



Marine Communications

It's January and that means not only is your Amateur Radio Committee launching its first class for SYC members on January 7th – but the Boat Show soon follows – with lots of radios on display. What kind of radios should be on your boat? Since the specifications for radios vary widely we will discuss in

this article some of the functions for radios, what's important, and try to debug some of the radio lingo, QSL? – In radio talk QSL stands for “do you understand or – yes I understand” – the Q symbols are shorthand in Amateur Radio talk to speed communications – much like nautical signal flags. We'll discuss both types of radios, marine and Amateur and divide the discussion into a couple of functional headings, i.e. Emergency, Information, Point to Point, and Networking.

Emergency

A primary function of your vessel's radio is emergency communication. If you are having a problem and need assistance there is no better way to ask for help than keying up a marine VHF on Channel 16. This is far better than using a cell phone – even if you are in cell range. Using channel 16 will alert boaters in your vicinity and if you preface your message with Mayday, Pan-Pan, or Securite (pronounced ‘Securitay’ from French sécurité) depending upon the urgency – you will increase the probability of a quick response. To facilitate those that may be able to assist you – your location is important. The newer radios have location capability and will activate the “Rescue 21” system when it becomes available in our area (testing could be as early as 2006 for Puget Sound). This technology requires a connection to a GPS – but is probably a good idea if you are shopping for a new radio. For this function you want a signal as strong as possible, i.e. high power, high antenna. If you place your antenna on the top of your mast – don't forget to have a back up if your mast is damaged. Also, if you must “abandon ship” portable VHF radios are useful. For fixed mounted radios make sure that the power cables are anchored and connected as directly to the battery as possible. In addition, a small placard placed next to the radio with a description of the vessel and emergency radio procedures can be helpful. Other radios that can be useful in emergency are, EPIRBS and SSB (Single Side Band) if you are away from VHF coverage. Amateur Radio equipment can be useful in an emergency mostly for offshore use – or when we experience the next earthquake – although one time I was able secure a tow by contacting a fellow Amateur Radio boater on the B.C. Boater's net frequency using a portable hand-held transceiver.

Information

The most used information channels on VHF are probably the weather channels. On SSB there are also weather maps – but you need special equipment to read them – mostly used if you are going offshore. Another example of information use is the Amateur Radio 2m nets reporting local weather conditions as various boats “check-in” to the net. You don't need a license to

listen in on the nets – just a hand-held small portable Amateur Radio 2m transceiver. These transceivers start at about \$100 and can run up to a few hundred dollars depending upon features (Amateur Radio transceivers are mostly purchased through mail order so you won't find them at the boat show). Some of the newer units can receive from low frequency (.5 MHz) to very high frequency (1000MHz), bypass the cell phone channels, and can transmit on the Amateur frequencies. These handhelds could also be very useful in an emergency. If you have an Amateur Radio Technician license you can transmit on the nets, ask questions, inquire about location of other boaters, conditions at anchorages, etc.

Point-To-Point

Another function is point-to-point communication. For 1:1 a cell phone is probably the most useful – if you are in a cell phone coverage area. New generation marine VHF's have discrete calling channels – the ability to call just one other radio. Otherwise we are all familiar with calling another vessel on 16 and moving to a different frequency for a public conversation. If you have an Amateur Radio transceiver you can also contact another Ham operator by calling on one of the well known net frequencies most any time during the day or arranging a QSO (discussion) during the net check-in time.

Networking

Marine VHF does not have a networking capability. Although during an emergency you will hear a number of stations on the same frequency with the Net control being assumed by the Coast Guard. The Amateur Bands have many nets – some only for boaters, e.g. B.C. Boaters Net and the Northwest Boaters Net. Again, you don't need a license to listen, but you need a Technician license to transmit on 2m and a General license to transmit on SSB. The B.C. Boaters Net uses 2m and utilizes a number of repeaters depending upon your location. All that is needed is a 2m hand-held although a fixed transceiver with a high antenna can make a big difference. The SSB nets are on 75m and 40m locally and you will need a SSB transceiver, antenna tuner, antenna, and a good ground.

In summary, when thinking about radios for marine communications – think about what you would need for an emergency first – since besides flares and waving a paddle in the air – your radios are your most important tools to connecting to other boaters and assistance. The boat show will have lots of marine transceivers, but for Amateur Radio gear you will probably have to use the web or visit one of the many “swap and shops” for used gear. Some firms to search for with a search engine include ARRL (for info), Ham Radio Outlet (also has a store in Portland), and Amateur Electronic Supply (AES). At one of our future meetings we plan to have one of the major manufacturers represented to give equipment demos and answer questions for both marine and Amateur Radio.

W7SYC - For more information about the Seattle Yacht Club Amateur Radio Committee: send an email to radio@seattleyachtclub.org.73s

