



Conducting a Radio Operator's Test on board Vessels subject to 47 CFR Part 80, Subpart S or Subpart W

Purpose:

This guide is for testing and training the radio operator on using Digital Selective Calling (DSC) radios on **47 CFR Part 80 Subparts S and W** compliant vessels.

The Coast Guard (CG) marine inspector (MI) should not inspect radio equipment on board a vessel. That is the job of a third-party Federal Communication Commission (FCC) Technician. However, the CG MI should test the competence of the vessel's operator on the knowledge of their equipment.

Looking at **47 CFR Part 80 Subparts S and W**, the main objective appears to be that vessels carry radio equipment on board capable of sending a distress alert and communicate from ship to shore stations utilizing the radio equipment based on the route from the vessel's Certificate of Inspection (COI). This does **NOT** include the Emergency Position Indicating Radio Beacon (EPIRB).

Review:

The CG inspector shall review the vessel's FCC licenses and CG-issued COI, ensure they have the required equipment for their route and verify the FCC licensed operator(s) on board knows how to test and use it. Usually this will be VHF DSC for routes < 20 miles at sea, and VHF & HF DSC or approved satellite system for routes > 20 miles at sea.

Simulate a Distress Scenario:

Distance:

< 20 miles: for vessels endorsed on the COI for routes < 20 miles.

>100 miles: For vessels endorsed on the COI for routes more than 20 miles from shore.

Equipment: Verify that the vessel is equipped with the DSC Distress Alerting equipment required for the route on the COI and in compliance to **47 CFR Subparts S or W**, as applicable.

Nature of Distress: Abandon Ship is preferable, but not required.

VHF Demonstration: Have the vessel's FCC-certified operator send a test call by means of VHF DSC internally to other VHF radios on board, to another vessel, or to a local Coast Guard Station, as explained in [MSIB 20-20 Ch 1](#).

HF Demonstration (for vessels with routes beyond 20 miles or beyond Sea Area A1): Have the vessel's FCC-certified operator send a test call by means of HF DSC to a Coast Guard station on 4207.5 kHz or 8414.5 kHz using the CG's Group MMSI# 003669999 or a specific USCG Station MMSI# (e.g. New Orleans/NMG MMSI# 003669998 or Miami/NMA MMSI# 003669997).



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Note: *There may be a delay in receiving test confirmation from some HF DSC CG stations. However, DSC test calls on 4207.5 kHz will be automatically acknowledged from Portsmouth/NMN MMSI #003669995 and Reyes, CA/NMC MMSI# 003669990. The CG MI should consult with the USCG Communications Command (COMMMCOMM) watchstanders in their area for more guidance on testing confirmation procedures and frequencies.*

DSC Distress Button: Discuss with the FCC certified operator that during an actual emergency, the operator would simply lift the tab and press and hold the distress button on each DSC equipped radio for approximately 3 seconds or utilize the distress menu and follow the prompted instructions. **DO NOT TEST THE DISTRESS BUTTON!!**

EPIRB: Discuss the activation of the **EPIRB** during a distress situation. There should be no delay in the activation of the EPIRB once a distress situation is determined to exist with emergency assistance needed.

References:

[46 CFR Subchapters T \(SPVs\) \(Part 184, Subpart E-Radio\)](#)

[46 CFR Subchapter L \(OSVs\) \(§130.210 Radiotelegraph and radiotelephone\)](#)

[46 CFR 15.405 Familiarity with vessel characteristics](#)

47 CFR Part 80, [Subpart S \(SPVs\)](#), [Subpart U \(Bridge-to-Bridge\)](#) and [Subpart W \(GMDSS\)](#)

[47 CFR 80.5 Categories of ships](#)

[47 U.S.C 153 Definitions \(46\) Ship](#)

[47 CFR Part 80, Subpart D Operator Requirements](#) (All Stations)

[47 CFR 80.1073 Radio Operator Requirements for Ship Stations \(Subpart W\)](#)

[47 CFR 80.931 Test of Radiotelephone Installations \(Subpart S\)](#)

[47 CFR 80.1107 Test of Radiotelephone Stations \(Subpart W\)](#)

[47 CFR 80.409 Station Logs](#)

[CG MSIB 20-20 Ch.1](#), Performing VHF Radio Check

[CG NavCen's HF Distress and USCG Contact Frequencies](#)

[FCC's How to Conduct an Inspection of a Small Passenger Vessel](#)

74 SOLAS (2020), Chapter 1, Part B, Regulation 9 Survey of Radio Installations on Cargo Ships

[NVIC 3-99](#), GMDSS and EPIRB Equipment Requirements for Commercial Vessels

[COMDINST M16000.71](#), Section B, Chapter 1, M. Inspection of Radio Equipment

[COMDINST M16000.74](#), Section E, Chapter 2, K. Inspection for Manning Requirement
Exemption for Vessels with GMDSS