

## **Integrating Historic Environment Data and AML**

Additional Military Layers (AML) is an electronic information product designed to provide environmental (non-navigational) information to military users. AML has been largely developed by the UKHO under the direction of Defence Intelligence, and incorporates international standards for hydrographic data.

As previously reported (Marine Data News March 2007), there are several coincidences of interest between the military and archaeologists when it comes to scrutinising the seabed. Consequently, a project is being initiated to address the interplay of archaeological and military methodologies as a means of better understanding issues of data standards and data management, and to facilitate greater interoperability of respective datasets. The project will serve as a test bed for integration, which is expected to offer ways forward on issues common to many members of the marine data community.

The project, which is to be carried out by Wessex Archaeology on behalf of the MOD, will address two main packages of work that are, however, closely inter-related.

The first package will look at data and metadata standards applicable to AML on the one hand, and heritage data on the other, all within the overall context of developing marine data and metadata standards. This package will also look at the respective methodologies involved in generating AML and in processing and interpreting data archaeologically, to help establish commonalities in respective models of data management. The issue of representing seabed features as polygons will look be addressed in particular. Traditionally, both hydrographic wreck data and archaeological data have represented features as points, but the availability of securely-positioned high resolution geophysical data (and acoustic tracking for ROVs and divers) has meant that there is scope to represent features not only in terms of their overall extents, but also perhaps with internal sub-divisions to reflect differences in character.

The second package will look at procedures for archaeologists to report new or enhanced wreck data, based around form H525. This package will also look at issues surrounding the incorporation of digital imagery (sidescan; sub-bottom; air photos; 3D bathymetry; photographic stills), taking into account the manipulation of such images from 'raw' to 'processed' states. This package will consider data archiving and issues surrounding copyright and licensing.

A third package is also anticipated, though at a later stage, which will look at how data can be transferred or made available through the internet – either for operational purposes or for broader public access.

The project is to comprise scoping and pilot stages, focussing on Portsmouth Approaches as its study area. The project will make use of area-based geophysical data acquired on behalf of Defence Estates in connection with the Portsmouth Regeneration Project, and site-specific data acquired from statutorily-protected historic wreck sites on behalf of English Heritage. The project is expected to report in January 2008.

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