



NOMWC UUV Platoon and Data Fusion Cell (DFC)



AT A GLANCE

WHAT IT IS:

Naval Oceanography Mine Warfare Center (NOMWC) deploys Unmanned Underwater Vehicles (UUV), Platoons/Post Mission Analysis (PMA) Cells and Data Fusion Cells (DFC) in order to provide direct support to global mine countermeasure (MCM) forces for:

- Mine hunting
- Maritime Homeland Defense surveys
- Post Mission Analysis
- On-scene tactical and environmental analysis of MCM data
- Change detection and contact fusion of MCM data

HOW IT WORKS:

Four UUV Platoons operate the Mk18 Mod 1 Swordfish (Hydroid REMUS 100). Each platoon is composed of 10 sailors and deploys with 2-5 UUVs, support equipment, small boats, and an air mobile shelter.

WHY IT IS IMPORTANT:

The NOMWC UUV platoon offers a cost efficient, rapid expeditionary mine hunting force. Participation in UW16 improves tactical and strategic interoperability with coalition partners for MCM operations.

**Unmanned Warrior is part of exercise Joint Warrior 2016, hosted by the United Kingdom off the North-West coast of Scotland.*



NOMWC UUV Platoons have significant expertise operating in ports, harbors, confined waterways, and in open ocean operations. Platoons operate a system (3) of Mk 18 Mod1 Swordfish UUVs from Navy RHIB boats.

The Swordfish has dual side-scan sonar frequencies. This allows the vehicle to survey larger swath areas while reducing the number of false contacts through use of higher resolution sonar frequency.

Additional sensors on the Mk 18 Mod 1 Swordfish collect environmental data, such as: current speed, temperature, salinity, bathymetry and depth.

NOMWC also provides environmental support to U.S. and coalition MCM forces through forward-deployed personnel embedded with key MCM commands around the world

- Environmental Summary products
- MCM Tactical Oceanographic Analysis

Research Objectives for US in Unmanned Warrior 2016:

- Supplement TACMEMO workshop during Hell Bay 4 to validate content
- Provide UUV support to Waterside Rapid Deployment Security System
- Participate in Hell Bay 4 mine hunting portion for detection and classification