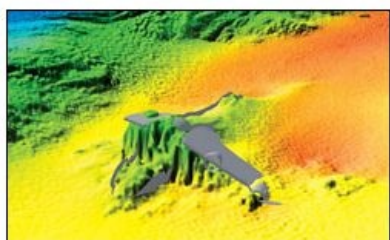


Submerged Flying Boat Wreck Survey



SRD (Sonar Research & Development Ltd) have completed a detailed sonar survey of the submerged wreck of a Sunderland flying-boat in Pembroke Dock (South Wales, UK). The survey of the RAF Sunderland, which sank at her moorings on a stormy night in November 1940, will be used by the Pembroke Dock Sunderland Trust in their efforts to recover, restore and eventually display this unique World War Two aircraft.

To undertake the survey, SRD deployed its Subsea Visualisation System (SVS3) from a locally-available vessel. The digital multibeam sensors, operating at a frequency of 240kHz, were able to image the wreck site and the surrounding parts of the shipping channel. The data were interpreted and displayed using SRD's sonar acquisition and processing software package - SRDV.

A final digital terrain map was produced at a 10cm horizontal grid, along with useful "point cloud" information. Used in combination with a virtual 3D model generated from aircraft drawings, this bathymetric data revealed valuable information about the wreck's condition and the possible points of weakness in the airframe structure.

No-one was on board when the Mark I Sunderland, serial number T9044 sank. Nevertheless, its loss was a severe blow for the RAF, since it had relatively few Sunderlands during that early part of World War Two, when Britain stood alone against Germany. However by 1943, over 90 flying-boats - mostly Sunderlands - were based at Pembroke Dock, playing a crucial role in the Battle of the Atlantic.

T9044 flew 14 operational missions before it sank. There are just three other military Sunderlands left in the world, all later Mark V versions, which differ significantly from the Mark I. According to John Evans, Project Manager of the Pembroke Dock Sunderland Trust, the survey results are more than they had hoped for and provide an excellent platform upon which the recovery of T9044 and display of the remains here in Pembroke Dock may be based.