Chapter 11

Operations
Chapter 11: Operations

Stories From Real Life: Alvin Ops—Submersible, Team, and Ships

Chapter Outline

1. Introduction
2. Operations Overview
   2.1. Search and Recovery Ops
   2.2. Other Types of Ops
3. Operational Phases
   3.1 Mission Considerations and Risk Assessment
   3.2 Ops Planning
   3.3 Staging and Mobilization
   3.4 On-Site Activities
   3.5. Demobilization
4. Chapter Summary

Chapter Learning Outcomes

• Describe the basic concepts and considerations in managing an underwater operation.
• Detail the steps involved in organizing and executing a shallow water underwater search and recovery operation using a small ROV.
• Explain how to conduct a search pattern and describe the types of equipment that might be involved in such an operation.

Figure 11.1.cover: Ship Hull Inspection with a Micro-ROV

In addition to an appropriate vehicle equipped with the right sensors, mission success required effective planning, personnel, and execution.

This chapter cover photo shows a VideoRay Pro 3 GTO, equipped with a BlueView P-900 High Definition imaging sonar, deployed on a hull inspection operation in Jamaica. The mission for possible contraband attached to the ship’s hull turned up two canisters containing several hundred pounds of illegal drugs.

Image courtesy of Steve Van Meter, VideoRay LLC.