

Wave Gliders for Acoustic Applications

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Post 126

10/12/2011

3:00-3:30 pm Coffee Hour

3:30-4:45 pm Seminar

Abstract

A new class of energy harvesting autonomous surface vehicle, the wave glider, is being adapted to support existing and future portable underwater tracking range operation. The goal is to reduce the cost of exercises while increasing capability. A wave glider, equipped with GPS, RF communications, and acoustic modem/navigation hardware, serves as a communications and navigation gateway, replacing many of the functions of a range vessel. Using such a vehicle will reduce on-range acoustic noise and remove maneuvering constraints associated with having a range vessel on station during testing, evaluation and training exercises. We describe the concept of operation for this new platform; discuss the design of a vehicle with integrated acoustic communication and navigation; and present initial data on the acoustic signature of the vehicle to evaluate the feasibility of this approach.

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Please join us for the coffee hour at the seminar venue a half hour before the seminar, 3:00 – 3:30 pm