

# Sidelights

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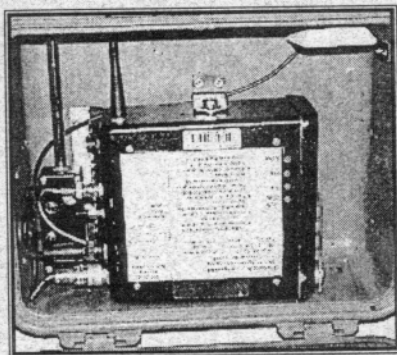
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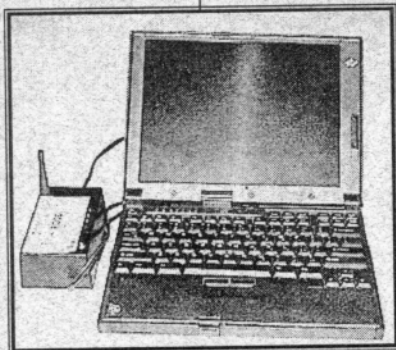
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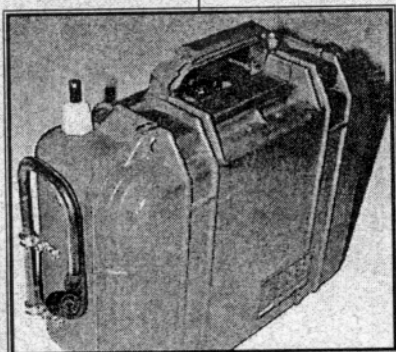
## Tampa's Navigation Aids and Tools



Interior of the suitcase showing the installed electronics. GPS antenna is at upper right.



Notebook PC with the power supply/modem unit.



Exterior of the suitcase. Note the hook mounted on the side used for hanging on vessel railing.

After lunch, meeting attendees were treated to more interesting speakers. These presentations all had to do with local navigation topics that could be applied nationally or throughout the world.

### Real Time Data Acquisition

Clifford R. Merz, director and program engineer for the University of South Florida, College of Marine Science, gave an overview of two of the areas weather monitoring systems. They are the Coastal Ocean Monitoring and Prediction System (COMPS) Program Real Time Data Acquisition System; and the Physical Oceanographic Real Time System (PORTS).

PORTS, which tracks weather conditions from six stations throughout the bay area, was developed by NOS and is operated in collaboration with USF, NOS, NOAA and local maritime interests. It records water level, wind speed and direction, relative humidity, atmospheric pressure, water and air temperature, and current strength and direction. PORTS provides both a nowcast and a forecast.

This information is used for:

- navigation

- oil spill response
- storm surge prediction

- environmental protection
- Red Tide studies
- fisheries management
- beach erosion tracking.



Capt. Vic Schisler, center, takes advantage of trying out the AIS system as Tampa pilots Capt. Terry Jednaszewski (left) and Capt. George Viso give instruction.



Everyone was interested in Capt. Pat Moloney's extremely portable Mac G4 Powerbook computer with its mini Disk-on-key hard drive that attaches to any USB port. Here he's showing Marci Grady how easy it is to use.



Catching up during a coffee break were, left to right, Captains Roger Johnson, Robert Valentine, Bill Benson, Dave Goff and Dave Del Gardo.

### Coastal Monitoring and Prediction

COMPS consists of four offshore buoys and eight land based stations on Florida's West Coast. They provide real time data for emergency management, storm surge prediction, search and rescue efforts, sediment transport, and general educational usage. Atmospheric (air temperature, wind speed, etc.) measurements and Hydrographic (sub-surface: current, water salinity, temperature, etc.) measurements are taken every 15 to 20 minutes. They are then transmitted and stored for use by a long list of collaborating agencies.

Actually, anyone can access this data by logging on to the COMPS website at [www.comps.marine.usf.edu](http://www.comps.marine.usf.edu).

### Pilots' Navigation System

Ross Norsworthy, president, Ross Engineering, went over the Tampa Bay Pilots' Automatic



## More Tampa continued from page 8

Identification System (AIS) which he developed. This system was first presented to the Council at the 1999 Professional Development Conference in Connecticut. It was also reported on in detail by Capt.

Terry Jednaszewski in the Fall 2001 issue of *Sidelights*.

It is basically a combined navigation and communication tool which the Tampa Bay pilots carry on to each ship with them. Now that it's been successfully used on an every-day basis for three-and-a-half years, Ross Engineering is developing a Universal Shipborne version that can be used worldwide.

Ross Engineering is the only U.S. supplier of a system like this. IMO/SOLAS has mandated carriage requirements with a phase in period between 2003-2008.

AIS is a three-part system consisting of: 1. A user interface/display keyboard such as a laptop, ARPA, ECDIS. 2. A systems interface to assemble the information from GPS, speed and other sensors. 3. A transponder to communicate this information to the display keyboard.

The benefits of AIS are improved collision avoidance, improved situational awareness, and improved communications. As technology advances this type of device is getting smaller and more sophisticated. Mr. Norsworthy showed us renderings of a potential future product that has the pilot wearing a mini display screen attached to glasses. This "Super Pilot" of the

future would allow the user to look out the window and at the AIS display at the same time without moving their head. We're not kidding.

### AIS in Action

Tampa pilot, Capt. Jorge Viso, gave the audience a real-time presentation of this system. He mounted an antenna on the hotel roof and we became the *S/S CAMM*



Clifford R. Merz, director and program engineer for the University of South Florida, College of Marine Science's Coastal Ocean Monitoring and Prediction System (COMPS) Program.

*Hilton*. Through his laptop computer he projected onto a screen what he sees when on the bridge of a ship. We watched other ships transiting Tampa Bay, brought up weather information provided by PORTS, and sent e-mails to other pilots. All very fascinating. With this system as a tool more ships are able to maneuver in fog that would ordinarily have to stay at anchor or the dock.

### Legal Aspects

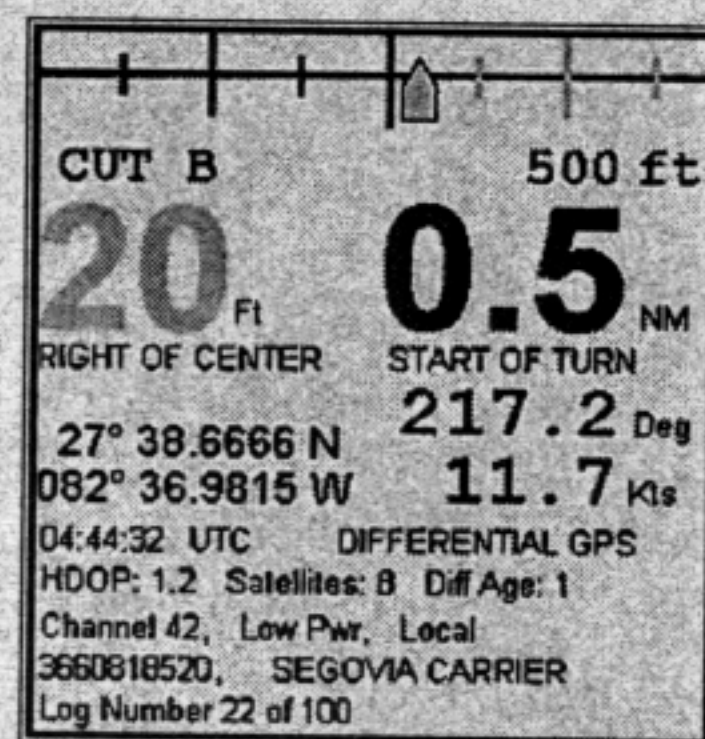
Anthony John Cuva, a board certified admiralty and maritime attorney with Akerman, Senterfitt & Eidson, P.A., in Tampa spoke on the legal aspects of using portable navigation systems. In general, no cases to date deal directly with a pilot bringing on board a navigation system with respect to failure to be able to utilize or rely on that system.

He reviewed Colregs 7 regarding using all available means to determine risk of collision and Colregs 5 regarding keeping a proper lookout. In his opinion both use very dangerous language about the use of radar or equivalent systematic observation.

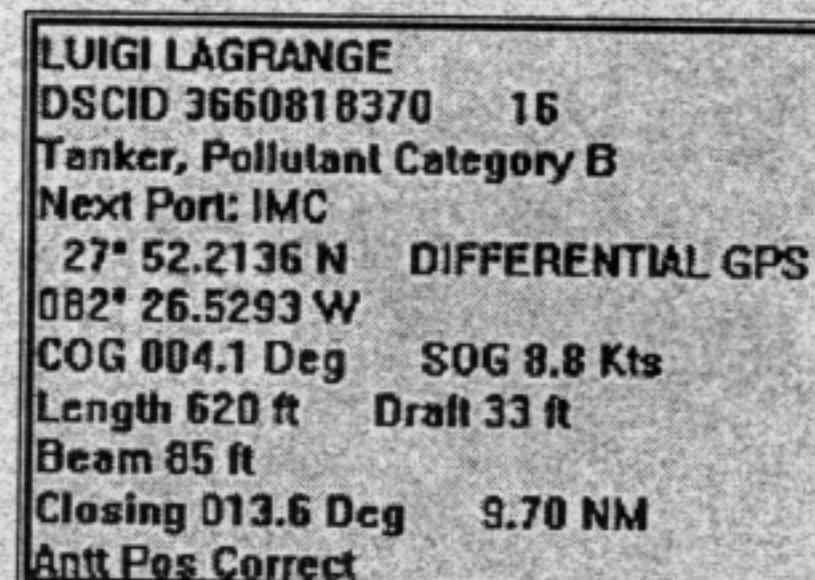
Mr. Cuva told us about several collision court cases involving the improper use of radar and ARPA, and one about a pilot's portable navigation system's



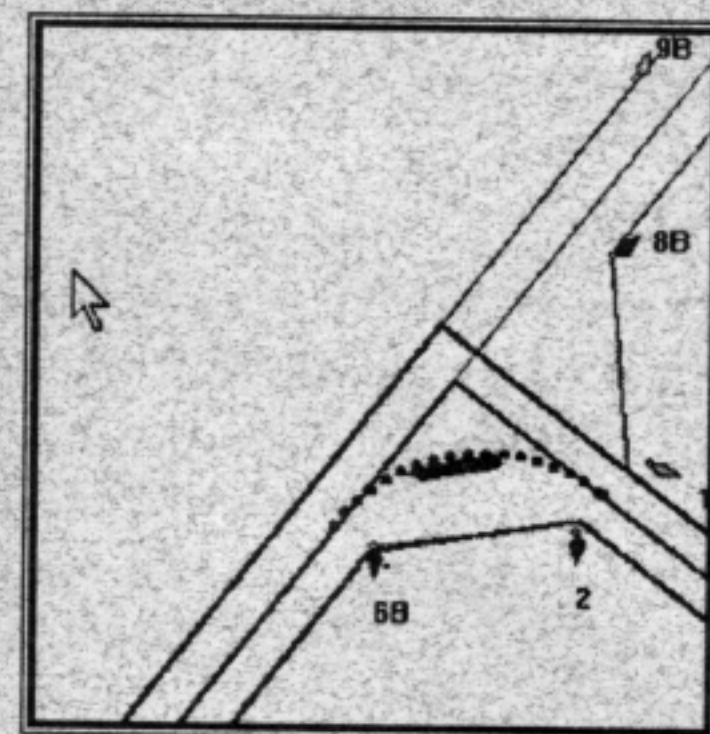
Ross Norsworthy, president of Ross Engineering, who designed Tampa's Automatic Identification System (AIS).



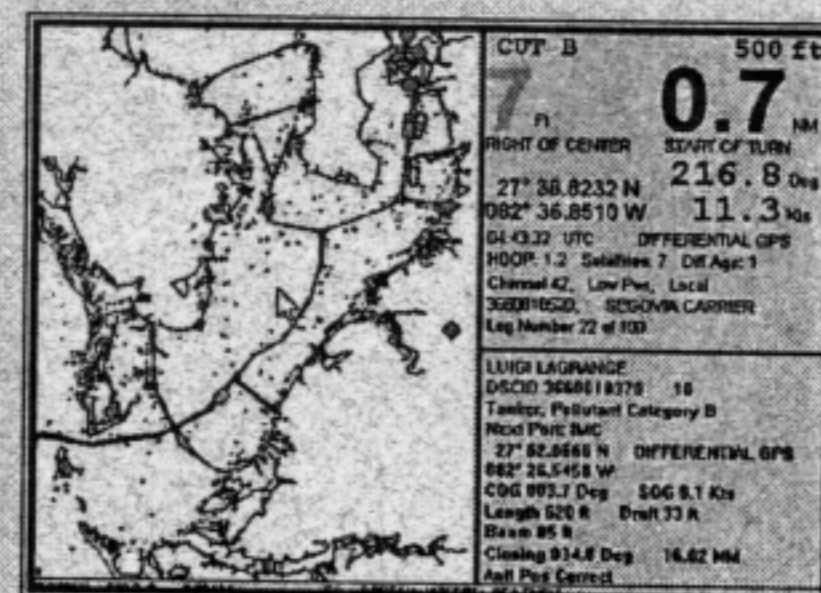
Own vessel information display area of the navigation software. Off center graphic is at the top.



Information display of other vessel selected by the user.



Zoomed-in display showing own vessel negotiating a turn. Navigation aids and labels are displayed.



Full screen display from the PC.

*Continued on page 17*



# Tampa Navigation

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antenna actually being in a different location than what was entered into the computer's software.

Lots of questions were fielded from members regarding master and pilot liability, responsibilities and changes in legislation. We hope to bring you details in future issues of *Sidelights*. 