

Connections

*News and Trends
From the world of Marine Computing*

Client Spotlight

Snow Dance: A Computer and Communications Odyssey

By Daniel Piltch

In This Issue:

Snow Dance's Odyssey	1
Icom M802 SSB	3
Tech Tip—Iridium	4

In Brief

You'll find us at the Annapolis Sailboat Show in the OCENS booth (YB-21), where we'll be accompanied by marine weather guru Michael Carr. Be sure to stop by and say hello!

Our new series of *Hands On* workshops on Electronic Navigation and Communications are coming to a location near you. Visit our web page, www.marinecomputer.com, and click on the Seminars link to learn more.

Tim Hasson, from our Mid-Atlantic Office, will be speaking on Communications as part of the Cruising Rally Association's *Passagemaker* seminar, October 25-27 in Hampton, VA. These seminars are a great learning opportunity for anyone planning extended cruising. For more info, contact the CRA at 401.848.0302.

The first time I met Tom & Daphne Corcoran, they were preparing their 56 foot Oyster, Snow Dance, for a trans-Atlantic cruise. Starting at their homeport of Wickford Cove in Rhode Island, they were bound eventually for the Mediterranean where Tom's penchant for history would lead them into many of the ports that Ulysses visited during his Odyssey. Our relationship with Snow Dance's odyssey began with some questions about their Inmarsat C terminal. They had bought the unit from Quest Telecom (one of the few US satellite communications dealers that's located even further north than our Portland, Maine headquarters), and were referred to us for some problems they were having linking the unit up to their onboard laptop.

Tom & Daphne brought their equipment up to our original loft office inside of one of the vast foundry-turned-boatyard buildings of Portland Yacht Services. We fixed the software problems, and began talking about other needs they had onboard such as electronic navigation & weather information. We made some recommendations and outfitted them with Nobeltec's Visual Navigation Suite (version 4!) and WeatherFax for Windows. Before long, they were back in search of a new computer. We talked about the options and decided to stick with something similar to the Toshiba laptop they were familiar with.

After a few support sessions over the phone they were ready to go. They graciously invited me down to their send-off party in Wickford Cove where I met Harry, their loyal Irish captain, and many of their friends. Snow Dance looked well-organized and spotlessly clean, as any good cruising boat should look (at least before leaving the dock anyway). A few days later, they were off for points east.

While they were approximately smack in the middle of the North Atlantic, Tom had a serious problem with his charting software. He sent me the details of the problem via an email from his Inmarsat C. I responded with a detailed list of steps to follow to resolve the problem. The next morning, I found an email informing me that all was well again aboard Snow Dance.

Eventually, the Corcorans arrived in the Mediterranean after stops in Ireland, England, France, and Portugal. Then the logs started arriving. Each day or two, Tom would write wonderful descriptions of the ports they were visiting and the history behind them. He sent the email off to his secretary back in the office in New Hampshire, who would then forward the logs on to a pre-determined list of family and friends (and technology consultants).

In the summer of 2000, on a trip home, Tom arranged for a brief visit to our office to update his software and discuss using a GSM phone with his laptop in coastal areas, rather than the somewhat pricey Inmarsat C. We upgraded his charting

Snow Dance: A Computer and Communications Odyssey

software from version 4 to version 5, and tweaked his trusty laptop a bit to resolve some performance issues. We decided to put off the GSM data link until the following year.

Then, during another office visit in the Spring of 2001, we upgraded Tom from weather-Fax for Windows to the more powerful WeatherStation 2000 software, and set him up with Motorola's SmartCollect data hookup for his Timeport phone. It turns out that we were all a little ahead of the curve compared to the GSM providers in Barcelona who weren't able to provision the appropriate data service at first.

Over the winter of 2001-2002, Tom wanted a more reliable means of voice communications for his pending trans-Atlantic crossing with the Atlantic Rally Challenge (ARC) from Grand Canary to St. Lucia. He had previously bought an Iridium phone during their first lifecycle (before going bankrupt and being resurrected). Tom had heard that Iridium was back in business and dug out his old phone to see if it would still work. We helped him get the phone re-activated and explained the easier (and far cheaper) new rate structure of \$1.50 per minute to anywhere in the world. Compared to the old rates, this was a vast improvement.

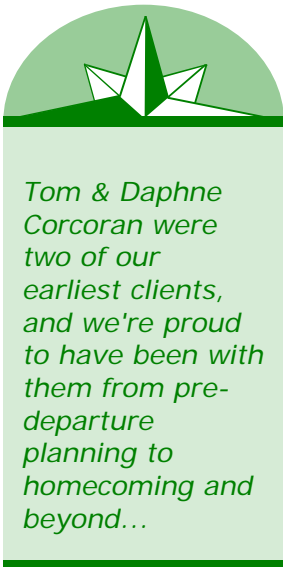
We spent an afternoon in our new spacious office overlooking Portland harbor training Tom and his son-in-law on how the phone could be used in conjunction with his weather software to pull weather charts off the Internet. We also upgraded their charting software from version 5 to version 6 and set them up with a one month subscription to Nobeltec's weather service.

With their Inmarsat C, Iridium phone, and trusty single sideband, they were well prepared to stay in touch during the three week crossing. Though in the end there were a few problems with the data side of the Iridium connectivity, it functioned flawlessly for voice communications and the Inmarsat C was as reliable as ever for email. They arrived safely in St. Lucia along with the rest of the ARC fleet, though a few boats had suffered some damage due to some strong winds early in the trip.

Along the way, Tom & Daphne had met up with other clients of ours with whom we'd recently worked to outfit a new Oyster 56 called Chinook. Over a beer in St. Lucia, they were rumored to be talking about the experience they each had working with Marine Computer Systems, and they tell me they had good things to say (as we hope all our clients do)! Both Chinook and Snow Dance spent a leisurely 2002 cruising up the coast. I paid a visit to the Corcorans during their stop in Portland, and heard about their plans to head across the Bay of Fundy to Nova Scotia before turning around and heading home one final time to Rhode Island.

My last meeting with Tom was at the Newport Boat Show in mid September. Snow Dance was up for sale, and he wanted me to do one final tune up of the systems before turning it all over to the new owner. Had I been writing the ad, it would have read something like this: "Excellent communications and navigation system for sale. Integrated tightly with weather software. Package also comes with a lovely sailboat." Perhaps this is why I didn't become a yacht broker.

Tom & Daphne Corcoran were two of our earliest clients, and we're proud to have been with them from pre-departure planning to homecoming and beyond. As Marine Computer Systems approaches its fifth year, we look forward to seeing an increasing number of clients returning from faraway places with our systems aboard.



New Products

Icom M802 SSB Transceiver

By Tim Hasson

The new Icom M802 SSB Transceiver features a compact and attractive design, improved support for HF Email, and is the first SSB radio designed for the U.S. recreational market to offer enhanced distress alerting using Digital Selective Calling (DSC).

The main unit is under one foot square, and weighs in at just over 10 lbs. The separate control head is about 4" high and 8" long, and is styled to complement Icom's popular M502 VHF radio. The control head is accompanied by a separate 4" speaker. We found the controls to be well laid-out and intuitive to use, and were impressed that Icom included a headphone jack right on the front of the control panel. This useful feature is missing from many marine SSB's, including the M802's predecessors.

For HF Email users, it's a straightforward proposition to connect a Pactor modem or other TNC to the M802, using either an 8-pin accessory jack or a 9-pin AFMOD connector. Another serial port is provided to remote control the radio from a personal computer, and a GPS receiver connects to the main unit via a sturdy BNC-type connector. The radio features a separate memory bank for up to 160 email frequencies, and comes from the factory pre-programmed with channels for SeaWave Digital as well as many of the SailMail and Cruise Email stations. Unfortunately the Email channels are not user-programmable, a point we feel is an oversight on Icom's part.

Digital Selective Calling (DSC) is a paging system that can be used to automate calling other stations. In an emergency situation, DSC can transmit a digital packet of information which includes the vessel's unique identification, position and time, and the nature of the distress, thereby alerting the closest Rescue Coordination Center (RCC) and other vessels in the area. The M802 uses a second internal DSC receiver to constantly scan the international DSC hailing channels for calls ranked as "Distress", "Safety" or "Urgent", and alerts the radio operator when any are received. This feature requires a second, receive-only antenna. Any long wire, such as a shroud or stay on a sailboat, will work for this purpose.

On the technical side, the M802 offers up to 160 user-programmable channels, a digital speech compressor for improved talk power, and uses Digital Signal Processing (DSP) for clearer reception. The DSP technology also lets the M802 offer synthesized passband filters for a variety of digital modes. A companion automatic antenna tuner, the AT-140, is also available.

For more information on the M802, marine SSB radio in general, sending or receiving Email via SSB and Digital Selective Calling, contact us at Marine Computer Systems, Inc.

CONNECTIONS: News and Trends in Marine Computing is brought to you by:

MARINE COMPUTER SYSTEMS, INC.

www.MarineComputer.com

Maine Office

58 Fore St, Building 6
Portland, ME 04101
207.871.1575

Mid-Atlantic Office

PO Box 262
Salford, PA 18957
610.287.0703

MARINE COMPUTER SYSTEMS, INC.

Portland Marine Complex
58 Fore Street, Building 6
Portland, ME 04101



TO:

Tech Tip

Iridium Direct Internet Data with Windows ME

Iridium's Direct Internet Data (or DID) is a great packet data service, but it can pose its share of configuration challenges. One such challenge affects users of Windows Millennium Edition (ME) operating system, who install the Direct Internet Data service software, called the Apollo Emulator, from the supplied CD-ROM. The software reboots the computer system towards the end of the installation process, which is not uncommon. What is uncommon is that after this reboot many Windows ME users may be facing a blank desktop with no icons and a computer system that doesn't want to go anywhere. Fret not, this is one seemingly vexing ailment with a relatively simple cure.

The problem stems from Windows ME's desire to include a network protocol called NetBEUI (we computer-types pronounce that "net buoy") to just about every network connection, including the Iridium DID. The Apollo Emulator Software, which lets the computer use the Direct Internet Data service, just isn't prepared emotionally to deal with NetBEUI, and the system hangs as a result. Since Windows ME is an "operating" system and we're looking for a "cure", think of yourself as a surgeon as you go in and cut out the offending NetBEUI protocol and throw it away (no need for a biopsy on this one!).

Start the computer in "Safe Mode" by holding down the F8 key as the system powers up. From the "Start" button choose "Settings" then "Control Panel". Double-click on the "Network" icon, and be sure the "Configuration" tab is selected. Scroll down the list of network components and find the "NetBEUI —> Apollo Emulator NDIS" item, highlight it, and hit the "Remove" button. Say OK to the warning message, and OK your way out of the Network dialog box. Your system will need to reboot in Normal mode to finalize the changes. Following this reboot, you should find yourself saying, "I DID it!". — Tim Hasson