



# HYPACK® used to Survey Normandy, France

By Jerry Knisley



In the summer of 2013 I spent two weeks on a sailboat surveying the Normandy area in France as a volunteer. Well actually, a HYPACK volunteer as HYPACK volunteered to assist the survey and I was lucky enough to be a part of it. There was a pretty ambitious goal, survey as much area as possible with the EDGETECH 4600 and leave no gaps. The survey was conducted aboard a 25 meter sailboat using Trimble RTK with a CODA F-175 motion reference unit and the

Edgetech 4600. All of the data was recorded in the HYPACK 2013 version.

The image here is the survey vessel we used. At one point the ship got very quiet. As anyone that has spent time at sea will know, this is usually bad. I jumped up and asked what happened. The helmsman kind of laughed at me and said, “We turned the engines off, we are a sailboat.” At this point we surveyed, online, at 5 knots on sail. It was a first for me, I had never heard of anyone sailing a survey line. With the length and width of the vessel, we were able to survey in seas that a smaller vessel would have to return to port. The survey was lucky with weather and continued 24 hours a day 7 days a week, pulling in once while I was there for fuel.

The final results are impressive in scope for a continuous data set of sidescan and multibeam coverage.

- Phase 1 surveyed 511km<sup>2</sup> in 27 days with over 350 wrecks and debris marked.
- Phase 2 surveyed over 50 specific targets creating highly detailed 3D images.
- Work continues with processing the 11TB of data collected.
- LOG Backup Time was set to 15 minutes. This started a new file every 15 minutes in HYSWEEP. Even with such a short time to log a file, each file was roughly 260 Mbytes.
- The HYPACK folder consists of 414 GBytes of HSX data.

The project was filmed and a documentary was produced that will be on PBS in May.

<http://tvbythenumbers.zap2it.com/2014/03/06/d-days-sunken-secrets-to-premiere-wednesday-may-28-on-pbs/242648/>

At the HYPACK 2014 USA training event Pat Sanders and I gave a presentation on the survey that is available at <http://www.ustream.tv/recorded/42749826>

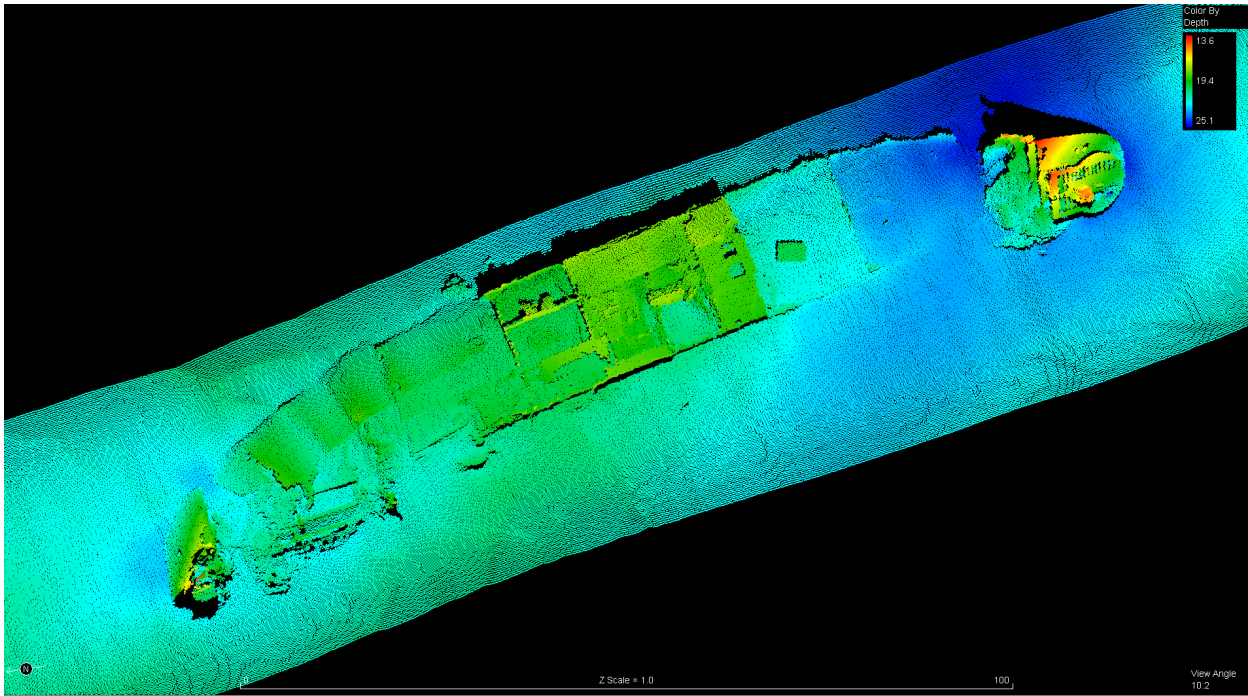
On April 23<sup>rd</sup> I will be giving a presentation on the survey at the THSOA meeting in Lafayette, LA.

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**FIGURE 1.**

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**FIGURE 2.** *Small section of the American harbor, surveyed with the EDGETECH 4600*

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