

## Some Answers to the Most Frequently Asked DSC Questions

**D**igital Selective Calling (DSC) is one of those topics best understood at its most basic level. Digging into behind-the-scenes information can seriously muddy the waters. So, here, we offer a brief overview to cover the most frequently asked questions. More information can be found at the Coast Guard's Navigation Center website, [www.navcen.uscg.gov](http://www.navcen.uscg.gov).

• **WHAT IS DSC?** DSC's foremost purpose is distress alerting. With the press of a button, users can send a pre-configured distress message to emergency personnel and other DSC-equipped boats in range. The digital message is sent over channel 70 and contains pertinent information about the boat, its Maritime Mobile Service Identity (MMSI) number, owner details, and emergency contact information. When a DSC radio is connected to a GPS, the Mayday includes the boat's location. The transmission takes about one-third of a second and is automatically repeated until a rescue authority answers. Because the signal is digital, it has a better chance than a voice call of getting through in rough conditions.

A DSC transmission includes the priority of the call (distress, urgency, safety, routine), who the call is being sent to (all ships or a specific ship/station), and the transmitting boat's identity, location, and nature of distress. DSC also allows sailors to use their VHF radios like a cell phone for ship-to-ship and ship-to-shore communications, without interfering with VHF hailing traffic and without the limitations and cost of cell coverage.

• **WHAT IS AN MMSI NUMBER?** All boats operating on the high seas are assigned one nine-digit MMSI for all onboard equipment capable of transmitting and receiving digital signals—including EPIRBs, AIS transponders, DSC-capable VHF's, all INMARSAT satellite terminals, etc.—and that number serves as an identifier for the boat. Once a boat owner registers the vessel with the appropriate agency (the Federal Communica-

tions Commission in the U.S.), the boat's emergency contact information is linked to the MMSI number, which is then programmed into the onboard electronics. When a distress call is broadcast, the MMSI is included in the message, giving rescue and emergency personnel accurate details of the boat.

The FCC and Coast Guard strongly encourage all boats to apply for an MMSI to enable DSC use in the case of an emergency. With the Coast Guard's VHF-based Rescue 21 vessel ID system adding more and more stations, having the ability to send a DSC distress call will greatly increase a boater's chances of rescue.

• **HOW DO I GET AN MMSI?** For recreational boats operating in U.S. waters, boat owners can attain an MMSI through the FCC (888-225-5322, [www.fcc.gov](http://www.fcc.gov)) or another approved agency, such as BoatUS (800/563-1536, [www.boatus.com/mmsi/instruct.htm](http://www.boatus.com/mmsi/instruct.htm)), Sea Tow (800-4SEATOW, [www.seatow.com/boating\\_safety/mmsi.asp](http://www.seatow.com/boating_safety/mmsi.asp)), or the US Power Squadrons ([www.usps.org/php/mmsi/home.php](http://www.usps.org/php/mmsi/home.php)). However, all U.S. flagged commercial boats and those recreational boats operating in international waters must get their MMSI license directly from the FCC. You can start the process online by filing FCC Forms 159 ([www.fcc.gov/formpage.html#159](http://www.fcc.gov/formpage.html#159)) and 605 ([www.fcc.gov/formpage.html#605](http://www.fcc.gov/formpage.html#605)). If you think your boat may ever be sailing international waters, we suggest getting your MMSI from the FCC. Otherwise, a new MMSI will have to be attained from the FCC and entered into all onboard digital electronics before leaving U.S. waters.

• **WHAT DOES CLASS D MEAN?** Class D devices are marketed toward recreational boaters and other non-SOLAS regulated vessels. To be a Class D device, DSC equipment must be able to monitor channel 70 for DSC while still operating a working VHF channel and have other specified features.