



Up Top In Operations

April 2004

Monthly Newsletter of the National Operations Department

Volume 04

DOES THAT DISTRESS BUTTON REALLY WORK ?

Bill Scholz DSO-CM D11SR
dsocm@d11s.org

*[Thanks to Gordon West for some re-
search and details]*

Many of us have recently acquired a new VHF Marine radio with DSC (Digital Selective Calling) capability. We've done so, at least partially, because of the belief that we were buying an extra measure of safety. After all, the hype that goes along with the radio tells us that if we push that red button labeled DISTRESS, then help will be called.

What's in a Distress Call?

We remember from our original boating safety class or from our operations training that an effective "MAYDAY" distress call must have at least three elements: (a) the MAYDAY words, (b) the identity of the boat and (c) our location. More information can be important too, but those three elements are the basic information to allow a rescuer to find us.



When we press the DISTRESS button on a DSC radio, the radio digitally transmits a MAYDAY message with our **boat identity**, and with the specific location from our **GPS receiver**. That includes all the critical elements!

But Does Our Radio Really Do All That?

Well, yes, but *ONLY IF TWO STEPS* have been completed. The radio must somehow know our boat's identity, and it must be connected to a GPS receiver.

Not having both identity and position is the same as just shouting MAYDAY on channel 16 without any other information. Everybody knows there has been a distress call, but has absolutely no idea who is in distress or where they are located. We've all seen or participated in such cases, and know how frustrating it is for search and rescue.

Step One: Our Identity

DSC radios use a special nine-digit number, called an MMSI or Maritime Mobile Service Identifier. You request an MMSI for your boat, usually from a free registrar such as BOAT/US.

(continued on page 2)

WHO DO YOU CALL? THE AWO!

Bob Peterson, DSO-CM D11NR
bob@peterson.org

A small runabout is six hours overdue and the Station O.D. needs to determine if the owner's trailer and pick-up are still in the launch ramp parking lot. But it's a two-hour trip in the 41'

UTB. What other means are available to eliminate that lengthy boat trip?

A Coast Guard helo has been launched to respond to an injured rock climber half way up the steep face of a coastal cliff. The on-scene Fire Department does not have marine VHF. How do you get an experienced communication facility, with an operator conversant with ICS and Coast Guard jargon on-scene?

Group just called to report that their Op Center, in fact the whole island, is without electrical power! Who can provide backup radio coverage?

(continued on page 3)



Edwin J. Kroeker, DVC-OT
ekroeker@seaqueue.com

**DOES THE DISTRESS
BUTTON REALLY WORK?**

(continued from page 1)

You provide information about your boat (size, color, boat name, owner name, owner telephone number, etc) that is entered into a database. A new MMSI is assigned to you and your boat, and associated with your boat description. This MMSI number then needs to be programmed into your radio, following the radio manufacturer's directions. (Once you have your radio programmed with an MMSI, it should not be moved to another boat without a new MMSI).

When you transmit a message using the DSC feature of the VHF radio, that MMSI number is always used to identify the source of the message. So, if you push the DISTRESS button on the radio, the receiving stations not only know you need help, but can look up who you are, what color your vessel is, how big it is, etc.

Step Two: Our Location

The radio can only get position information from your GPS receiver. By connecting your GPS to the radio, rescuers will know where you were when the DISTRESS button was pushed.

Most marine GPS receivers have a data output, often labeled NMEA-0183. Your DSC radio has a data input that should be connected to that GPS output. For some GPS receivers, this might require purchasing a data cable with the right connector for your particular GPS. Your GPS manual and the DSC radio manual will tell you how to connect the two or three wires necessary.

Ready to Go!

So if you have a DSC-capable VHF radio, make sure that you get that MMSI number, make sure it is put on the radio, and lastly get your GPS hooked up to the radio. Safety is job number 1, and the tools have to be used correctly. Partial use of the tools can be worse than no tools at all.



**MORE CREW IN
TELECOMMUNICATIONS**

Edwin J. Kroeker, DVC-OT
ekroeker@seaqueue.com

The Telecommunications Division of the Department of Operations is pleased to announce the appointment of Daniel F. Amoroso as BA-OTU (Branch Assistant - Operations Telecommunication Utilization).

Dan (W3DI) has been an Auxiliary member for about 7 years, and in that time has become well known in the Auxiliary HF community. His activity as an amateur radio operator over 20 years has included serving as the Amateur Radio Emergency Service (ARES) Coordinator for Pennsylvania's Delaware County. He participates in Navy MARS with call nnn0abp.

A professional baker by trade (serving Philadelphia for over 40 years), Dan also serves his district (D5NR) as an ADSO-CM. He's been a Flotilla Commander, and has served on the national staff in the past.

Dan says "One of the exciting duties as an Auxiliarist has been to be part of the USCG Auxiliary Special Event Radio Day!"

(continued on page 3)

Everybody active in operations is urged to be familiar with how watchstanders are trained, the better to understand how your safety is remotely handled underway, in the air, or in a land mobile facility.

For Auxiliary watchstanders at Auxiliary Radio facilities, many parts of COMDTINST M16720.7A *Communication Watchstander Qualification Guide* are relevant. For the aviators, surface operators, and land mobile operators, Appendix H (and its references) of the Qualification Guide will be helpful in understanding how the watchstander on the other end of the radio has been trained to handle issues like lost communications.

Qualification Guide:

http://www.cgaux.info/g_ocx/publications/comdtinst/M16120.7A.pdf

Training Reference:

Telecommunications Manual COMDTINST M2000.3C

http://www.uscg.mil/ccs/cit/cim/directives/CIM/CIM_2000_3C.pdf

Both of these electronic documents are also available from your DSO-CM.

**Just
One More
in 2004**



WHO DO YOU CALL? THE AWO!

(continued from page 1)

In District Eleven, Northern Region, Coast Guard Search and rescue (SAR) Controllers, Station Officers of the Day (OD), Marine Safety Office (MSO) Dispatchers and others know exactly how to get what they need. They call the on-duty Auxiliary Watch Officer (AWO).



As most know, Auxiliary land-mobile radio facilities are eligible to be placed under orders just as our aircraft and vessels are eligible. Once dispatched to the scene of a SAR case, trained land-mobile radio operators can function within the Incident Command System (ICS) structure, represent Coast Guard interests in a multi-agency scenario, and perform other authorized on-scene coordination tasks. They can relay comms from and to state, county and local emergency services units not equipped with marine VHF-FM radios. The list goes on.

For years, Coast Guard units in D11-NR knew about Auxiliary land-mobile facilities, but were often hampered in their attempts to reach available Auxiliarists. Auxiliary members might have been at work, running errands or otherwise available, but unreachable by the Coast Guard unit. And there were always the issues of changed phone numbers, busy signals and full voice-mail systems. In short, the inability to reliably reach the land-mobile assets jeopardized the entire program.

Enter the Auxiliary Watch Officer program. A half dozen or so well-trained and highly experienced

Auxiliarists, intimately familiar with ICS, the Area of Responsibility (AOR) and the capabilities of a hundred or more land-mobile operators share the watch on a 24-hour basis to receive calls from Coast Guard units. They can dispatch the nearest, most appropriately equipped land-mobile units. Who has VHF direction finding gear? Who can access Auxiliary repeaters, and control their remote-base marine channels? Who knows the shortcuts to get somewhere quickly? Who has worked with the Civil Air Patrol, Fire Department, Sheriff's Office, Highway Patrol, Park Rangers and Fish & Game officers before? The AWOs are aware of these and other critical factors used to determine

which Auxiliary unit to call for a land-mobile response.

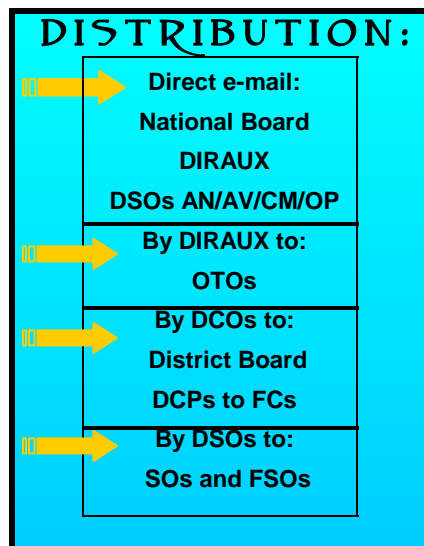
We often hear of Auxiliary land-mobile operators in other districts begging for assignments. One of the most common concerns for Coast Guard units is the "how to reach us quickly" question. The AWO program goes a long way toward eliminating that problem, making Auxiliary land-mobile support easy and effective for the Coast Guard.

MORE CREW IN TELECOMMUNICATIONS

(continued from page 2)

Dan can take credit for helping to organize nearly all of these events. Now, his role at the national level is to promote, encourage, and supervise sponsorship of Auxiliary special event radio stations throughout the Auxiliary telecommunications community as a means of promoting the Auxiliary to a national and international public. This is an enlarged role of what Dan has so ably accomplished in the past! In addition, Dan joins our HF Advisory Group to help direct and promote the future of HF communications within the USCG Auxiliary.

Dan can be reached at nnn0abp@navymars.org.



NATIONAL OPERATIONS DEPARTMENT

Program	Staff Member	E-mail Address
Department Chief	Linda A. Nelson	echopeep@ixpres.com
Deputy Department Chief	David Elliot	DC-Od@auxop.us
Aids to Navigation	George Pendergast	comodone@charter.net
Aviation	Robert Shafer	DVC-OA@auxair.us
Communications	Edwin "Ned" Kroeker	ekroeker@seaqueue.com
Surface Operations	Mark Simoni	mark@simonisystems.com
Education		
G-OCX Operations Division Chief; Aviation Branch Chief	LCDR Mike Staier, USCG	MStaier@comdt.uscg.mil
G-OCX Surface Operations Branch Chief	BMCM Glenn Wilson, USCG	GWilson@comdt.uscg.mil