Marine Communications by Day Chapin -





stories are on the ARRL site) have followed the over 125 mph winds of Hurricane Katrina. As we know from past experience, i.e., the last Seattle earthquake, cellular and landline telephone service is generally not available and Amateur Radio service can be very useful.

On the local front – there was a lot going on this summer in marine communications as a number of members were on the expanded two-meter network in addition to the 75-meter net. The two meter network with the linked repeaters seemed to work well as members were able to keep in touch from the San Juans, Gulf Islands, Georgia Strait, through Desolation Sound, to Port McNeil (I think all of the SYC Outstations were reachable by one or more of the linked repeaters details of the link system are in the June Binnacle). The BC Boaters Net operated this summer on the two-meter link. The net started at 5pm every evening and included not only the standard boat by boat net check-in but also a lot of additional information offered by operators on weather, information on where each boat was anchored, and intended cruise destination. Les, VE7GBT, and others, also offered detailed weather information and long-range forecasts that were appreciated by the boating community.

If you were able to listen or check in on the net you probably noticed that not all signals were easily readable, i.e., many transmissions were less than 5 by 9 in quality. The "5 by 9" comes from the RST system, which stands for Readability - Strength - Tone (tone is only used for CW - Morse code signals). The first "5" is signal quality - the second number "9" is the strength of the signal – 5 and 9 being the best). As we all know - having a radio is only one part of the system. The antenna and ground system are equally if not more important in both receiving and transmitting signals. If you are using a hand-held transceiver you are limited to a short stubby (rubber duck) antenna and no ground system (although you can sometimes plug in a fractional wave telescoping antenna). By connecting your radio to the boat with a ground and external antenna you can improve your signal dramatically. Ideally you could mount an antenna optimized for 2 meters, but you can also obtain good results by "sharing" your fixed mounted marine VHF antenna with your Amateur Radio transceiver since the

frequencies are very close. The two-meter Amateur Radio band is from 144 MHz to 148 MHz – the marine band is from 156 MHz to 163 MHz (Channel 16 Marine VHF is 156.8 MHz). One way to share the fixed mounted antenna is by installing a coax switch (to switch between the two radios). Most modern transceivers will effectively tune to an antenna that is not exactly the correct length. Using an SWR meter (available at marine stores and Radio Shack) will assist you in determining if the match is close (SWR stands for Standing Wave Ratio and is a measure of antenna efficiency).

Even though the frequencies are close, an important distinction does exist between Marine VHF and Amateur Radio VHF. When using the Marine channels you are talking to another boat directly (line of sight) on one frequency – there is no repeater. Amateur Radio services use repeaters, which are high power transceivers that receive signals on one frequency and then transmit back on another frequency (like a big amplifier). Repeaters are usually located on mountain tops (e.g., Salt Spring two meter Amateur Radio repeater) and can cover a wide area. In addition, the Amateur Radio operators on Vancouver Island have linked many of the Island repeaters so that you can effectively communicate with others throughout Georgia Straits and beyond.

Your SYC Amateur Radio Committee is beginning to plan programs and events for this next year and we would like your input on potential programs we might offer in addition to Amateur Radio licensing classes. Email any thoughts you have on programs to me at chapin@activesoft.net.

W7SYC - For more information about the Seattle

Yacht Club Amateur Radio Committee: send an email to radio@lists.seattleyachtclub.org. 73s



Around the Club.



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