



AIS? Say What?

by VINCENT PICA

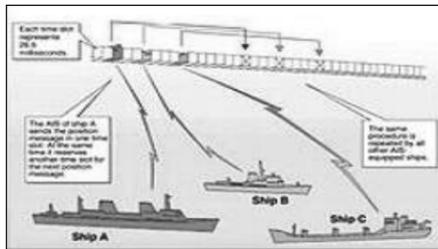
CHIEF OF STAFF, FIRST DISTRICT, SOUTHERN REGION (D1SR)
UNITED STATES COAST GUARD AUXILIARY



In the "technology gamesmanship" between the Have's and the Have Not's, each time two mariners (or golfers, tennis aficionados or "Internuts") get together, inevitably the "tech question du jour" comes up. In our father's days, it was "did you get a VHF radio yet?" or perhaps a "What do you think about LORAN?" In our younger days, it was, "hey, have you put GPS aboard yet? I have and it is faaaaantastic!" As the price of hardware came down, we even got into discussion about radar (see SSP, "Radar for the Private Boater - Eye Ayes!", 12/19/07), which for most people was considered only a tool for the military and commercial mariners. But, for the same reason (lowering costs), now AIS is part of the tech jargon. This column is about that.

AIS is what?

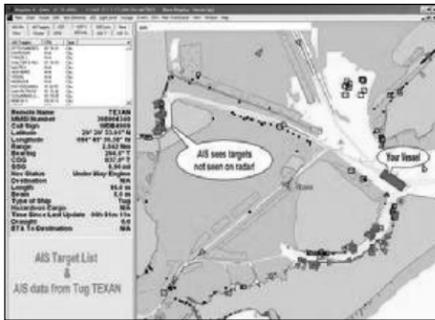
AIS is the Automatic Identification System, operated by the US Coast Guard here in the United States. The International Maritime Organization's (IMO) International Convention for the Safety of Life at Sea (SOLAS) "requires AIS to be fitted aboard international voyaging ships with gross tonnage of 300 or more tons, and all



passenger ships regardless of size."

It is estimated that more than 40,000 ships currently carry AIS class A equipment. Clearly, by the prior description, it is and has been intended for the "big boys." What does it do? It links all AIS-equipped vessels together via satellite/GPS technology.

Well, doesn't my radio do that essentially? Not unless you or the opposing skipper see each other and decide to open up a channel. AIS broadcasts continuously.



And it broadcasts plenty - directly on to your radar screen, or chart plotter or GPS screen. It will tell you, for any AIS-equipped ship within VHF-radio range, its speed and heading, which is critical in understanding if there is a threat of collision. It will also tell you when and where it will happen if both of you maintain your present course and speed (*that's when the "CPA", i.e., Closest Point of Approach, is zero...*)

But any good radar system these days will give you that data. True. If the radar sees the opposing vessel, it

can. While many objects can block a radar return, VHF goes in a straight line, to infinity essentially, and won't be (completely) blocked by bridges, wave or rain scatter and the like.

It will even give you the vessel's name amongst other characteristic information so, when you put out a "security call" during a transit ("secure-a-tay, secure-a-tay, secure-a-tay, this is the M/V Charlie westbound on the rhumb line from Montauk to New York City, all vessels on opposing course, please be advised"), you can say, "Hailing M/V Monica, eastbound on the rhumb line from New York City to Montauk, this is the M/V Charlie on a reciprocal course, 10 miles ahead. Suggest we both go to starboard and open up a lane between us." How cool would that be...?

The US Coast Guard has noted that AIS might replace RACONS, or radar beacons, currently used for electronic navigation aids. And, if buoys and beacons can transmit their data, it will be a further aid when aid is mostly needed - poor visibility and crowded seaways. And don't be surprised if you hear about Virtual AIS. In one example, an AIS transmission describes the position of buoy but the signal itself originates from a transmitter located in a USCG station miles away and on land. For example, an on-shore base station might broadcast the position of a string of channel markers, each of which is too small to contain a transmitter itself. In another example, AIS could transmit the image of a marker

which does not exist physically but now marks a transient situation, like a sunken vessel or channel that had shoaled over. Although such aids would only be visible to AIS-equipped ships, this would be a lot cheaper - and faster - than physical markers.

OK, How Do I Get One?

Well, "what should I get" is probably a better question. AIS transponders come in two classes. Class-A really IS for the big guys - it is a fully integrated system, costing \$3,000-\$5,000 and is technologically beyond most private skippers in complexity and size. With that said, for \$600-\$900, there is a Class-B transponder which can be integrated into your existing electronics package. The best device to integrate it with is your chart plotter. And, most importantly, Class-A AIS systems can see Class-B and vice-versa...

One last thing: AIS "hates" to be close to AIS, meaning, it is self-alarming. You set the perimeter or zone of safety and, if another AIS-equipped boat enters that zone, the alarm goes off. And, on your chart plotter, you see its heading, speed, position and name. Immediately. This is one of the reasons I have AIS on my boat (I have the ACR Class-B AIS but there are several good ones out there.)

BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux@aol.com or go direct to the D1SR Human Resources department, who are in charge of new members matters, at DSO-HR and we will help you "get in this thing..."

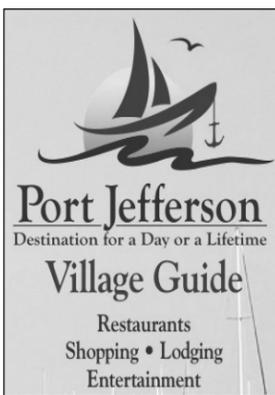
PORT JEFFERSON VILLAGE IS AWARDED \$100,000 FOR COMPLETION OF THE HARBORWALK PROJECT

The NYS Regional Council announces \$100,000 grant award for Port Jefferson Village for improved public access to Harborfront Park and the Port Jefferson Village Marina Complex. The award of \$100,000 will finance public access improvements to the Harborwalk and Harborfront Park in the Village of Port Jefferson. The park, adjacent to the Port Jefferson / Bridgeport Ferry terminal, has become an established tourist destination on the North Shore and has revitalized Port Jefferson's adjacent downtown business district.

As written in the grant, Completion of Harborwalk will increase access to and encourage appreciation of a newly created public space on the waterfront that includes areas for passive recreation, picnicking and maritime appreciation. This project preserves the beautiful harbor view and increases access to the entire waterfront and adjacent park and Village Center. This project supports, rather than adversely affects, our natural resources by encouraging foot traffic along the shore line and waterfront as opposed to cars.

Last week, Governor Andrew M. Cuomo announced \$785 million has been awarded through the Regional Economic Development Council initiative to drive economic growth and create jobs. For complete release regarding Strategic Plan Rankings and Funding Packages for Regions, go to: <http://www.governor.ny.gov/press/12082011RegionalCouncils>

Inc. Village of Port Jefferson, Mayor Margot Garant states, "This grant allows us to finish the portion of the boardwalk directly contiguous to Harborfront Park and Danfords Hotel and Marina with the appropriate brush steel rail and finish so visitors can connect from our Park to the Town of Brookhaven newly finished boardwalk."



Stephen Molfetta Joins the Official Staff of the Suffolk County National Bank As Vice President and Commercial Lender



The Suffolk County National Bank (SCNB) recently announced that Stephen Molfetta has joined the Bank as Vice President and Commercial Lender.

Mr. Molfetta has an extensive background in the field of financial services with an emphasis in business lending. With more than 20 years in the industry, he is well versed in Business Development, Portfolio Management, Financial Statement Analysis and Small Business Lending, including the programs offered through the Small Business Administration (SBA). Prior to joining SCNB, Mr. Molfetta held various positions in several banking institutions. Most recently, he was associated with the Long Island Development Corp. where he partnered with development companies and municipalities to promote economic growth in the local communities.

Karen Hamilton, Chief Lending Officer, SCNB, commented, "It is my pleasure to welcome Stephen Molfetta to the Commercial Lending team. We look forward to benefitting from his experience and expertise in business lending, which further builds upon the strengths of our group."

Mr. Molfetta attended Long Island University/C.W. Post College where he received a Bachelor of Science Degree in Finance. Involved in the community, Mr. Molfetta served as a mentor in the Island Trees Memorial Middle School located in Levittown. During his career, he was involved in a number of outreach