## Marine Communications by Dan Schwartz



## All Comers Event: Marine Communications 101

One hundred and eleven years ago, Italian inventor Guglielmo Marconi began experiments at telegraphic communications without wires...i.e. wireless. After sending Morse code transmissions about the America's Cup races in 1897 from a ship 18 miles offshore of New York, Marconi next set his sights on trans-Atlantic radio communications, which he succeeded in demonstrating in December of 1901. Within a decade, ships were being fitted with wireless telegraph installations.

Amateur enthusiasts began experimenting with radio shortly after Marconi's first attempts at wireless communications and the hobby of "ham" radio remains popular today. Frequently, during natural disasters and emergencies, amateur radio operators provide the only reliable communications to first responders and emergency workers. Amateur radio operators who are also involved in boating have combined those two activities - to the enhancement of both. The longdistance communications capabilities of 'ham' radio equipment on a wide-ranging cruising yacht, has made keeping in touch from remote cruising grounds an attractive advantage to have onboard. Several nets are available to serve as contact and information points for cruising yachts, both along our coast and within the Inside Passage - as well as out into the far reaches of the Pacific.

Today, operating a vessel of any size without some sort of reliable radio communications equipment is almost unimaginable. Yet a rather bewildering array of options is available to boaters and the rapid pace of technology makes it hard to keep up!

On March 31st, the Seattle Yacht Club Amateur Radio Committee will present a brief and informative program titled "Marine Communications 101: Radios and Boats" from 19:00 to 21:00 in the Fireside Room. Experienced radio and yachting hands, as well as newcomers, will find some excellent resources for gaining further information in equipping their boats for reliable radio and wireless communications. A considerable number of SYC members enjoy the hobby of amateur radio and they are happy to share their experience with those who are just getting started in this fun and safety-enabling activity.

This program will introduce you to various options for radio communications from your vessel and to provide awareness of the resources within our Club for further information and assistance.

## **Brief Maritime Radio Timeline**

• 1912: The radio equipment on board the Titanic, built by the Marconi Company, was the state of the art at that time – with a guaranteed range of 250 miles under any weather conditions, and frequently usable over 400 miles. The antenna consisted of four wires strung between two masts, 205 feet above the ship's water line.

The senior wireless operator was 25-year-old John "Jack" Phillips. On the evening of April 14th, 1912, one of the first messages they received was sent from another ship, warning of ice. Several other reports were copied, and delivered to the Captain, but the Titanic continued to steam ahead at over 20 knots.

At 12:15 AM, the Titanic's wireless operators began sending "CQD MGY." ("General Call-Distress from the Titanic.") Later, Phillips began sending the new distress signal, SOS. The rest is well-known history. In the aftermath of this great disaster, the logical role for radio communications aboard ships was greatly expanded.

- 1920-1950: Radiotelephony emerged and the post-World War II technical revolution in solid-state electronics and miniaturization provided us the familiar VHF and single-sideband radio sets on virtually all of our yachts.
- 2000: Digital communications methods now permit data, text and image communications while at sea. Today other options such as satellite communications, cellular technology and Internet access are used by recreational and smaller vessels.

## What's Ahead At SYC?

The SYC Amateur Radio Committee is planning future events of a more focused nature. In coming months, we will arrange a speaker on access to weather information by radio, use of the popular 'two-meter' amateur radio repeaters while cruising, installing SSB equipment, and other topics of interest and utility to the wider Seattle Yacht Club membership. We will be glad to entertain any ideas for these sessions. Please e-mail our chair, Day Chapin at chapin@activesoft.net or Dan Schwartz at Schwartz@ocean.washington.edu with your suggestions.