

Autonomous Underwater Vehicle Recharging System

LT Bryan D. Miller, USNR

Prof. Chryssostomos Chryssostomidis	Prof. James L. Kirtley
Thesis Supervisor	Thesis Reader

The Odyssey AUV Series uses a Lithium-ion Polymer battery which is able to supply the necessary power for a limited mission time. The current method of recharge includes surfacing the AUV, opening the vehicle, removing the battery from the vehicle and recharging the battery. A different approach is proposed which uses an inductive coupling and power electronics to conduct a battery charge without opening the vehicle or removing the battery.