



AT A GLANCE

WHAT IT IS:

This Tactical Memorandum (TACMEMO) is intended to act as a functional planning guide for multi-national, multi-UUV (collaborative/combined) operations. Derived from open source material, it is consistent with the findings from a FVEY UUV War Game* sponsored by Navy Warfare Development Command (NWDC) Fleet experimentation in September 2015.

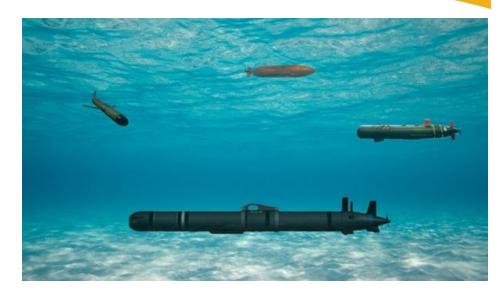
HOW IT WORKS:

The TACMEMO assists operational and tactical planners of collaborative/combined UUV operations with collecting and organizing the necessary mission and technical information to inform effective UUV mission analysis, review of potential courses of action and final plan development. It provides important planning characteristics for UUV operations grouped into six planning information categories.

WHY IT IS IMPORTANT:

The TACMEMO will provide a doctrinal baseline for the planning of collaborative/combined UUV operations in order to improve interoperability and integration, while reducing risks of interference or collisions.

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



The rapid development and introduction of Underwater Unmanned Vehicle (UUV) capabilities in a growing number of mission areas (e.g. MCM, ISR, ASW, GEOINT) makes it likely that operations with multiple UUVs will take place in the same geographic area and in overlapping waterspace.

The growing procurement and use of UUVs by an increasing number of allied nations in this variety of mission areas makes the occurrence of multi-national, multi-UUV operations increasingly probable.

While not all UUV operations, systems and environmental factors can be totally anticipated, the planning framework contained in the TACMEMO will provide a degree of conceptualization, detail and rigor for building coherent, coordinated plans for leadership and operators assigned to an international, multi-UUV mission.

Unmanned Warrior 2016, allows the U.S. Navy to collaborate on a draft TACMEMO with allied nations in a representative operating environment. A workshop will be conducted as an objective within the Hell Bay 4 event at the British Undersea Test & Evaluation Centre in Kyle of Lochalsh, Scotland.

Research Objectives for US in Unmanned Warrior 2016:

- Workshop TACMEMO with Hell Bay 4 participants to validate content
- Capture lessons and gather insights from observation of other Hell Bay 4 objectives which will add to the utility of the TACMEMO
- Share UUV TACMEMO doctrinal concepts with allied nations

*FVEY – refers to "Five Eyes" alliance between US, UK, Canada, New Zealand and Australia after WWII.