Welcome to the Sounder, Airmar’s bi-monthly newsletter that presents our newest innovative products, offers hands-on installation tips, explains our quality features, and acquaints OEM’s, Installers and Press with our company’s resources.

In this issue, Airmar’s introduces three NMEA 2000® certified products. Learn more about measuring and compensating for deadrise angles, in our Installation Bulletin, and meet Airmar’s new Product Marketing Manager, Mark Reedenauer.

If you know someone who would benefit from receiving this informative newsletter, or if you would like to un-subscribe, contact us at sales@airmar.com.

Airmar Now Offers Three NMEA 2000® Compatible Transducers For Advanced Network Performance and Easy Installation

by Ron Ballanti

The American leader in transducer technology now offers a range of NMEA 2000® compatible Smart™ Sensor transducers designed for use with integrated marine electronics systems.

With the plug-and-play functionality of the NMEA 2000® protocol, these advanced Airmar transducers feature embedded micro-electronics, where all signals are processed inside the sensor itself, and displayed on any NMEA 2000® compatible device. All that is needed is one cable from the transducer to the vessel’s NMEA 2000® network backbone cable. Depth, speed and temperature data can then be available to any NMEA 2000® device in the navigation station, on the fly bridge, up in the tuna tower or in the salon. As soon as they’re plugged in, these transducers self-configure and generate an IP address identifying themselves to the NMEA 2000® network.

The three transducer offerings cover Airmar’s most popular mounting styles: transom mount, in-hull and through-hull. For transom-mount applications, Airmar manufactures the P39 Smart™ TRIDUCER® multisensor that delivers superior bottom readings at high boat speeds as well as precise water temperature and boat speed data. For shoot-through-the-hull applications, Airmar offers its Smart™ P79 depth transducer. This transducer’s unique design allows it to be mounted close to the vessel’s centerline without drilling holes, and is able to correct for the hull’s deadrise angle. Since there are no protrusions below the hull, the NMEA 2000® P79 provides superior performance for high-speed vessels.

Airmar’s DST800 Smart™ retractable TRIDUCER® multisensor provides NMEA 2000® depth, speed and temperature data in one compact through-hull housing. This easy-to-install sensor measures depths up to 200 feet and accurate speed readings from one to 52 knots. The wide fore-and-aft fan-shaped transducer beam is designed to find bottom even when installed on steep deadrise hulls or on sailboats when heeled. Airmar’s new patented Intelligent Speed Circuit provides exceptional paddlewheel accuracy below five knots and smooth linear speed output at any speed.

Airmar introduced these products at NMEA Connectfest 2005—an event at the recent Miami Boat Show to demonstrate to the industry, press and public the benefits and possibilities of the NMEA 2000® standard. Twelve manufacturers participated in the event, with 40 various NMEA 2000® certified products connected into the CAN network backbone. “The capabilities and solutions the NMEA 2000®
network offers clearly exceeded the expectations of both the press and public,” said Jennifer Matsis, Sales Manager of Marine Products for Airmar. “They were amazed to watch true ‘plug and play’ in action, as products self-configured when added to the network. We were very pleased to display our products at the event, and we’re hard at work on exciting developments for the future,” Matsis added.

These new NMEA 2000® Airmar transducers will be available for use with a range of compatible marine electronics from leading manufacturers. To learn more about the new NMEA 2000® compatible Airmar P39, P79 or DST800 transducers, check with your marine electronics manufacturer or contact Airmar Technology Corp. at 35 Meadowbrook Drive, Milford, NH 03055. Telephone: 603.673.9570. Or visit the company’s website at www.airmar.com.

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Dealing With Deadrise
by Irene Robb

Deadrise Angle Affects Echosounder Performance

Nearly all boat hulls have some deadrise angle where the transducer will be installed. If it is mounted directly to the hull, the sound beam will be aimed to the side at the same angle as the hull’s deadrise. Like a game of pool, if the impulse hits the bottom at an angle, it will bounce off at an equal and opposite angle. In Figure 1, it is easy to see that some of the return echoes are misdirected. For an echosounder to work effectively, the transducer beam must be aimed straight down toward the bottom, as shown in Figure 2. Then the transducer will be in line to receive the return echoes. When a boat hull’s deadrise angle nears or exceeds 10°, there needs to be some compensation.

Measuring Deadrise

The first step is to measure the deadrise angle of the hull at the point where the transducer will be installed. A variety of tools can be used such as a digital level, a bubble level and protractor, or a combination square. A digital level is the simplest; the tool displays the angle when it is laid against the hull.

To use a combination square, measure the level run and rise of the hull. Then refer to the chart below to identify the hull’s deadrise angle.

Compensating For Deadrise

Airmar offers products in every mounting style to deal with deadrise. In-hull models such as the powerful M260 and R199 are mounted in a tank which is cut to match the deadrise angle of the hull—up to 25°. The smaller P79 is mounted in a fixed angle tank, and the transducer is turned until the number on the rim matches the deadrise angle of the hull—up to 22°.
Thru-hull stem transducers are installed with a fairing, either High-Performance or Standard, to compensate for a hull’s deadrise angle. The B45, B744V, B256, B260, and others can be oriented to transmit straight down in hulls up to 28° by cutting the fairing to match the deadrise angle. The rugged external mount transducers, such as the R99, are also installed with a fairing.

If a thru-hull flush-style transducer is called for, the Tilted Element B60-12° will accommodate a deadrise angle between 8° and 15°. And the Tilted Element B60-20° is right for hulls with a deadrise angle of between 16° and 24°. Both of these transducers compensate for deadrise by angling the element inside the housing. In every mounting style, Airmar has a sensor to deal effectively with deadrise.

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**Airmar Technology Corp. Appoints Mark Reedenauer As Product Marketing Manager**

*by Ron Ballanti*

Airmar Technology Corp., a leading American manufacturer of transducers and sensors for the recreational and professional marine markets, has appointed industry veteran Mark Reedenauer to the newly established post of Product Marketing Manager. The announcement was made by Jennifer Matsis, Marine Sales Manager for Airmar, based in Milford, New Hampshire.

In his new position, Reedenauer will be responsible for overseeing marketing activities for each of the company’s marine market segments, which include recreational boating and fishing, commercial fishing, professional marine and oceanographic/survey. Reedenauer will also head up all of Airmar’s trade show activities and logistics.

Reedenauer has years of experience in the marine industry and with high tech equipment. Since his graduation in 1999 with a Bachelor’s Degree in Computer Information Systems, Reedenauer has worked with leading marine electronics manufacturer Northstar Technologies, now part of Brunswick Corporation in Acton, Massachusetts. Based on his positive results, Reedenauer progressed through the ranks from Technical Sales Representative to Marketing Coordinator, and was most recently Northstar’s Product Marketing Manager.

“We’re extremely pleased to have somebody with Mark’s background, marketing experience and technical knowledge,” said Matsis. “We know Mark will be a great fit for our company,” she added.

For more information about Airmar’s wide range of premium quality transducers and sensors, contact: Airmar Technology Corp., 35 Meadowbrook Drive, Milford, NH 03055. Telephone: 603.673.9570. Or visit the company’s website at www.airmar.com.

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