

# **Underwater Vehicle System Development at the Institute For Exploration**

James B. Newman

Institute For Exploration and Woods Hole Marine Systems, Inc.

## ABSTRACT

Over the last three years the Institute For Exploration (IFE) has developed three new underwater vehicles to support IFE's explorations. These vehicles are:

- ECHO, a sidescan sonar system, which is used to search large areas for artifacts and to map relative positions of artifacts;
- LITTLE HERCULES, a small ROV (Remotely Operated Vehicle), which is primarily an imaging platform;
- and ARGUS, a heavy "towsled", which can operate as an independent imaging platform, but primarily assists the ROV by holding down the bottom of the main umbilical cable and by providing wide area lighting and overview imaging.

This paper will describe the vehicles and how they are operated, and will briefly describe the HERCULES wreck excavation ROV that will be developed in the next year in collaboration with Woods Hole Oceanographic Institution.