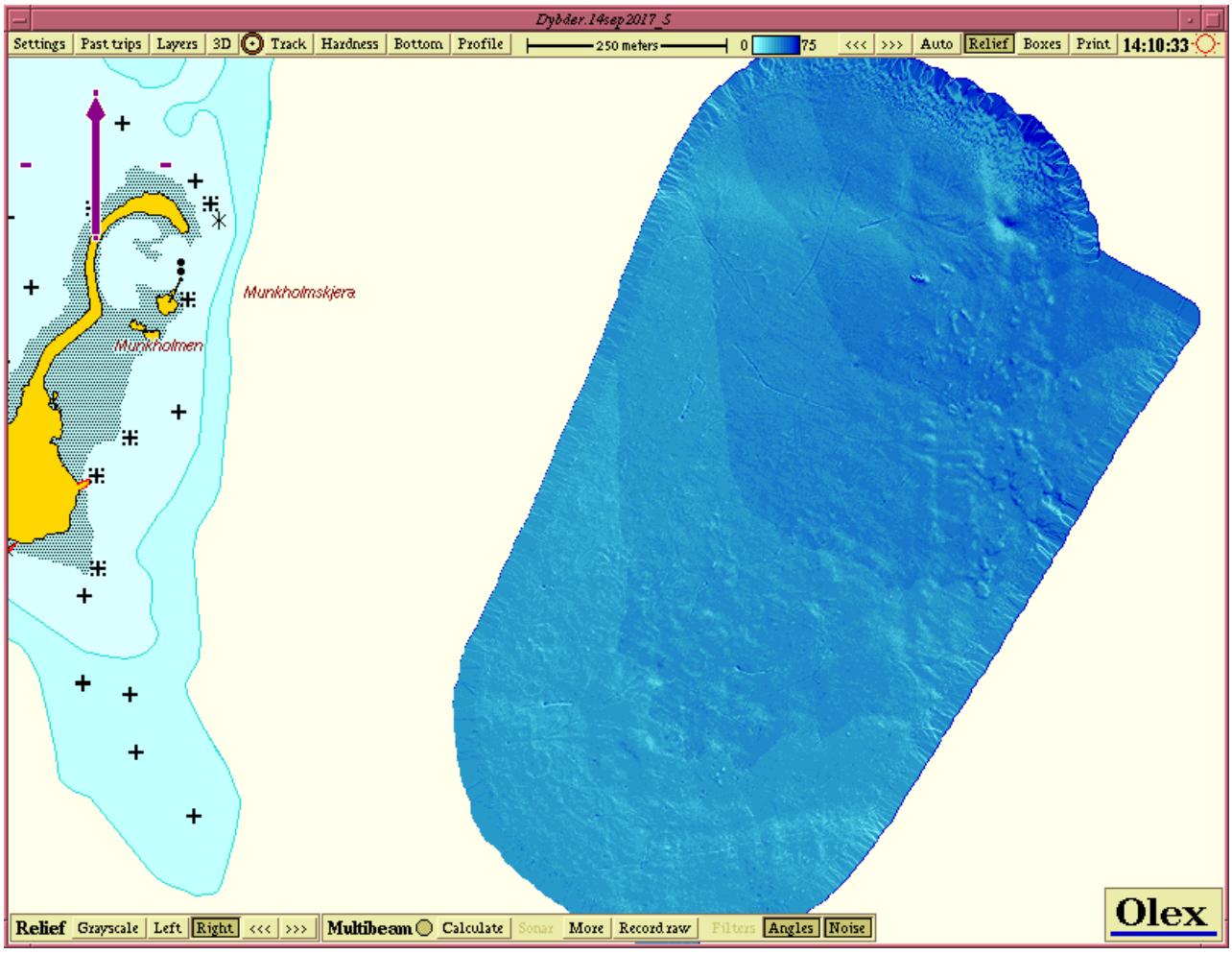
Advanced Navigation
Email: info@advancednavigation.com.au
Phone: +61 2 9099 3800
ABN: 49 156 101 549
Level 8, 37 Pitt Street
Sydney NSW 2000
Australia

4 Jan 2018

Press Release:

Olex Integrates Spatial Inertial Navigation System into Marine Vessels



Background:
Nexans Olex has successfully integrated Spatial, an inertial navigation system, into their hydrographic vessel. Spatial is a ruggedized miniature GPS aided inertial navigation system and AHRS that provides accurate position, velocity, acceleration and orientation. It combines temperature calibrated accelerometers, gyroscopes, magnetometers and a pressure sensor with an advanced GNSS receiver.

Challenge:

Advanced Navigation
Email: info@advancednavigation.com.au
Phone: +61 2 9099 3800
ABN: 49 156 101 549
Level 8, 37 Pitt Street
Sydney NSW 2000
Australia

Olex was seeking a new inertial navigation system in their multibeam sonar mapping systems for two key reasons. Firstly, they needed more accurate position & orientation data than their existing inertial navigation system could provide. Secondly, affordability was a central objective to help widen the market for inertial motion sensors and bring in customers who were previously lost due to the high costs.

Resolution:
Spatial was chosen amongst other navigation systems because:

1) Spatial offers better performance against other competing systems. For example, for commercial fishing vessels using Spatial, it offers higher performance than their traditional satellite compasses, to a comparable price.
2) Spatial is much more reasonably priced than other motion sensors in multibeam sonar mapping systems offering the same or lower levels of performance.

One of the key advantages of Spatial is its high compatibility allowing it to be combined with Atec, Wassp, HGPS and many other solutions requiring inertial navigation.

Result:
The use of the Spatial system resulted in higher resolution data and higher accuracy mapping. Precise navigation data is a key focus with Spatial, promising to deliver 0.1 degrees accuracy in pitch and roll, 0.2 degrees in heading, and 5 cm or 5% in heave. All of this is done at an exceptionally competitive price making it a popular choice in the hydrographic survey market.

Experimental testing from Olex demonstrates the easy installation, accurate data & wide range of compatibility of the Spatial system to existing set ups.

Find out more: http://www.advancednavigation.com.au/product/spatial

Before	**After**
Sensor-less survey, with lots of roll errors	Spatial sensor integrated allowing finer details

Advanced Navigation
Email: info@advancednavigation.com.au
Phone: +61 2 9099 3800
ABN: 49 156 101 549
Level 8, 37 Pitt Street
Sydney NSW 2000
Australia