SYNOPSIS

The jack-up barge *Octopus* was being towed from Kirkwall to Seal Skerry Bay in the Orkney Islands by the tug *Harald*, to act as a platform for the installation of a prototype tidal turbine. The tug and tow altered their route to pass to the west of Little Green Holm Island, due to the strong tidal streams experienced during the passage, a route not usually used by deep draught vessels. As the tug and tow rounded the south of Little Green Holm Island the barge, which was being towed with its legs extended to a depth of 13m, grounded on an uncharted bank of 7.1m.

Octopus sustained buckling damage to 4 barge legs, resulting in substantial cost and project delays. There were no injuries and no damage to the tug Harald.

The applicable Admiralty chart for the area indicated a depth of greater than 20m with the closest sounding indicating a depth of 26m. The source data diagram on the chart indicated that the area was last surveyed, by leadline, in the 1840s.

The MAIB report recommends that:

The DfT and MCA:

 Review the future work schedule for the UK Civil Hydrography survey programme, taking into account the priorities identified by MCA Research Project 512, the Committee on Shipping Hydrography and the MCA, particularly in light of the increasing use by large cruise vessels of sea areas not surveyed to modern standards.

The UKHO and the MCA:

Agree wording and put forward to the IHO/IMO a proposal that the relevant working
groups investigate ways of ensuring that ECDIS displays provide a clear warning or
indication to the mariner whenever the survey data used to produce the electronic
chart in use is of poor quality.

Industry bodies responsible for vessels that operate in remote waters, such as cruise vessels, offshore supply vessels and vessels engaged in renewable energy installation:

 Promulgate to the ship owners through their membership the safety lessons identified in this report, to emphasize to shipmasters and navigating officers, the need to carefully consider chart source data and, in the case of Electronic Navigational Charts (ENC), "Category of Zone of Confidence" (CATZOC) when planning and executing navigational passages.

The marine consultants responsible for overseeing the marine aspects of the tidal turbine project fully consider, when planning the passage of deep draught vessels:

- The potential effect of tidal conditions.
- The quality of survey data, available for the area concerned.