

A Graphical Mission Management System for UUV Mission Specification, Control and Analysis

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Abstract: The Lockheed Martin Perry Technologies CetusII is a highly maneuverable hover-capable Autonomous Underwater Vehicle uniquely suited to underwater object relocation and imaging. The CetusII provides for precise geodetic relocation and target imaging in Shallow Water/Very Shallow Water environments operating from small available deployment assets with minimum support needs. In 2002 a new graphical Mission management system, specified by Perry Technologies and developed by Novint, enhanced the user's capability to define and simulate missions, monitor and control the AUV during mission execution, and evaluate the performance of the system in accomplishing the mission. This paper describes the development and capabilities of the graphical mission management system, its implementation on the CetusII AUV and a gateway communications buoy, and results from testing and demonstration of Search-Classify-Map as well as Reacquire-Identify-Neutralize missions.