development process
- 2) Analyzing and providing recommendations on acquisition strategies
- 3) Interfacing regularly with representatives of UNOLS, NSF, and ONR to ensure all concerned parties are fully informed and have every opportunity to provide input during the process
- 4) Investigating the impacts of vessel tonnage on regulatory requirements and life cycle cost
- 5) Investigating and recommending technologies to improve reliability, reduce manning, and reduce life cycle cost.
- 6) Developing design criteria and requirements to form basis for the beginning of the acquisition

### **II. Detailed Task Descriptions:**

- 1) Acquisition Strategy Analysis:
  - a) Develop a selection of acquisition strategies that could be used for procurement of the REGIONAL Class AGOR. Identify approaches that have the potential for reducing cost and/or accelerating schedule.
  - b) Interface with representatives of ONR and NSF to determine if proposed alternatives are compatible with agency funding profiles
  - c) Investigate efficiencies and advantages of combining REGIONAL and OCEAN acquisitions
  - d) Provide pros and cons of each alternative
  - e) Develop cost and schedule estimates for each alternative
  - f) Provide recommendations
- 2) Refine the REGIONAL Class Concept Designs Within the \$25M Cost Cap
  - a) Verify Phase I ship ROM design meets latest version of Regional SMRs
  - b) Refine the ROM design to be affordable within the \$25M cost cap.
  - c) Provide recommendations on most suitable hull type (monohull or SWATH)
  - d) Identify requirements that drive cost and alternatives to reduce cost
  - e) Provide input to UNOLS, NSF, and ONR on the impacts to the existing SMRs of the cost cap.

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- f) Interface with UNOLS, NSF, and ONR representatives to develop revised SMRs for a ship that meets the cost cap.
- 3) Effects of Tonnage on Regulatory Requirements and Life Cycle Cost
- a) Analyze regulatory body requirements of domestic and international tonnage relative to ship size
  - b) Identify breakpoints in ship size driven by tonnage regulations and determine life cycle costs above and below the breakpoints
  - c) Investigate and recommend strategies for reducing tonnage impacts
  - d) Investigate impact on science capabilities of reducing tonnage
  - e) Provide recommendations on vessel size and capabilities that represent the best compromise between science mission capability and life cycle cost
- 4) Technologies to Optimize Reliability, Manning, and Life Cycle Cost
- a) Identify and investigate technologies to improve reliability, reduce manning, and reduce life cycle cost
  - b) Solicit feedback from UNOLS ship operators, and representatives of ONR and NSF on areas where improvements are desired and suggestions for technologies to be investigated
  - c) Provide recommendations
  - d) Interface with UNOLS, NSF, and ONR representatives to determine suitability to the fleet
- 5) Ship Specification and Other Documentation to Support Acquisition
- a) Develop documentation suitable for supporting initiation of the acquisition process. This could include revised SMRs, ship design criteria, performance specification, and/or desired operational capabilities document. Actual documentation may vary depending on the selected acquisition strategy.