

## Introduction to Charts - Capt Geoff

Charts have always fascinated me. There is the sense of exploring new territory, wondering about a secluded bay, or what it will actually look like when you enter an unvisited channel. One of the big draws for me is wondering about the people who did the surveying. Most of the original surveying was done with sextant and hand lead line by crews under oars or sail. Even now, outside of the main commercial routes, some of the information still comes from those original surveys.

Charts contain so much useful information, not just the water depths (check whether metric or fathoms and feet in the title block), but bottom type, currents, restricted areas and the like. Above the water level, aids to navigation, coastline type and much more information is available. To fit this all onto a chart, most of the information has to be condensed, using symbols, or abbreviations. The key to interpreting this information is contained in a booklet known as Chart No. 1.

Of course things change: docks are built or removed, occasionally new underwater dangers are found or created, such as a vessel sinking in shallow water. This information is generally first given out to the marine community in a "Notice to Shipping". Many notices to shipping are fairly short lived, such as a navigation buoy temporarily out of position, with the notice cancelled when the buoy is returned to position. Others are permanent, such as a new breakwater and become "Notices to Mariners".

Charts must be kept up to date by entering the permanent changes onto them. Sometimes it is also useful to enter the temporary changes that you should remain aware of, such as a temporary underwater hazard.

So where do you find these Notices to Shipping and Notice to Mariners? Current Notships are broadcast on Marine Radio. They can also be found on the Internet. Notices to Mariners can also be found on the internet. If you don't have internet access, you can arrange to have both NotShips and Notices to Mariners mailed to you.

While Notship lists cover the whole coast, for Notices to Mariners, you can look up corrections for a particular chart on the internet, a real timesaver. The first thing to check when updating your chart is that the edition is current (Web site will show chart number, name and edition date, which must be the same date as shown below the bottom left margin of your chart). New chart editions are not created very often, and only if major changes have occurred. Having confirmed we have the current edition, how do we know which corrections we need to make?

When you buy a chart, Canadian Hydrographics Services (CHS - the group that does surveys and maintains charts and most other publications) will likely have put some of the corrections on the latest reprint. These will be shown below chart edition date. There may also be a green stamp indicating further corrections along the lines of "Updated to June 2010". Any newer corrections need to be entered on the chart. The CHS website where you find the Notice to Mariners has instructions on how to make and record these corrections.

When using your up-to-date chart, you need to know more than what the abbreviations, symbols and colours mean. You also need to know how tide height affects the values you see for depths. (For example the symbols for a dangerous rock and a rock awash are quite similar, but the extra few feet of depth at datum may allow you to pass over one, but certainly not the other.) You also need to know how to find true and magnetic north, and how to plot a course. Once you have set your course, you need to know how to verify you are staying on track. If the terms above are confusing, you may want to consider a chartwork course or book.

For links to the Notices to Shipping and Notices to Mariners (which also includes a reminder that carriage and use of CHS's paper charts is a legal requirement), and other Boating Safety information, including details of Power Squadron's boating course, where basic chartwork is taught, please visit our website at <http://www.riplerocksquadron.com/>