

April 12, 2011

The purpose of this license renewal is to provide training for mariner's seeking FCC licensing for GMDSS operator licenses. This 70-Hour course provides instruction on theory and usage of a GMDSS system. This course will also meet the Standards of Training, Certification, and Watchkeeping criteria issued by the United States Coast Guard as pursuant 46 CFR 10.205(n) and Table A-IV/2 of the STCW Code.

Classroom equipment consist of VHF, MF, HF, and IMMARSAT. Radio Telephone and Telex are also part of this system.

After completing the theory portion of the course, students will practice scenarios while utilizing this equipment. Students will be required to pass the Element 7 FCC exam.

Upon completion of the course, students must be competent in the following areas:

Competence	Learning Objective	Methods for Demonstrating Competence	Criteria for Evaluating Competence	Assessor's Initials	T/P
Power Up Unit	3.4.2	♦ Use approved equipment	♦ Unit is on and ready for programming		
Adjust Volume and Squelch Controls for Proper Operation	3.4.2	♦ Use approved equipment	♦ Demonstrate ability to properly adjust squelch		
Set Unit to a Channel Designated by the Evaluator	3.4.2 3.4.1	♦ Use approved equipment	♦ Set VHF to a channel as directed		
Set High and Low Power	3.4.2	♦ Use approved equipment ♦ Oral or written exam questions on proper use of power settings	♦ Demonstrate ability to set unit to high or low power ♦ Describe conditions and circumstances when low power should be used		
If so Equipped, Set Unit to Receive Local Weather Information	3.4.2 3.4.1	♦ Use approved equipment	♦ Demonstrate ability to set VHF to receive weather channel ♦ Demonstrate ability to select proper weather channel for local area		
Confirm is Position Input is Available and Correct	3.4.2	♦ Use approved equipment	♦ Demonstrate ability to confirm that unit is fitted with position data input (manual/auto)		
Transmit a Voice Call	3.1.2 3.1.3 3.4.2 5.2.1 5.2.2 5.2.3 6.2.2	♦ Use approved equipment	♦ Demonstrate ability to transmit voice call using correct power and channel as provided by instructor ♦ Makes appropriate log entry		
Understands Use and Limitations of MMSI	3.1.3 3.1.3 3.4.2 5.1.1	♦ Use approved equipment ♦ Written or oral question on changing MMSI	♦ Demonstrates ability to check that proper user MMSI is installed ♦ Describes to examiner the limits on types of MMSI that can be included.		
Ability to Program MMSI Directory	3.1.3 3.4.2	♦ Use approved equipment	♦ Program a nine digit MMSI and station name in unit directory		
Transmit a DSC Call	3.4.2 5.2.1 6.2.2	♦ Use approved equipment	♦ Transmit a DSC call to another unit designated by the examiner with answer on an appropriate channel ♦ Makes appropriate log entry		
Transmit a DSC Distress Alert	3.4.2 5.2.1 6.2.2	♦ Use approved equipment	♦ Using a DUMMY LOAD activate a DSC distress alert including position		

Transmit a DSC Distress Message	3.4.2 5.2.1	◆ Use approved equipment	◆ Using a DUMMY LOAD compose and transmit a distress message appropriate to the DSC distress alert required above		
Proper Response When a Distress Call is Received	3.4.2 5.2.1 5.2.2 5.2.3 6.2.2	◆ Use approved equipment	◆ Demonstrate to examiner the proper procedure for responding to a distress call on VHF		
Transmit an All Ships Call (Not Distress)	3.4.2 6.2.2	◆ Use approved equipment			
Understanding of Data Directory	3.4.2 5.1.1 5.1.2 5.2.1	◆ Use approved equipment	◆ Transmit a non distress all ship call using the proper protocol, power, and channel ◆ Make proper log entry		
Action to Correct False Alert	5.4.2	◆ Use approved equipment ◆ Oral or Essay Question Demonstrating Awareness of False Alert Procedures	◆ Describe actions to be taken to minimize the effects if a false distress alert is transmitted		
Ability to Secure Unit	3.4.2	◆ Use approved equipment	◆ Demonstrate ability to secure power to unit including delay times or sequences required		
Ability to Initiate and Properly Act on Results of Self Test	3.4.2 3.5.1	◆ Use approved equipment	◆ Initialize Self Test Program ◆ Analyze results ◆ Take appropriate action such as reporting to Master ◆ Print out or record test report results		
Knowledge of Unit Range	1.1.1 2.1.1 2.1.3 2.1.4 3.4.2 3.4.5	◆ Oral Exam or Written Essay on Subject Area	◆ Is able to describe to examiner the normal operating range of VHF unit and circumstances which increase or decrease range		
Power Up Unit	3.3.2	◆ Use approved equipment	◆ Unit is on and ready for programming		
Demonstrate How to Log In to a Specific LES and Ocean Region	3.3.2	◆ Use approved equipment	◆ Use keyboard to display the setup menu Select LES/CES from the available list and log in		
Demonstrate the Ability to Create a New Message	3.3.4	◆ Use approved equipment	◆ Using the main menu demonstrate how to create a message by preparing a message supplied by the examiner for transmission		
Demonstrate How to Save a New Message	3.3.4	◆ Use approved equipment ◆ Oral or written exam questions on proper use of power settings	◆ Using the INMARSAT Standard C Terminal, demonstrate how to properly name and save a message		
Demonstrate How to Print a Message	3.3.3 3.3.4	◆ Use approved equipment	◆ Demonstrate how to prepare the printer for operation including replacing ribbons and paper ◆ Using the keyboard, locate, select, and print a message designated by the examiner		
Demonstrate How to Enter a Mail Address Into Memory	3.3.4	◆ Use approved equipment	◆ Demonstrate how to access the address menu and enter an address name, destination, ocean region, and network ◆ Demonstrate how to save the entry ◆ Demonstrate how to select an address or name provided by examiner from memory		

Demonstrate How to Send a Telex Message to Another Terminal with Confirmation	3.3.4	◆ Use approved equipment	◆ Demonstrate how to enter the send menu and select a message specified by examiner to send ◆ Demonstrate how to select the correct address ◆ Transmit the message with confirmation option properly selected		
Demonstrate the Logout of a Coast Earth Station	3.3.2	◆ Use approved equipment	◆ Using the menu function select the setup option and then access the login/logout function and demonstrate how to log out		
Demonstrate How to View and Print Out the Transmit Log	3.3.3	◆ Use approved equipment	◆ Using the menu function select the logs menu and call up the transmit log. Select a message specified by the examiner and print out a hard copy on the printer		
Demonstrate How to View and Print Out the Receive Log	3.3.3	◆ Use approved equipment	◆ Using the menu select the logs menu ◆ Demonstrate how to display the receive log ◆ Demonstrate how to locate and print a specific entry or entire log		
Demonstrate How to View and Print Out the EGC Log	3.3.3	◆ Use approved equipment	◆ Using the menu select the logs menu ◆ Demonstrate how to display the ESC log ◆ Demonstrate how to locate and print a specific entry or entire log		
Demonstrate How to Locate Ship Position on Menu Screen and Confirm That the GPS Information Input is Active and Correct Within Unit	3.3.4	◆ Use approved equipment	◆ Demonstrate how to locate the position on the menu screen ◆ Indicate how the unit displays the current GPS position and how to determine if it is valid		
Describe How to Send a Distress Alert From the Unit.	5.3.2	◆ Use approved equipment	◆ Using A Dummy Load, set up and activate a distress alert		
Demonstrate How to Prepare a Distress Message Using the Menu System DO NOT SEND THE MESSAGE	5.3.2	◆ Use approved equipment	Using a or Dummy Load, set up a distress message using the menu system		
Demonstrate How to Prepare a Position Report	3.3.4	◆ Use approved equipment	◆ Demonstrate how to enter menu option and insert ID of receiving station		
Demonstrate Procedures to Mitigate a False Alert	5.3.2	◆ Use approved equipment	◆ Demonstrate or describe to the examiner the proper procedure to use to mitigate or cancel a false alert		
Demonstrate How to Enable and Disable the Units Polling Function	3.3.4	◆ Use approved equipment	◆ Demonstrate how to enter menu option and toggle yes/no for polling		
Demonstrate How to Locate a Remote Terminal IMN Using Appropriate Documentation	3.3.1	◆ Use approved equipment	◆ Using the satellite directory determine the proper ship IMN using vessel name		
Demonstrate How to View the Terminal's IMN From the Menu	3.3.4	◆ Use approved equipment	◆ Demonstrates how to use the menu options to display IMN		
Demonstrate How to Select a Navarea From the Menu	3.3.2	◆ Use approved equipment	◆ Demonstrate how to use the menu options to select desired Navarea		

Demonstrate How to Print an EGC Message From the Terminal's Memory	3.3.3	◆Use approved equipment	◆Demonstrate how to use the menu options to print the desired message from the memory		
Ability to Power Down Unit	3.3.2	◆Use approved equipment	◆Demonstrate ability to secure power to unit including delay times or sequences required		
Power Up Unit	3.4.1	◆Use approved equipment	◆Unit is on and ready for programming		
Adjust Volume and Squelch Controls for Proper Operation	3.4.3	◆Use approved equipment	◆Demonstrate ability to properly adjust squelch		
Set Unit to a Given Transmit and Receive Frequency Designated by the Evaluator	3.4.3	◆Use approved equipment	◆Set unit to XMIT/Receive Frequency for intended mode of operation and propagation conditions for scenario described by examiner		
Set High, Medium, and Low Power	3.4.3	◆Use approved equipment	◆Demonstrate ability to set unit to high, medium, or low power ◆Describe conditions and circumstances when low power should be used		
Ability to Use ITU Memory Function	3.4.3	◆Use approved equipment	◆Recall and make active an ITU channel pair from memory		
Properly Tune XMTR	3.4.3	◆Use approved equipment	◆Demonstrate ability to properly tune transmitter and antenna coupler to frequency specified by examiner		
Confirm Position Input is Available and Correct	3.4.1	◆Use approved equipment	◆Demonstrate ability to confirm that unit is fitted with position data input ◆If fitted demonstrate how to confirm data is present and correct		
Manual Position Input	3.4.1	◆Use approved equipment	◆Demonstrate how to input position manually		
Transmit Call Using Each of the Following: ◆RT ◆FEC ◆ARQ	3.4.3	◆Use approved equipment	◆Demonstrate proper selection of frequency pair from appropriate reference book for each mode ◆Properly set up transmitter and receiver ◆Use proper protocol, frequency, and procedure for time of day, range, and conditions ◆Make proper log entry		
Understands Use and Limitations of MMSI	3.4.1 3.1.3	◆Use approved equipment	◆Demonstrate ability to check that proper user MMSI is installed ◆Describes to examiner the limits on number of times that MMSI can be changed		
Able to Program MMSI Directory	3.4.1 3.1.8	◆Use approved equipment	◆Program a nine digit MMSI and station name into unit directory		
Ability to Transmit a DSC Call	6.3.3	◆Use approved equipment	◆Using the MF and HF equipment demonstrate the ability to place a DSC call to a station specified by the examiner		
Activate a Distress Alert	5.2.1	◆Use approved equipment	◆USING A DUMMY LOAD set up an activate a distress alert on a multiple frequency from the built in menu		
Initiate A Distress Relay	5.2.1	◆Use approved equipment	◆Using proper protocols, procedures, transmit a distress relay of an received distress alert using the conditions described by the examiner		
Transmit a Distress Message	5.2.1	◆Use approved equipment	◆USING A DUMMY LOAD draft and demonstrate how to transmit a distress message using proper terminology & procedures		

Acknowledge a Distress Message	5.2.1	◆ Use approved equipment	◆ Send an acknowledgment to a medium frequency distress message & explain its meaning		
Ability to Transmit an All Ships Call	5.2.3	◆ Use approved equipment	◆ Demonstrate how to set up and transmit an all ships call into a DUMMY LOAD		
Demonstrate Knowledge of Distress Data Directory	5.2.3	◆ Use approved equipment	◆ Access the distress data directory and retrieve the information		
Transmit an Automatic Distress Alert	5.2.3	◆ Use approved equipment	◆ Demonstrate and explain the use of the "Distress Button" on into a DUMMY LOAD		
Ability to Initiate and Properly Act on Results of Self Test	3.4.3 3.5.1	◆ Use approved equipment	◆ Initialize self test program ◆ Analyze results ◆ Take appropriate action such as reporting to master ◆ Print out or record test report results		
Enter Specified Transmit and Receive Frequency	3.4.3	◆ Use approved equipment	◆ Demonstrate ability to enter manually a transmit and receive frequency specified by the examiner		
Transmit a Non Distress All Ships Call	5.2.2	◆ Use approved equipment	◆ Demonstrate the ability to properly initiate and complete an all ship call with supplied text to ships within a specified area		
Compose a Message Using a Keyboard	6.3.4	◆ Use approved equipment	◆ Demonstrate the ability to correctly use the keyboard to compose and prepare a message		
Demonstrate Procedures to Mitigate a False Alert	5.2.1 5.4.2	◆ Use approved equipment	◆ Demonstrate the proper procedure to use to mitigate or cancel a false alert		
Demonstrate Complete Process of Executing a Normal Message to a Shore Station	6.3.3 6.3.4	◆ Use approved equipment	◆ Demonstrate the proper operational techniques to initiate, transmit and conclude a normal message to a shore station		
Understand the Relation of Frequency, Range, Power, and Time in Transmitting a Message	1.1.1 2.1.1 2.1.3 2.1.4 3.4.3 3.4.5	◆ Use approved equipment	◆ Is able to describe to examiner the normal operating range of MF/HF Unit and circumstances which increase or decrease range		
Ability to Power Down Unit	3.4.3	◆ Use approved equipment	◆ Demonstrate ability to secure power to unit including delay times or sequences required		
Knowledge of Unit Range	6.3.1	◆ Written Exam	◆ Describes the range to be expected in a given situation presented by examiner including time of day, distance to station, power, and frequency		
Power Up Unit	4.3.1	◆ Use approved equipment	◆ Unit is on and ready for programming		
Initialize Self Test	4.3.1	◆ Use approved equipment	◆ Initialize self test program ◆ Analyze results ◆ Take appropriate action such as replacing paper or reporting to master ◆ Print out test report results		
Program NAVTEX Receiver to Select or Reject Any Group of Stations	4.3.1	◆ Use approved equipment	◆ Demonstrate the ability to program examiner selected stations into unit		
Program NAVTEX Receiver to Select or Reject Message Types	4.3.1	◆ Use approved equipment	◆ Demonstrate the ability to program examiner selected categories into the unit		

Print Status Report of Selected/Rejected Stations	4.3.1	◆Use approved equipment	◆Demonstrate the ability to print out report of examiner selected station or category		
Identify the Transmitting Station	4.3.1	◆Use approved equipment	◆Demonstrate ability to identify station by character identifier using appropriate manual such as PUB 117		
Identify Message Category Within a Message	4.3.1	◆Use approved equipment	◆Demonstrate ability to identify message by character identifier using appropriate manual such as PUB 117		
Use Appropriate Reference Material to Determine NAVTEX Transmit Times in Designated Geographic Area	4.3.1	◆Use approved equipment	◆Demonstrate the ability to determine NAVTEX transmit times for examiner selected stations using appropriate reference materials such as PUB 117 or instruction for receiver		
Change Paper in Receiver	4.3.1	◆Use approved equipment	◆Successful replacement of paper and clearing of alarm condition		
Power Down	4.3.1	◆Use approved equipment	◆Demonstrate proper method of powering equipment off		
Demonstrate How to Place the Unit in the Test Mode	4.1.1	◆Use approved equipment	◆Demonstrate how to place unit in the test mode		
Explain the Results to be Expected in the Test Mode if Unit is Operating Properly	4.1.1	◆Use approved equipment	◆Demonstrate and describe the results of the test and how to use radio receiver to confirm operation		
Explain the Purpose of Float Free Operation and the Limitations That Result	4.1.1	◆Use approved equipment	◆Demonstrate and describe factors to be considered in mounting unit to make sure float free features function properly		
Describe the Appropriate Position to Mount an EPIRB on Ship	4.1.1	◆Use approved equipment	◆Describe in detail the proper mounting position		
Describe What Information an EPIRB Alert Delivers to an RCC	4.1.1	◆Use approved equipment	◆Correctly identify the data set delivered to the RCC		
Demonstrate How to Disable an EPIRB That is Generating a False Alert	4.1.1	◆Use approved equipment	◆Demonstrate how to stop unit from transmitting signals (disable unit)		
Describe All the Conditions and Actions That Must Be Accomplished in Order To Activate an EPIRB DO NOT ACITVATE	4.1.1	◆Use approved equipment	◆Demonstrate how to activate the unit manually and describe how the unit functions in automatic mode		
Describe How To Locate the Battery Expiration Date and Why It Should Be Recorded	4.1.1	◆Use approved equipment	◆Demonstrate location of battery and how to access to check battery date, describe service life of battery		
Demonstrate How To Deactivate the EPIRB	4.1.1	◆Use approved equipment	◆Demonstrate how to secure unit for storage or transport		
Demonstrate How to Activate the Unit For Use	4.2.1	◆Use approved equipment	◆Demonstrate how to activate the unit manually and set for proper operation when installed for automatic shipboard use		
Demonstrate How To Recognize When the Unit is Being Interrogated	4.2.1	◆Use approved equipment	◆Identify the location of and meaning of flashing light and buzzer		

Demonstrate How to Conduct a Test of the SART Unit	4.2.1	♦ Use approved equipment	♦ Demonstrate or describe to the examiner the use of the test switch and display on radar including which radar to observe		
Describe the Expected Results From a SART Unit Test	4.2.1	♦ Oral Question or ♦ Essay Exam	♦ Describe the 12 Dot Radar Display		
Demonstrate How to Locate the Battery Expiration Date and Discuss Why It Should Be Recorded	4.2.1	♦ Use approved equipment	♦ Locate the expiration date on battery and explain the replacement regulations		
Describe How To Properly Mount a SART in a Survival Craft	4.2.1	♦ Oral Question	♦ Describe to examiner the factors to be considered in mounting the unit. If using actual installation discuss placement and possible improvements		
Identify the Unique Signal Response on a Radar Screen Produced by a Interrogated SART	4.2.1	♦ Oral Question	♦ Describe 12 Dot display and its orientation of display in relation to the transmitter		
Describe the Appropriate Radar Settings When Searching for a SART Signal	4.2.1	♦ Oral Question	♦ Demonstrates understanding of requirement that rain and sea clutter controls (FTC and STC) must be set a minimum to see signal		
Describe the Significance and Use of the Lights and Audible Alarms on the SART	4.2.1	♦ Oral Question or ♦ Essay Exam (Preferred)	♦ Explain the significance of the Lights and Audible alarms		
Describe the Appropriate Locations to Stow a SART on the Vessel	4.2.1	♦ Oral Question or ♦ Essay Exam (Preferred)	♦ Describe the <i>REQUIRED NUMBER OF LIGHTS</i>		
Demonstrate How to Deactivate the Unit	4.2.1	♦ Use approved equipment	♦ Demonstrate how to secure the unit		
Demonstrate How to Power Up Unit	3.4.4	♦ Use approved equipment	♦ Successfully Powers Up Unit		
Demonstrate How to Determine That the Squelch is Properly Set and Operating Correctly	3.4.4	♦ Use approved equipment	♦ Using squelch control demonstrating how to adjust until the receiver background noise just stops		
Demonstrate How to Change the Frequency	3.4.4	♦ Use approved equipment	♦ Set unit to a channel designated by the examiner		
Demonstrate How to Transmit a Message to Another Unit	3.4.4	Use Actual Installation or ♦ Oral Question	♦ Demonstrate ability to locate and properly use the push to talk function to send a message using proper protocol for initial and subsequent contacts		
Discuss the Procedures to Properly Store the Portable VHF	3.4.4	♦ Use approved equipment	♦ If using actual installation describes factors which makes installation appropriate and suggests changes to improve ♦ If using essay describes the principle factors which should be considered in locating the stowage position for the unit such as stowage in path to L/B		

Demonstrate How to Determine the Battery Expiration Date	3.4.4 3.4.6	◆ Use approved equipment	◆ Demonstrate location of battery, and how to access (if possible) to check date or discuss procedure to follow if battery is not accessible ◆ Discuss issues to be considered in testing unit and requirements for testing including impact on battery life		
Demonstrate How to Secure (Power Down) the Unit	3.4.4	◆ Use approved equipment	◆ Demonstrate how to power down and properly secure after testing or use		