



FACT SHEET



Program Executive Office, Littoral Combat Ships (PEO LCS), 614 Sicard Street, SE Stop 7003, Washington Navy Yard, DC 20376-7003 • 202.781.3900 • 20110912_RMMV_V2

Remote Multi-Mission Vehicle (RMMV)

Background

Naval mines pose a significant threat to U.S. and allied shipping, particularly in navigation chokepoints and transit lanes. The remote multi-mission vehicle (RMMV), the workhorse of the remote mine-hunting system (RMS), shall be capable of accomplishing mine countermeasure missions in forward Fleet operating areas by employing shipboard equipment that allows integration, deployment, and operation of the individual sensor systems from a shipboard environment. RMMV, coupled with the towed AN/AQS-20A mine-hunting sonar system, comprise the RMS. RMS will satisfy the U.S. Navy's need for an organic (off-board) surface ship mine reconnaissance capability, designed to conduct rapid reconnaissance of bottom and moored mines from the deep-water region to the very shallow water region. The RMS will determine the presence of mines and safe routes or operating areas around potential minefields.

Description

The RMMV is an unmanned, autonomous, semi-submersible, high endurance, low-visibility system that will be operated and maintained from the Littoral Combat Ship (LCS). The RMMV will be capable of both line-of-sight and over-the-horizon operations. The off-board vehicle will have self-contained control, propulsion, power, and navigation features and as many as two RMMVs may be operated from the LCS simultaneously. The vehicle will be capable of real-time communications of mine reconnaissance sensor data, as well as automatic search and recording modes. The RMMV will tow the

AN/AQS-20A mine-hunting sonar system for detection, classification, and localization of mine-like contacts and identification of bottom mines. The host ship will be equipped to conduct data processing, display, and recording. The system will also be able to communicate tactical mine reconnaissance data to other Naval forces. Fueled for long endurance, the RMMV's diesel marine engine and high-efficiency propeller will drive the 7-meter- vehicle at speeds exceeding 16 knots. A streamlined snorkel/mast, which is the vehicle's only visible feature above the water, draws air into the engine and provides a platform for radio frequency antennas, and an obstacle avoidance system. The system's high coverage search rate can find mines in deep and shallow water with high probability. The RMMV can be pre-programmed to perform autonomously or be manually controlled via a data link. The RMMV will be capable of off board operation for longer than 24 hours. To preserve fuel, if rapid recovery is not possible, the RMMV can be placed in a dormant state until the unit receives new instructions. The system is scheduled for delivery in FY2015.



Specifications	
Length:	23 ft
Mast Height:	18 ft. with mast extended
Diameter:	4 ft.
Weight:	14,500 lbs. average (including AN/AQS-20A)