

# BOAT CREW BASICS

## *A GUIDE FOR BOAT CREW CANDIDATES & MENTORS*

By: Bob Peterson, Coxn / QE / Air Crew, ADSO-OPT, D11 NR April, 2008

### “Operate a VHF-FM Radiotelephone”

Marine Radios have changed markedly over the years; from the crystal-controlled 5-watt designs of the 1970's to today's 25-watt frequency-synthesized, DSC-enabled “all channel” models that often incorporate NOAA WX broadcasts, loudhailers, intercoms, dual- and tri-channel watches, programmable memory-scanning and other handy features.

Before the 1960's, when VHF-FM designs were mandated for marine use by the FCC, heavy, space-consuming, power-hungry radios that operated on the MF-AM band (remember 2182 KHz) were the rule. Their size and lack of effective water-resistance often forced their installation below decks, even on flyingbridge-equipped boats, forcing the skipper to delegate most radio ‘comms’ duties to a crewman, with inevitable delays and problems in relaying comms info back and forth.

Today's Coxswains often operate the radio by themselves, eliminating the need to delegate this duty to a crewmember. Still, when things get dicey, especially in rough weather, a second pair of hands, to proficiently operate the radio, while the Coxswain cons the boat can save the day.

If you're unfamiliar with the make and model of radio fitted aboard the boat, you should examine it carefully and learn to operate all its controls. The balance of this article will discuss the key points you'll need to know.

Find the “On/Off” switch and see how it works; some rotate, some flip up and down, others push in and pop out. Many are combined with the receiver's volume control. Next, find the channel selector and use it to switch the radio to commonly-used channels, like 16, 06, 21, 22, 83, etc. The

default operating mode will advance the radio from one channel to the next in increments of one. But in “memory mode” the control may advance the channel to the next in the programmed memory.

Next you'll want to get the Squelch and Volume controls set. These two controls need to be operated together, since a high Squelch setting may remove all audio, preventing any adjustment of the volume control. Random radio frequency (RF) energy exists naturally up and down the radio frequency spectrum. Without a properly set Squelch control these naturally occurring signals will send a loud “hash” noise through the speaker. The Squelch control establishes an electronic threshold beyond which strong signals are received and broadcast and weak signals are ignored. Scanning radios won't scan if the Squelch control is not sufficiently advanced to throttle back this natural RF ‘noise’.

Pick up the microphone and note how its PTT (Press To Talk) button works. Unlike older mic's, with their large diaphragms, today's mic's often have a small pinhole into which your voice is input. It is easy to totally cover up this hole with your thumb or finger, all but eliminating your voice!

Find the Hi/Low power setting switch. When talking with nearby stations, the Low setting is often sufficient; most other times the High setting is used.

Commit the most-used Prowords and the Phonetic Alphabet to memory.

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