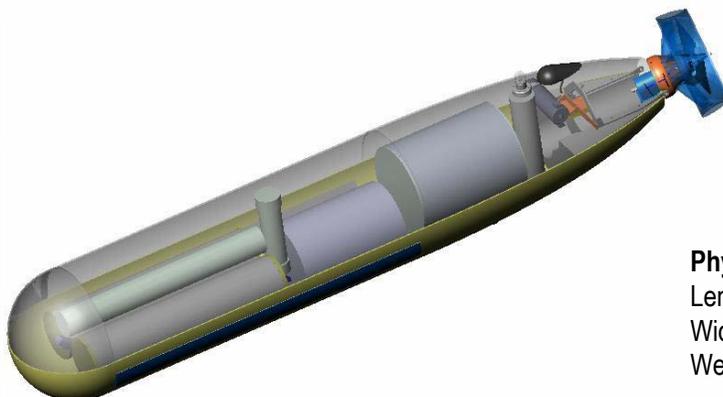# BPAUV
Battlespace Preparation Autonomous Underwater Vehicle

Physical Characteristics
Length   122" (305 cm)
Width   21" (53 cm)
Weight   483 lbs (220 kg) dry &
           798 lbs (360 kg) wet
Operating depth 900 ft (270 m)

BPAUVs are small, high performance autonomous underwater vehicles (AUVs) designed to provide flexible, robust survey systems. They have a low-drag fairing with a single, articulated, ducted propeller. They can be operated from a ship or boat. They are routinely operated from oceanographic vessels without small boats, but can also be operated from a launch or even a small fishing boat. A behavior-based control architecture is used to provide flexible and powerful means of specifying mission objectives. A large and reliable library of behaviors has been established, and provides a tool kit from which missions can be constructed. BPAUVs are routinely operated as fully autonomous systems in which no communication occurs during a mission.

USE: Wide-area bottom mapping, bathymetry and hydrographic surveys, change detection, mine hunting.

Sensor Packages
Conductivity Temp Depth (CTD)
Doppler Velocity Log: (DVL, Measures Speed Over Ground)
Fluorometer (Turbidity)
Optical Backscatter Sensor: (OBS, Turbidity)
KLINE 5400 Side Scan Sonar: 455 kHz

Navigation Means
INS (Inertial Navigation System)
DVL (Doppler Velocity Log)
AHRS (Attitude Heading Ref. System)
Periodic DGPS Updates

Dynamic Tracking
Yes

Onboard Identification/ Classification
No

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