PROSPECTS OF USING UNDERWATER GLIDER FOR OCEANOGRAPHY AND UNDERWATER ENVIRONMENT SURVEILLANCE. REVIEW OF FOREIGH PRESS

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With growing worldwide interest in commercial, scientific, and military issues associated with both oceans and shallow waters, there has been a corresponding growth in demand for extending of technical frontiers of underwater gliders. Underwater gliders travel through the ocean by buoyancy control, which makes their motion silent and involves low energy consumption. Due to those advantages, numerous studies on underwater acoustics have been carried out using gliders and different acoustic payloads have been developed. This paper aims to analyze the use of underwater gliders for acoustic monitoring and underwater target detection by comparing its characteristics, payloads, functions and prospects of using. Potential advantages of gliders are specified, key problems whose solution may extend the capabilities of gliders for oceanography and underwater environment surveillance tasks are shown. The suggestions of using underwater gliders as passive system for detection and tracking of underwater platforms are made.

Keywords: underwater gliders, underwater environment surveillance, underwater object detection, antisubmarine warfare, towed array.

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