



## AFFORDABLE AIS

Our recommendation for West Coast boaters

**A**t Pacific Yacht Systems, we are often asked for product recommendations; the challenge is what works for one boater doesn't necessarily work for another. As well, there are often compatibility issues between different equipment manufacturers. However, now and then, a product comes along that serves a purpose for all boaters at a reasonable price point.

In this *PY* Tech Talk, we are going to look at the benefits of the Automatic Identification System (known as AIS)

and recommend a product that we have been installing for the past couple of years that has been receiving great feedback.

When asked about AIS, we often use the example of exchanging virtual boat "business cards" on the water. AIS information includes the vessel name, call sign, vessel size and navigation data such as present location, course over ground (COG) and speed over ground (SOG). AIS information can be used on its own, but most often the information is displayed on your boat's chart plotter by overlaying each AIS target's physical location, SOG, COG and other infor-

mation in relation to your position and SOG/COG. Most chart plotters will even predict potential collisions and warn the operator.

Since AIS information is transmitted over VHF frequencies, it does better than line of sight, and commonly can receive AIS broadcasts over low mountains or islands. Unlike radar, AIS can "see" around corners. This can be a huge safety benefit in inclement weather or when navigating the many islands and passes on the BC Coast, and it is an excellent complement to your existing radar. Also, because AIS includes the vessel's MMSI number and name,



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hailing a particular boat over VHF can be simplified. (See PY January 2020 *AIS vs. Radar* for a full comparison.)

All you need to take full advantage of AIS is a VHF or AIS antenna and AIS receiver (and/or transceiver), plus a compatible chart plotter or smartphone/tablet. Sharing of AIS information between vessels is free, and there is no subscription required.


Passenger ships such as ferries, tugboats and most large commercial vessels have a Class A transceiver (12 watts) to send and receive AIS information on VHF frequencies. However, some recreational boaters opt to transmit AIS information using a Class B transceiver (two watts).

So, what is our favourite AIS product? A company called Em-trak, based in the UK, offers several AIS options for recreational boaters. The

website has a short AIS selector quiz that allows you to choose the best system for your boat, whether you have a motor cruiser, offshore sailer, daysailer, RIB, tender or even a jet ski. Many of the solutions include an integrated splitter so you can choose to use it with your existing VHF radio antenna, and you don't have to install a separate antenna. You also have the option to connect your AIS wirelessly to your smartphone or tablet.

The most popular model we sell for the Pacific Northwest is the standard power B923 (2W CSTDMA). It is a Class B transceiver that is small, lightweight and allows you to receive and transmit. It draws very little power and has a built-in power surge protector. It includes a high-performance internal GPS receiver, but you can add an external GPS antenna if you prefer.

The B923 has guaranteed connectivity and interoperability with any app, chart plotter, smartphone, tablet or PC. This ensures that you are not limited to any one navigation device and can maximize all of the AIS related functionality such as weather, MOB, anti-collision, anchor safety as well as vessel tracking. It is NMEA 0183 and NMEA 2000 compatible. It even has a silent mode (transmit off), so your coworkers can't find you. All of the Em-trak marine products are ruggedized and designed to withstand vibration, shock and extreme temperatures. They are water, pressure, spray and damp-proof.

If you have been considering AIS on your boat, there is no better time. Products, like the Em-trak B923 are plug-and-play, feature-rich and available at a great price point at \$700. 

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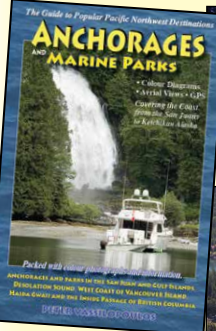
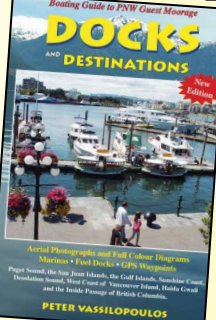


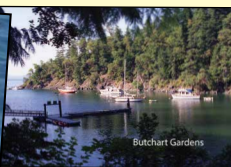

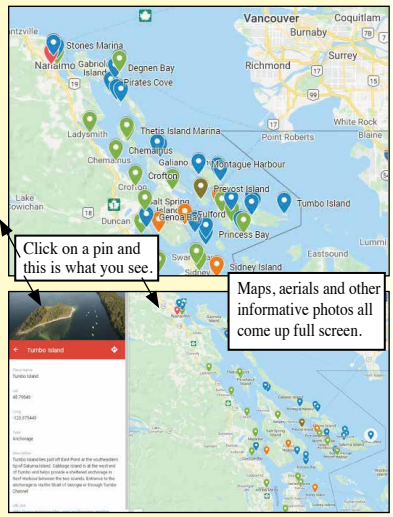
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**with Peter Vassilopoulos**  
author and publisher of BC cruising guides

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