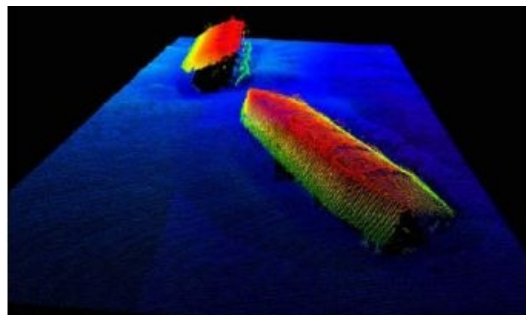


Images of WWII D-Day Harbour Revealed



The UK Hydrographic Office (UKHO) has released images from a survey of the underwater remains of an artificial harbour used in World War II that was used to facilitate rapid offloading of cargo during the Allied landings in Normandy, France. The images of Mulberry B, which was one of these portable temporary harbours developed and built in total secrecy by the British forces in World War II, have been created from a detailed 3D map that will allow archaeologists to assess the rate of deterioration of the remains.

UKHO teamed up with commercial survey company Netsurvey to trial new methods and provide staff training while gathering this detailed 3D data of the harbour. The images show the underwater remains, lying at a depth of about 5m and previously hidden from all but divers. Their construction and size testifies to the ingenuity, dedication and resolve of

the engineers and military personnel involved with the WWII project. Mulberry B, also known as Port Winston, saw heavy use in WWII. It was used over seven months to land over 220,000 men, 50,000 vehicles, and 600,000 tonnes of supplies, providing much needed reinforcements in France.

This was the first time the Mulberry B site had been surveyed for almost 20 years, although its sister harbour Mulberry A was surveyed in 2001 by the US Naval Historical Center as part of a wider campaign to record US losses in Normandy.

Head of the UKHO's Seabed Data Centre, Chris Howlett, said the most recent survey was one carried out by [SHOM](#) (the French Hydrographic Office) in 1993/94 in support of the D-Day 50th anniversary celebrations that were centred on Mulberry B. He said that this was systematic and adequately covered the remains from a safety of navigation perspective; this survey was carried out with single beam and side-scan sonar and did not provide images of use as an archaeological investigation.

Netsurvey and UKHO staff worked together in Normandy over two weeks in September and October 2011 using a scanning laser and multibeam sonar to precisely record the above and below-water remains of Mulberry B.

Additionally a magnetometer was towed to see if debris was buried. The event was a near-complete success delivering intensive training in survey methodology for UKHO staff as well as precisely measuring the majority of Mulberry B, one of the most impressive and important examples of military engineering ever and a triumph of British ingenuity and engineering skill.

Some of the remains stand proud of the sea and attract many thousands of visitors to the region each year. Unfortunately, the eastern end of the harbour, located in shallow water and festooned with the floats for crab pots, proved to be too difficult to reach, so remains unsurveyed.

Image: Sonar image of two sunken concrete 'beetles'. These were the floats used to support the floating roadways that allowed stores landed on the pier heads to reach the shore. The 'beetles' are 42 feet (12.8m) long and rest in about 10 feet (3m) of water.