Simrad launches HALO pulse compression radar

(EGERSUND, Norway) — Navico Commercial Marine Division today announced the launch of Simrad HALO pulse compression radar, the world’s most affordable solid-state, open-array radar system with pulse compression technology for non-SOLAS applications aboard commercial vessels.

Combining the advantages of Simrad FMCW broadband radar and traditional pulse radar systems, HALO radar detects targets as close as 20 feet (6 meters) – well within pulse radar’s short-range “blind spot” – while delivering exceptional long-range performance up to 72 nautical miles.

HALO radar provides unmatched target resolution with Beam Sharpening for enhanced target separation control. In dual range mode, HALO radar functions as two radars in one – monitoring two distance ranges simultaneously with independent displays, controls, MARPA target tracking and no compromises in detection at either range.

Custom harbor, offshore, weather and bird-finder modes tune HALO radar’s advanced signal processing to ensure targets are seen vividly, even in the toughest environmental conditions. Commercial fishing fleets will find HALO radar’s bird-finder mode a powerful tool for locating flocks of birds hovering over productive catch areas.

MARPA target tracking, combined with HALO radar’s close-range performance and excellent target separation, gives operators the ability to track commercial and smaller recreational craft at close range in busy harbors, ports and unfamiliar waters. HALO radar provides 10-target MARPA tracking, or 20 targets total in dual range operation, with closest point of approach (CPA) and time to closest point of approach (TCPA) displayed for each target. MARPA tracking requires an optional heading sensor.

The ability to be up and running in less than 30 seconds offers significant commercial advantages in reaction time and productivity. Unlike traditional pulse radar, HALO radar does not rely on a high-powered magnetron to transmit a signal, allowing it to resume full operation instantly from standby and in just 16 to 25 seconds from powered-off – avoiding the two- to three-minute warm-up time associated with traditional pulse radar systems.

HALO radar is built to last, with its reliable solid-state transceiver there is no magnetron to replace and no manual tuning required as the magnetron heats up or ages. Similarly, a solid-state brushless motor driver means no motor brushes to wear out and replace. HALO radar is designed to operate at high speed in winds up to 70 knots, and is rigorously tested to exceed IEC environmental, vibration and operational standards.

Solid-state technology also means compliance with the latest, low emission and radiation standards, making it safe to run HALO radar in anchorages and marinas. In fact, HALO radar is radiation safe to people within the swing circle of the array on all models. This makes it the ideal choice for non-SOLAS passenger vessels and smaller workboats, safe to mount almost anywhere on board and to operate in close proximity to passengers and crew.

"With the launch of the new Halo radar into the commercial market, we have introduced reliable Solid-state technology at a fraction of the cost of existing commercial solid state radar currently available on the market," said Jose Herrero, managing director, Navico Commercial Marine Division. "By introducing the new radar, even the smallest fleets can take advantage of the comprehensive feature available, with a perfect mix of near and distant range, reliability and resolution without the associated warm-up time, power consumption, costly maintenance or harmful emissions."

HALO radar is exclusively compatible with Simrad NSS evo2 and NSO evo2 multifunction display systems and connects via Ethernet with a bulkhead-mounted interface box below deck. The radar requires just 40 watts average in no wind and 150 Watts at maximum wind velocity. In standby mode, power consumption is only 6.5 watts, versus 10 to 15 watts for traditional pulse radar. With such low power consumption, support for 12- or 24-volt systems, and availability in 3-, 4- and 6-foot open arrays,
HALO radar is ideal for a wide variety of commercial vessels.

Availability: Navico Commercial Simrad HALO pulse compression radar is scheduled for availability from authorized dealers in 2015 and has a retail price of $6,300, $7,000 and $7,700 for 3-, 4- and 6-foot arrays, respectively.

For more information about HALO radar or the entire line of the Simrad Yachting marine electronics for commercial applications, visit www.navico.com/commercial.