Improved Tracking Reliability for Fanbeam

Greater tracking reliability and enhanced decision-making data are available for the Fanbeam laser-based marine positioning system with the launch of new control software from Measurement Devices Ltd (MDL), a leading supplier of positioning sensors for repetitive, high-accuracy range and bearing measurements from offshore support vessels.

The new software, which has been tested in field trials after an 18-month development program, is part of constant evaluation and monitoring of the system with users worldwide to ensure that Fanbeam constantly evolves.

Among Fanbeam's new capabilities are intelligent target clutter rejection made possible by sophisticated algorithms implemented in the new software, creating more reliable tracking by quickly discounting unwanted targets. Newly-available vertical tilt during tracking allows users to easily adjust the vertical tilt angle without having to stop tracking a target. Fully-automatic target filtering uses historical signal strength data to automatically set target rejection criteria. In addition, a greatly enhanced tracking algorithm modifies and enhances every aspect of the tracking, increasing its reliability and expanding the capability of the control system to a new level.

MDL business development manager Keith Park says: "This is an extremely exciting development which has already been widely welcomed in customer trials and we are expecting significant demand as the market becomes aware of the new capabilities. Intelligent target clutter rejection is a major advancement. Many users recognise the operational challenges of tracking a given reflector in a situation where many are visible to the laser. The new system is able to deal with these situations autonomously, allowing the operator to focus more time on other activities. Additional good news is that the new software can be used with existing laser hardware."

Use of positioning data from Fanbeam and other sensors allows a dynamic positioning system to automatically hold a vessel on-station while critical short-range operations, such as cargo container lifts from platform supply vessels, take place. Among the first offshore operators to acquire Fanbeam with the new control software has been Norwegian support vessel company Solstad.

Solstad Offshore ASA, which has a modern fleet of more than 40 construction, anchor handling and supply vessels, operates worldwide and has DP Class 1, 2 & 3 ships supporting the international oil and gas industries. The company conducted extensive trials with the new control software while operating in the Muchison and Ninan oilfields and was so impressed that it decided to buy one of the first of the new systems this summer.

Solstad captain Sigve Maelen says that the new control software adds to the efficiency and ease-of-use of the system. He adds: "With the new system the information is more detailed and we are aware of the signal strength which is very helpful. Overall our experience is very positive. It is cleverer in how it operates, easier to understand and improves safety as a result."

As well as use in offshore support vessels, Fanbeam® has been extensively used for seismic source positioning relative to geophysical exploration vessels and for positioning mine detection equipment in relation to navy vessels.

MDL, which has offices in Aberdeen, Scotland, York, England and Houston, Texas, was founded in 1983. Further details are available at www.mdl-laser.com or at www.fanbeam.com.