

## **RTCM 10150.0 Standard for VHF-FM Portable Marine Radiotelephone Equipment with Digital Selective Calling (DSC) and Global Navigation Satellite System (GNSS) Location Function, July 5, 2012**

This standard specifies the minimum functional and technical requirements for VHF-FM portable marine radiotelephones, equipped with Digital Selective Calling (DSC), and Global Navigation Satellite System (GNSS) functions. These radios are intended to be used on small vessels which may not be equipped with a fixed radio installation. Their purpose is to provide basic distress and routine calling functions with a simple user interface to make them easy to use by persons who are not completely familiar with DSC radio operation. Since the envisioned user of these radios may not have access to accurate position and navigation information, the radio is equipped with a GNSS processor which is intended to encode a distress call with location information. Since users may not be familiar with DSC functionality, manufacturers that add additional functions not required under this standard, should strive to maintain a simple user-friendly interface. Class 1 and Class 2 radios must as a minimum include those DSC functions permitted for handheld Class D in ITU-R M.493 and may include additional DSC functions. These additional functions must also comply with ITU-R M.4931. Class 3 radios shall only include those DSC functions permitted for handheld Class D in ITU-R M.493. VHF Radios that meet this standard are divided into three classes:

Class 1 - A General Purpose radio designed for use on smaller vessels, but where it is unlikely that the radio will be dropped overboard, this radio will not float without additional buoyancy aids.

Class 2 - A General Purpose radio designed for use on small vessels, where it is possible that the radio may be dropped overboard, this radio shall float without any additional buoyancy aids.

Class 3- A radio intended to comply with IMO SOLAS requirements that could potentially be used in a Survival Craft in an emergency that may in due course become a part of the GMDSS, this radio shall float without any additional buoyancy aids.