

**Summary Report for Individual Task**  
**551-8ST-8110**  
**Direct Sending and Receiving a Distress Signal**  
**Status: Approved**

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DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

**Condition:** Aboard a vessel, at sea, at anchor or moored alongside a pier, day or night, under all sea and weather conditions, using the INMARSAT-C Satellite Communications System (International Maritime Satellite), DSC Controller (Digital Selective Calling) and VHF/FM (Very High Frequency) DSC Transceiver while onboard an Army vessel.

**Standard:** The Soldier directs sending and receiving a distress signal using the vessel's Global Maritime Distress Safety System (GMDSS) in training or real emergencies to contact authorities or other vessels for assistance.

**Special Condition:** None

**Special Standards:** None

**Special Equipment:**

**Safety Level:** Low

**MOPP:**

<b>Task Statements</b>
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**Cue:** None

<b>DANGER</b>
None

<b>WARNING</b>
None

<b>CAUTION</b>
None

**Remarks:** None

**Notes:** None

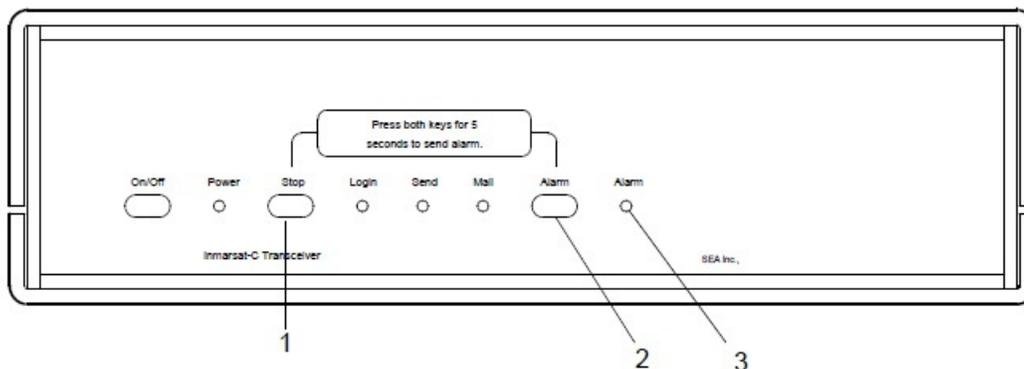
### Performance Steps

#### 1. Direct sending distress using the INMARSAT-C Satellite Communications System.

##### a. Send immediate distress message.

(1) Press the STOP (1) and ALARM (2) buttons on the transceiver simultaneously to send an immediate MARITIME DISTRESS (Figure 551-8ST-8110\_01).

Note: After you have sent a maritime distress you may send a set or detailed message

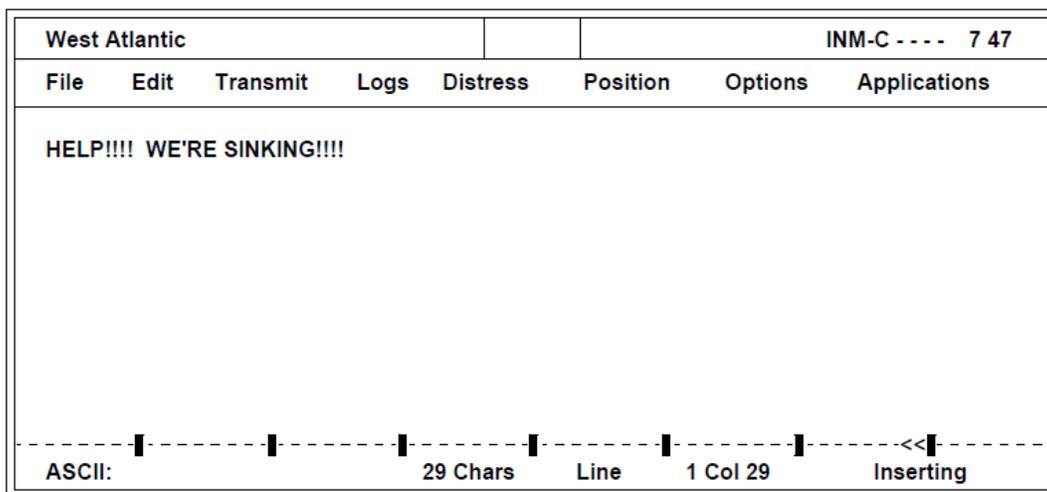


Transceiver  
Figure 551-8ST-8110\_01

(2) Hold buttons for at least 5 seconds until the alarm indicator (3) starts flashing (Figure 551-8ST-8110\_01).

##### b. Send detail distress message.

(1) Type the message in the TEXT field of the editor on INMARSAT-C data terminal.



INMARSAT-C Data Terminal  
Figure 551-8ST-8110\_02

(2) Choose TRANSMIT by pressing ALT and T.

(3) Press the TAB key to move the highlight one position to the right to the priority field '(\*) ROUTINE'.

Note: The address book may pop up while doing this. If the address field is empty, just select the first destination, as the address won't be used.

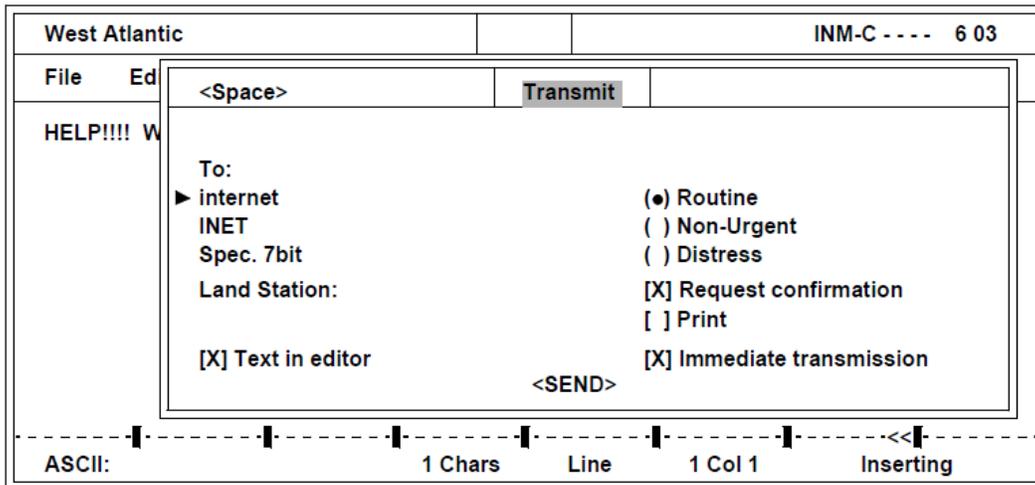
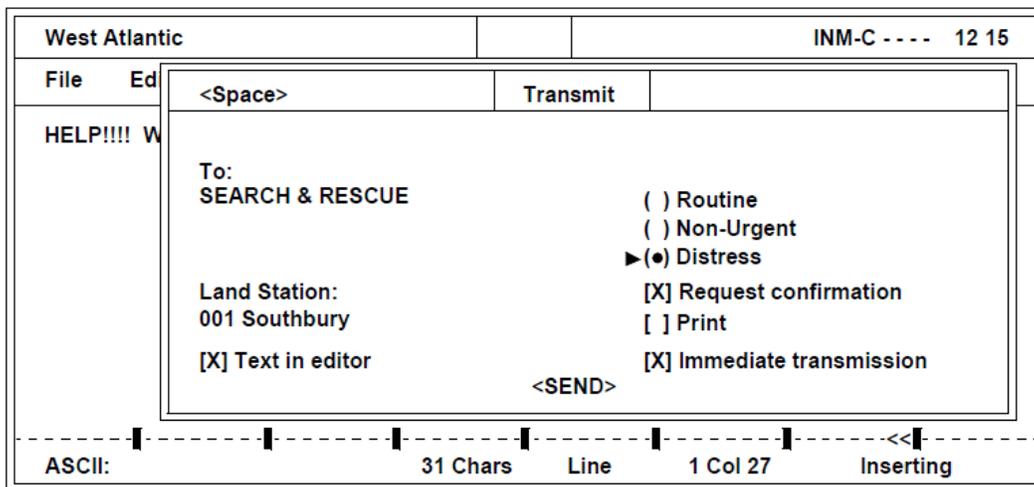


Figure 551-8ST-8110\_03  
INMARSAT-C Data Terminal

(4) Press the DOWN ARROW twice to ( ) DISTRESS and press SPACEBAR to select.

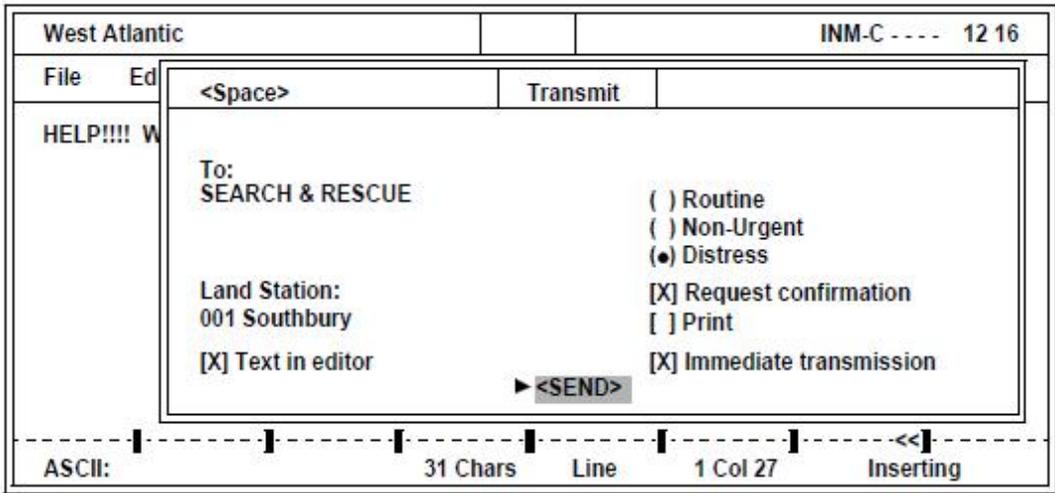
(5) Ensure the address field shows SEARCH & RESCUE.



INMARSAT-C Data Terminal  
Figure 551-8ST-8110\_04

(6) Press ENTER to move the highlight to SEND and press ENTER again to transmit.

Note: If the land station field is empty, the highlight will be positioned there instead. Press SPACEBAR to set the land station list and select a station. Once the station has been selected press the RIGHT ARROW key twice to send.

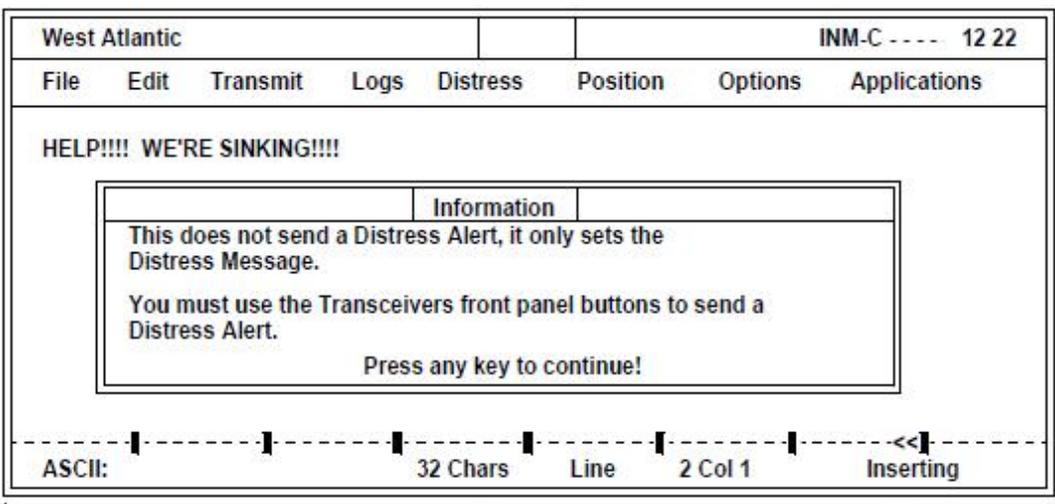


INMARSAT-C Data Terminal  
Figure 551-8ST-8110\_05

(7) Confirm the distress priority transmission by pressing ENTER.

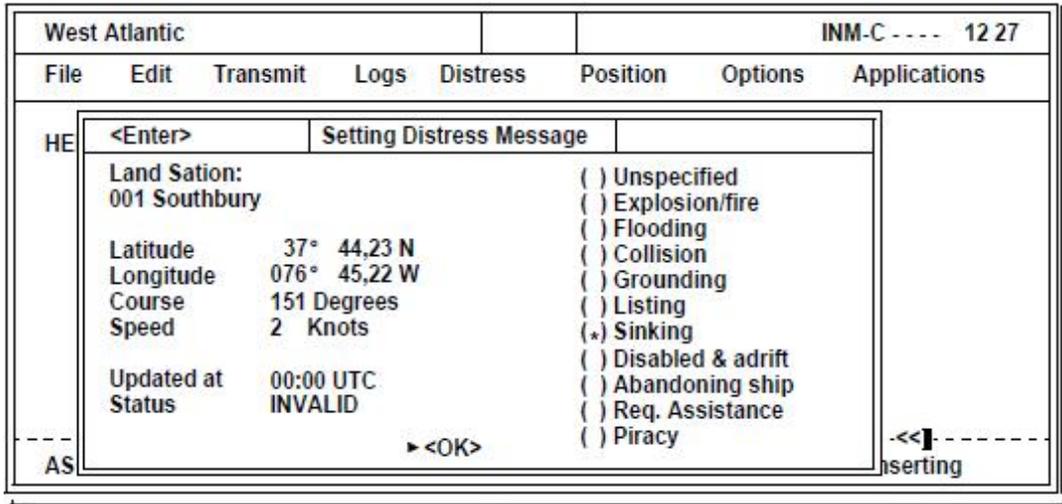
c. Send set distress message.

(1) Select the Distress Menu.



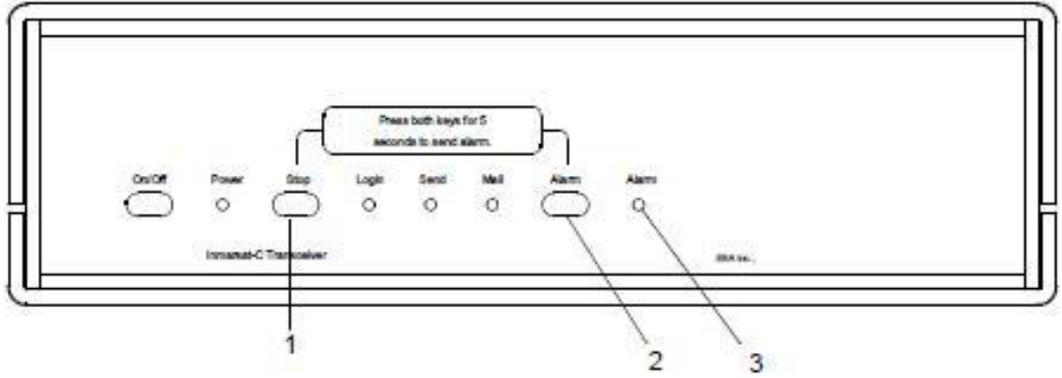
INMARSAT-C Data Terminal  
Figure 551-8ST-8110\_06

(2) View the Distress Message Dialog.



INMARSAT-C Data Terminal  
Figure 551-8ST-8110\_07

- (a) Edit the Land Station field, which will normally be filled in with the station that you used for your latest transmission, by pressing SPACEBAR.
  - (b) Enter your current position using the POSITION field if the status is INVALID.
  - (c) View the types available for Maritime Distress using the Nature of Distress field.
- (3) Press the STOP key (1) and ALARM key (2) buttons on the transceiver simultaneously for at least 5 seconds until the alarm indicator (3) starts flashing once the message is set (Figure 551-8ST-8110\_08).



INMARSAT-C Data Terminal  
Figure 551-8ST-8110\_08

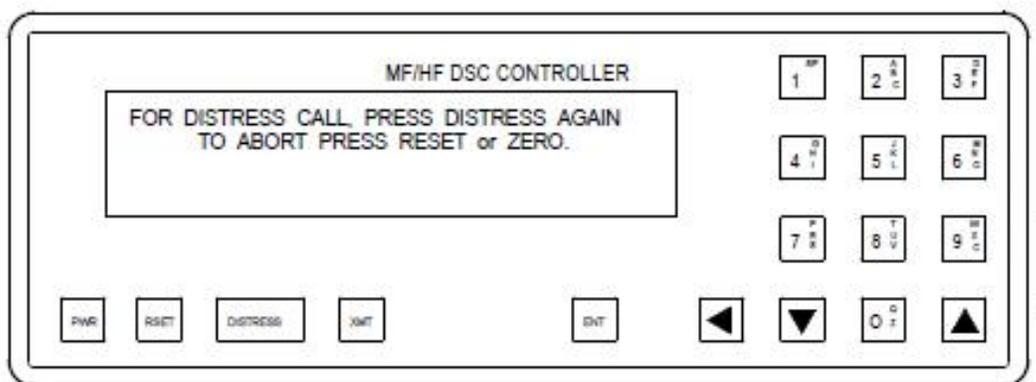
**WARNING**

2. Direct sending distress using DSC Controller.

## WARNING

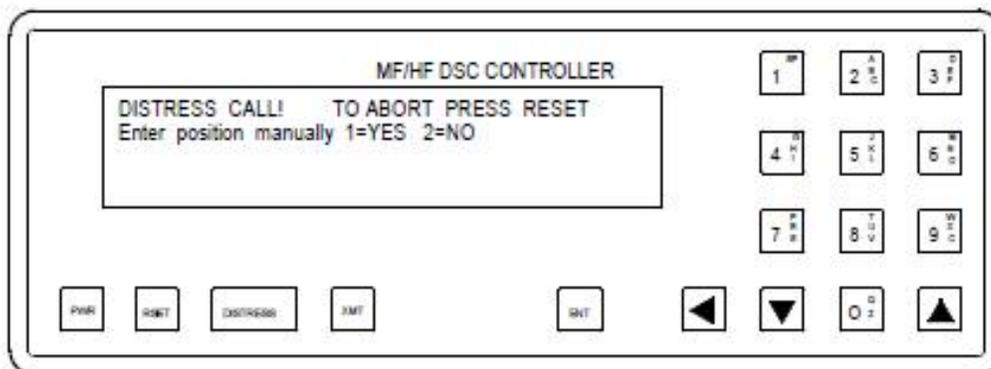
Do not attempt to send a distress using the DSC controller unless a MF/HF radio is installed. If a MF/HF radio is not installed, the distress will not be transmitted. Failure to follow this precaution could result in loss of life.

- a. Press the DISTRESS key.



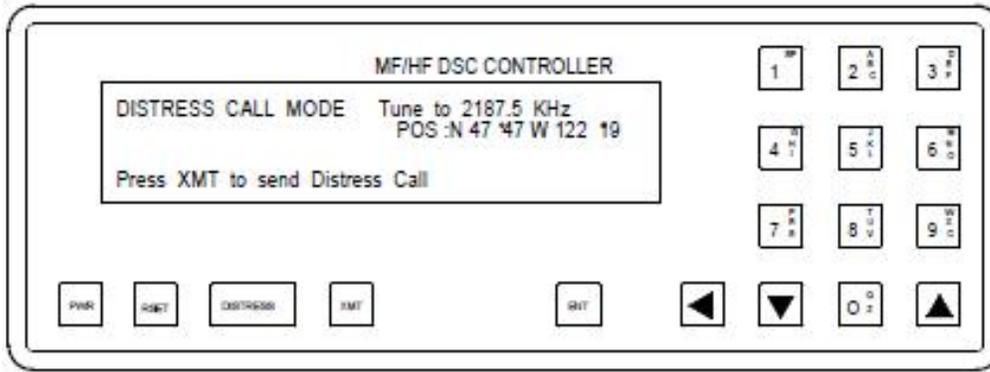
DSC Controller  
Figure 551-8ST-8110\_09

- b. Press O or RSET to cancel distress calling procedure if the DISTRESS key was pressed accidentally.
- c. Press the DISTRESS key a second time to enter Distress Calling mode if you wish to continue or the DSC controller will time out and return to its previous setting.
- d. Check to see if the PLGR has a valid position, it is read automatically and is required once the Distress mode has been activated.



MF/HF DSC Controller  
Figure 551-8ST-8110\_10

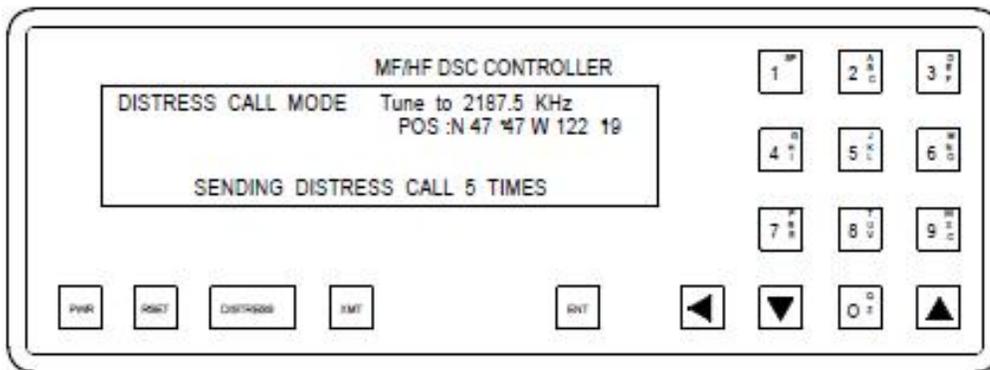
- e. Press 2 to indicate that you do not wish to enter your position manually. If the PLGR does not have a valid position, go to step 8 for instructions on manually entering a position.



MF/HF DSC Controller  
Figure 551-8ST-8110\_11

f. Press the XMT key to transmit distress call.

Note: Distress calls will be transmitted five times. Once the first signal has been sent, the DSC Controller will wait for an acknowledgement. Each consecutive distress signal will be preceded by a countdown.



MF/HF DSC Controller  
Figure 551-8ST-8110\_12

g. Press 1 if you wish to resend distress signal before the countdown time has elapsed.

h. Press 1 to indicate that you wish to enter your position manually.

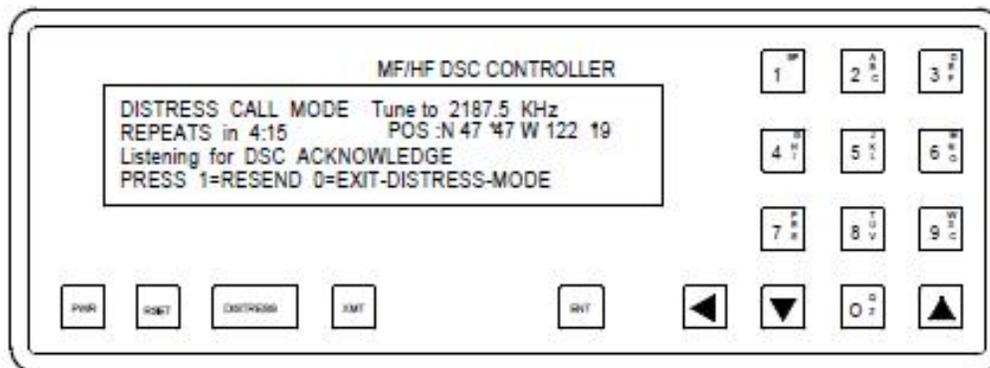
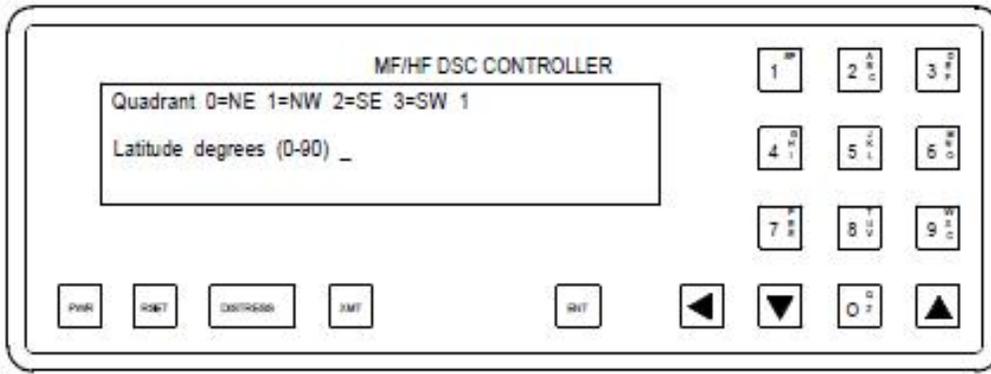


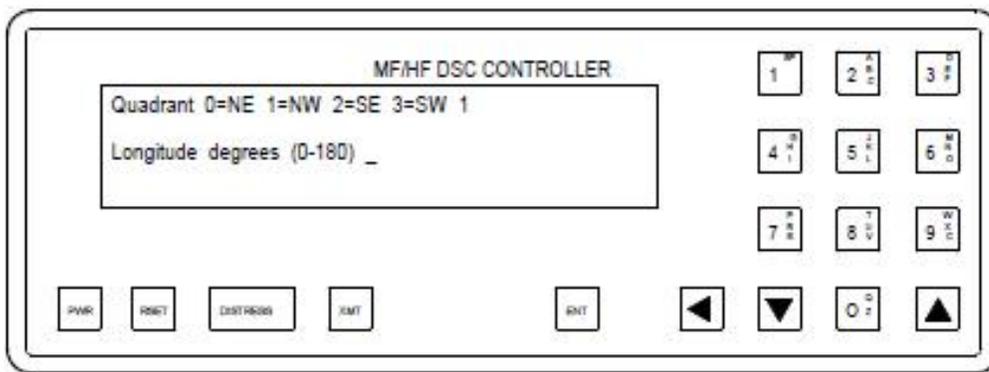
Figure 551-8ST-8110\_13  
MF/HF DSC Controller

i. Enter the quadrant, followed by degrees and minutes of latitude.



MF/HF DSC Controller  
Figure 551-8ST-8110\_14

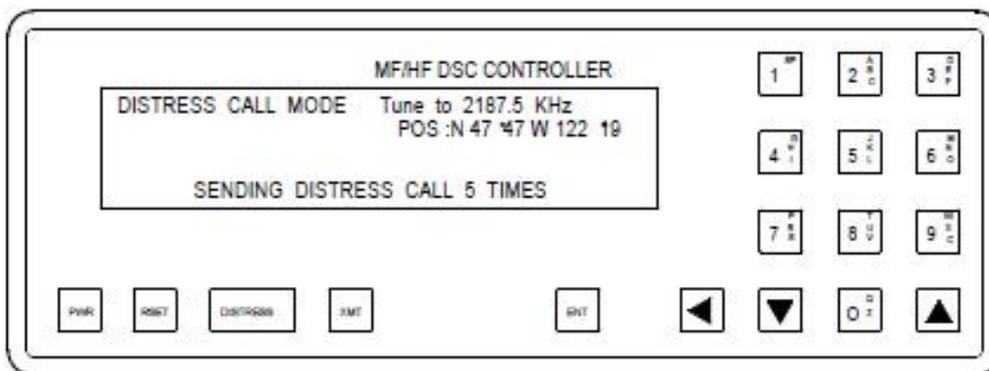
j. Enter the quadrant followed by the degrees and minutes of longitude.



MF/HF DSC Controller  
Figure 551-8ST-8110\_15

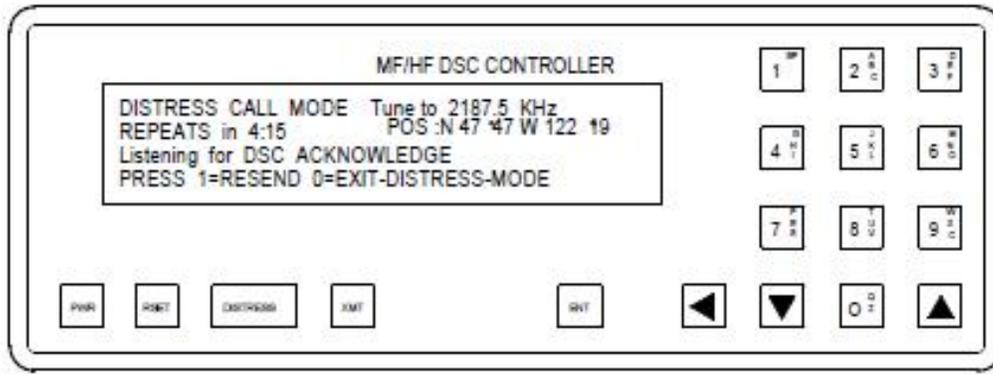
k. Press XMT key to transmit distress call once the position is entered.

Note: Distress calls will be transmitted five times. Once the first signal has been sent, the DSC controller will wait for an acknowledgement. Each consecutive distress signal will be preceded by a countdown.



MF/HF DSC Controller  
Figure 551-8ST-8110\_16

l. Press 1 if you wish to resend distress signal before the countdown time has elapsed.

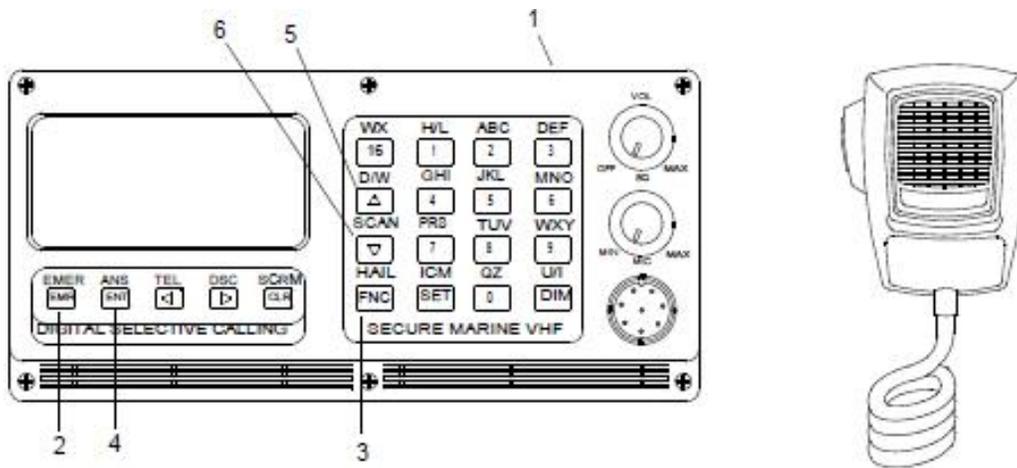


MF/HF DSC Controller  
Figure 551-8ST-8110\_17

3. Direct sending distress using the VHF/FM DSC Transceiver.

a. Use the EMERGENCY mode to send a distress call, which will automatically includes the vessel's DSC call sign and LAT/LON position and can be sent only if the PLGR is operational.

b. Press the EMR key (2) or press the FNC key (3) and the EMR key (2) to access the EMERGENCY functions of the VHF/FM DSC transceiver (1) Figure 551-8ST-8110\_18.

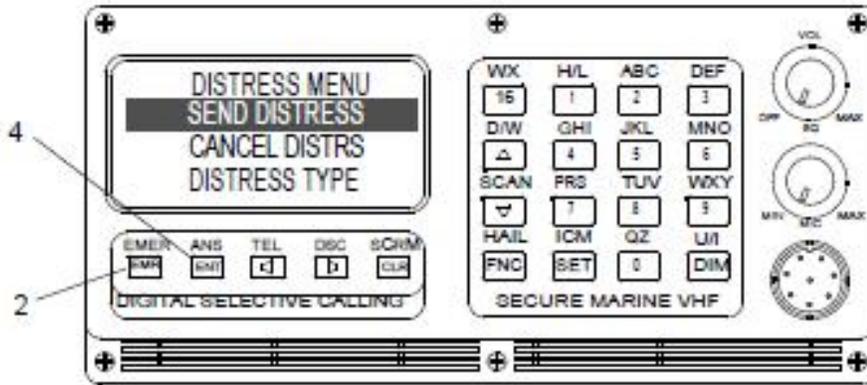


VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_18

c. Send distress.

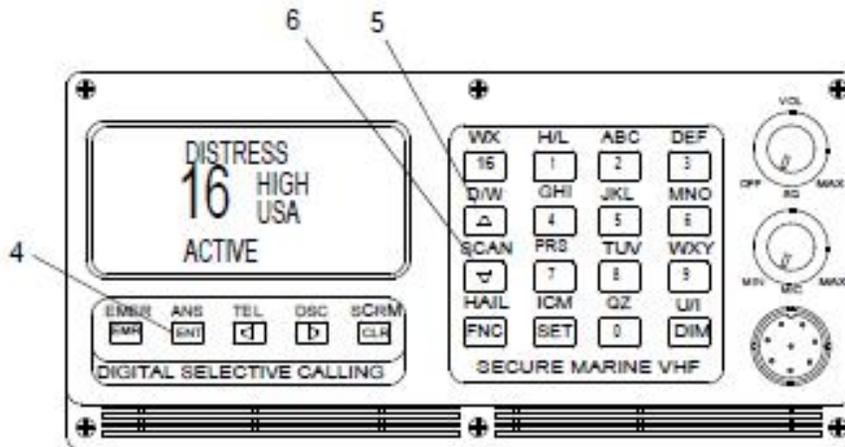
(1) Press the EMR key (2) to go to the DISTRESS menu and to access and send a distress call (Figure 551-8ST-8110\_19).

Note: The menu selection by default is the "SEND DISTRESS" option.



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_19

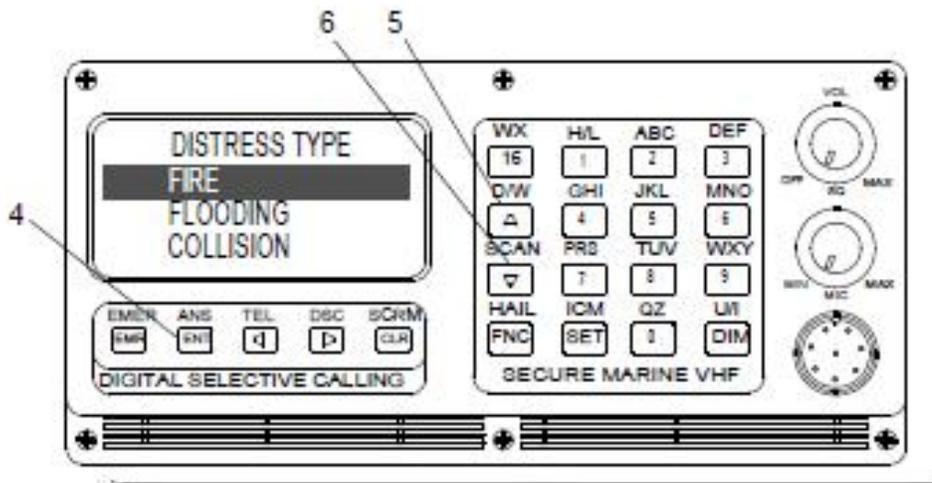
(2) Press and hold the EMR key (2) or the ENT key (4) for five seconds until the DISTRESS CALL is transmitted and the time on the countdown indicator on the bottom line has elapsed (Figure 551-8ST-8110\_19).



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_20

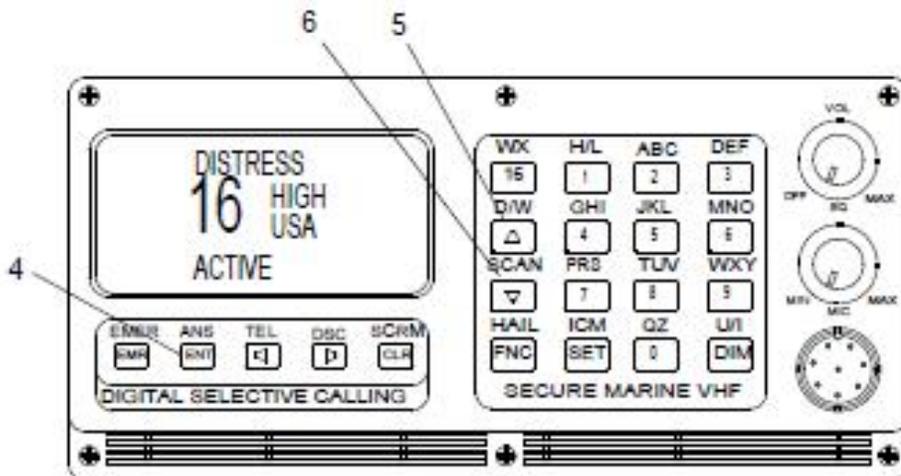
(3) Select the type of distress with UP ARROW key (5) or DOWN ARROW key (6) and press the ENT key (4)(Figure 551-8ST-8110\_21).

Note: If a DSC acknowledgement is not received from a shore station within two minutes, the distress call will be automatically repeated. Distress will continue to be rebroadcast every five minutes with an updated position until either acknowledged or cancelled. As a reminder that the EMERGENCY mode is active, the distress tone will sound for five seconds every thirty seconds.



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_21

(4) Ensure that DISTRESS appears in the upper line of the display and ACTIVE appears in the lower line while waiting for an acknowledgement.



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_22

(5) Press any key when acknowledgement is received, DISTRESS CALL ACKNOWLEDGEMENT PRESS ANY KEY is displayed and the distress call has been automatically cancelled.

(6) Select the LAT/LON ENTRY option from the main DISTRESS menu using the option from the main DISTRESS menu using the UP ARROW key (5) or DOWN ARROW key (6) and press the ENT key (4).

(7) Enter the latitude and longitude for the current position if the DSC CONTROLLER has no position from the PLGR and the screen is blank.

(8) Press the corresponding key where the alpha character is located to enter the hemisphere.

#### 4. Direct receiving distress using the INMARSAT-C Satellite Communications System.

a. Press the ESC key to remove the pop up box and accompanying beep on the INMARSAT-C data terminal EGC screen that indicates a distress signal has been received.

b. Remove automatic printout of distress signal from the INMARSAT-C printer.

## 5. Direct receiving MF/HF DSC Controller distress call

### a. Receive a distress message through the DSC controller.

Note: These procedures only apply if there is a MF/HF DSC Controller radio installed.

International rules state that the obligation to accept distress calls and messages is absolute in every case of every station without distinction and such messages must be accepted with priority over all other messages. All distress messages will be answered and the necessary steps immediately taken to give effect to them.

Coast Guard stations are much better placed to help as they have helicopters, lifeboats, hospitals and other rescue facilities at their disposal.

Always keep a pencil and notepad by the radio in case you receive a distress alert so you can write down the distress message.

When a DSC controller receives a distress alert it will sound an audible alarm. The alarm will continue to sound until a response is made.

- (1) Make no transmissions while waiting for acknowledgement and message.
- (2) Continue the watch on channel 16 until the distress alert has been acknowledged.
- (3) Plot the casualties position.
- (4) Write down the message transmitted on channel 16.

### b. Take the following action to acknowledge an alert from a vessel within range of the coast:

(1) Do nothing. Acknowledgements of a DSC alert by use of DSC is made only by coast stations and vessels fitted with Class A or Class B DSC controllers. If there is no response after a short interval, contact the coast guard and inform them of the distress situation. When the alert has been acknowledged, prepare for receiving the subsequent distress message. Finally, inform the master of the vessel of the contents of the distress message.

(2) If there is no response after a short interval, contact the coast guard and inform them of the distress situation. When the alert has been acknowledged, prepare for receiving the subsequent distress message.

(3) Inform the master of the vessel of the contents of the distress message.

### c. Alert from a vessel outside coastal communication range and outside your vicinity:

(1) Wait to see if another vessel, closer to the one in distress, acknowledges the call first.

(2) When the alert has been acknowledged, prepare for receiving the subsequent distress message. If no acknowledgement is heard, inform the master of the vessel of the contents of the distress message and follow the steps below:

(a) Acknowledge the distress as soon as possible. As there is no facility on a class D controller to acknowledge a distress alert by DSC, it will have to be done on channel 16 by voice.

(b) Follow the below procedures to transmit your acknowledgement of the distress alert:

**EXAMPLE OF TRANSMISSION**

**MAYDAY**

**NAME OR MMSI NUMBER OF THE VESSEL  
IN DISTRESS SPOKEN THREE TIMES.**

**"THIS IS"**

**NAME OF OWN VESSEL SPOKEN THREE TIMES.**

**"RECEIVED MAYDAY"**

**STATE THE ASSISTANCE YOU CAN PROVIDE.**

Example of Transmission  
Figure 551-8ST-8110\_23

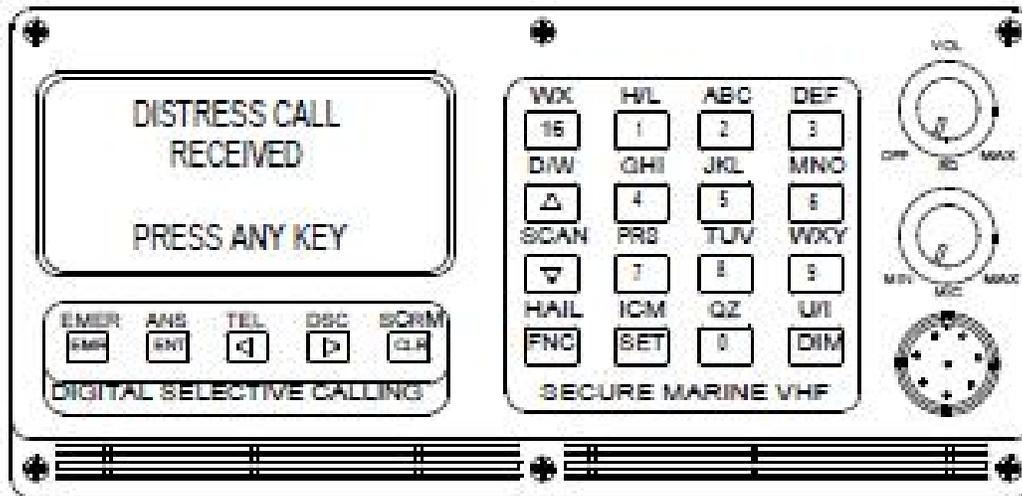
d. Alert from a vessel out of coastal communication range close by:

(1) The DSC distress alert cycle of five calls will take approximately 3 seconds and is repeated randomly at between 3.5 and 4.5 minute intervals. If your acknowledgement coincides with a DSC repetition, acknowledge as soon as it is finished.

(2) If you can render full assistance, ask the distressed vessel to cancel the DSC distress alert and inform the coast guard so that they don't assume the vessel has sunk.

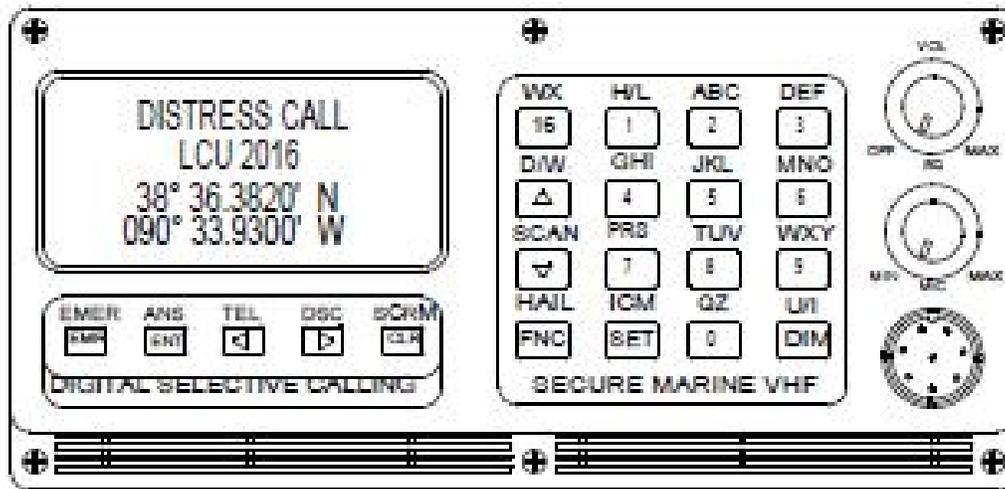
6. Direct receiving a distress using the VHF/FM DSC Transceiver.

a. Press any key when a distress is received, a distress tone is heard on the radio and the DSC CONTROLLER has defaulted to the distress display.



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_24

b. Ensure that the vessel position and identification appears in the DSC CONTROLLER display.

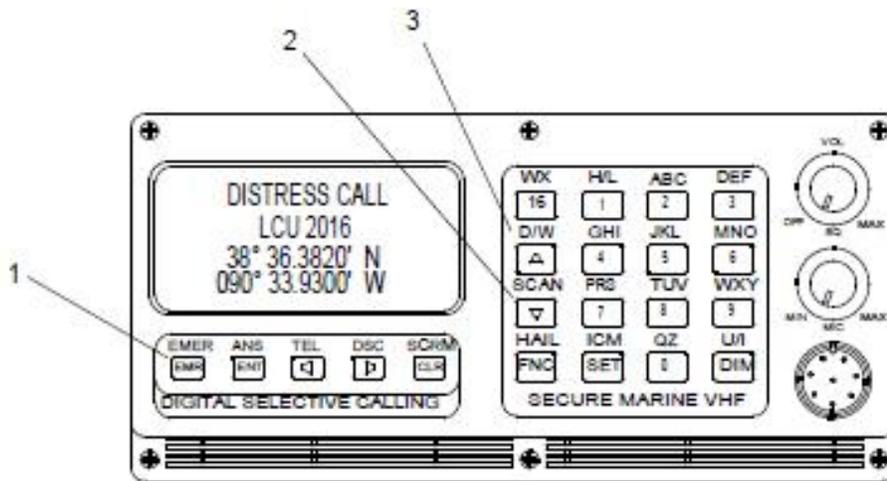


VHF/FM DSC Transceiver  
Figure-551-8ST-8110\_25

7. Acknowledge the distress call.

a. Press the EMER key (1) to acknowledge a distress call that the DSC CONTROLLER has received (Figure 551-8ST-8110\_26).

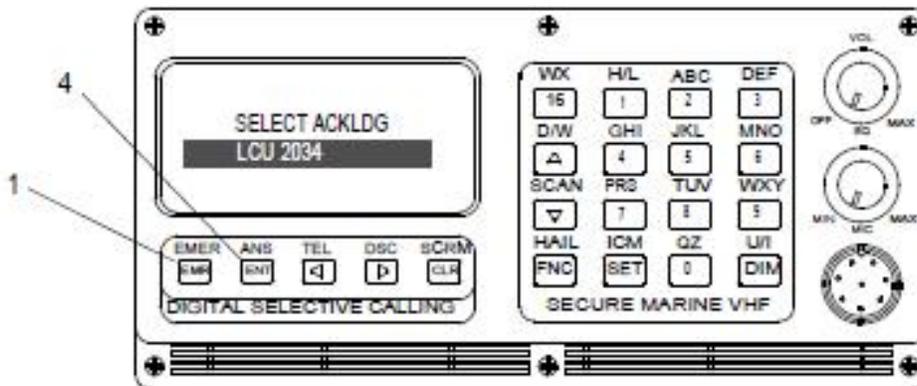
Note: A distress call cannot be acknowledged for the first 80 seconds after receiving the call. This allows time for shore base stations to respond to the distress call.



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_26

b. Select the DISTRESS ACK key option from the main distress menu with the UP ARROW key (2) or the DOWN ARROW key (3) and press the ENT key (4)(Figure 551-8ST-8110\_27).

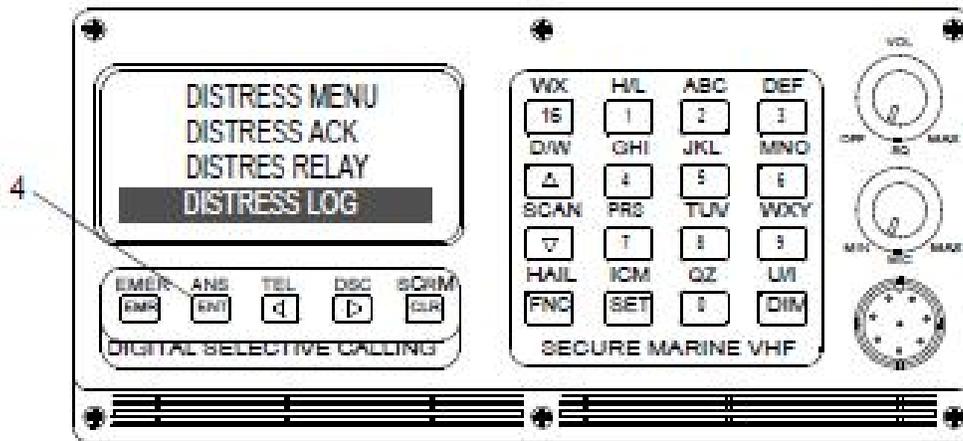
c. Select the distress log entry which corresponds to the distress call that is to be acknowledged and press the ENT key (4) (Figure 551-8ST-8110\_27).



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_27

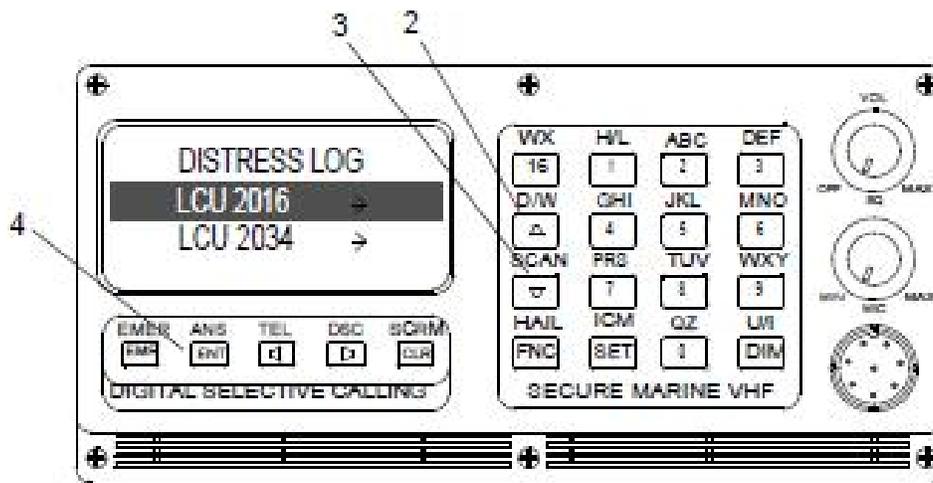
8. Log the distress call.

a. Select the DISTRESS LOG from the main distress menu and press the ENT key (4) to view the distress log (Figure 551-8ST-8110\_28).



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_28

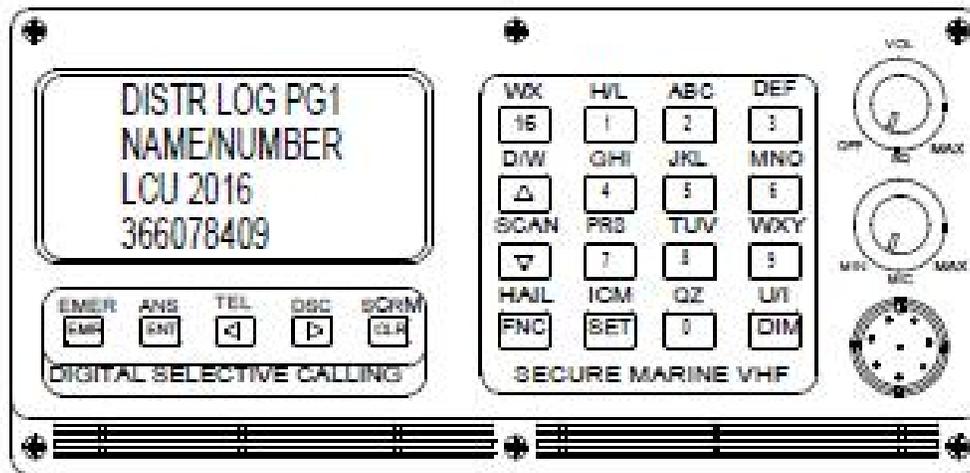
b. Select a name or DSC number from the log using the UP ARROW key (2) or the DOWN ARROW key (3) and press ENT (4) (Figure 551-8ST-8110\_29).



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_29

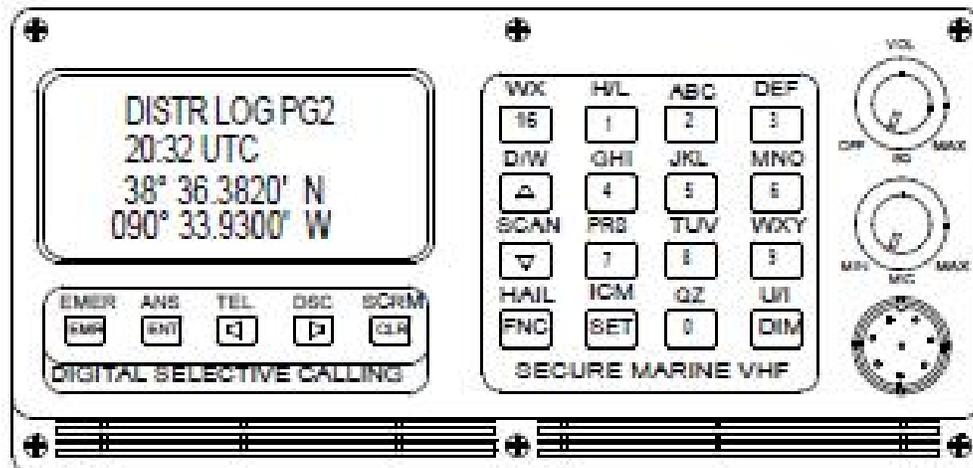
c. Use the RIGHT ARROW key (2) to move through the rest of the distress log pages (Figure 551-8ST-8110\_29).

d. View distress log page 1, if available, to learn the name and DSC ID number of the vessel that sent the distress call.



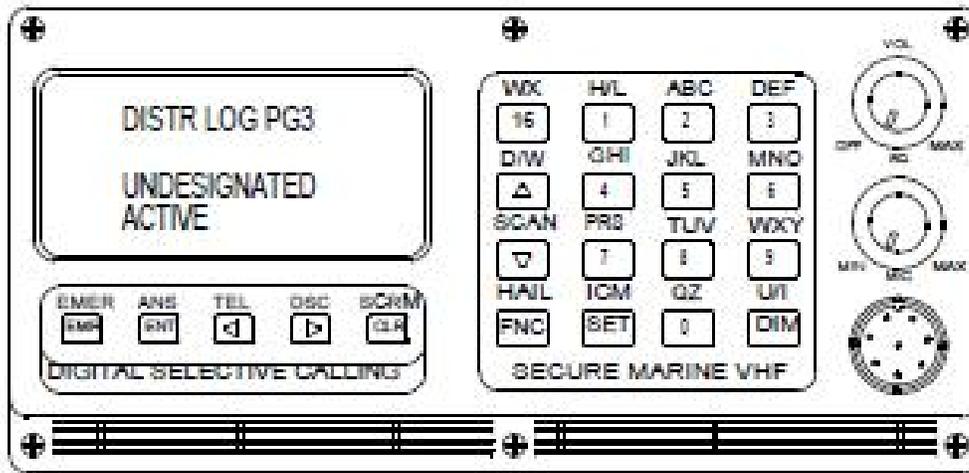
VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_30

e. View distress log page 2 to learn the latitude, longitude and time of position as received from the distress call.



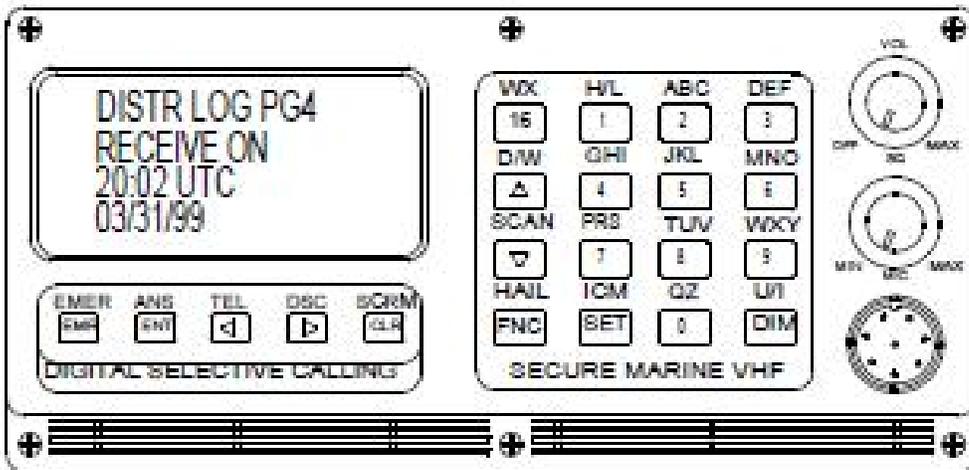
VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_31

f. View distress log page 3 to learn the status of the distress call, number of people onboard and the type of distress call.



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_32

g. View distress log page 4 to learn the name and DSC ID number of the station that acknowledged the distress call.



VHF/FM DSC Transceiver  
Figure 551-8ST-8110\_33

(Asterisks indicates a leader performance step.)

**Evaluation Preparation:** None

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Directed sending distress using the INMARSAT-C Satellite Communications System IAW TM 11-5895-1847-12P.			
2. Directed sending distress using DSC Controller IAW TM 11-5895-1847-12P.			
3. Directed sending distress using the VHF/FM DSC Transceiver IAW TM 11-5895-1847-12P.			
4. Directed receiving distress using the INMARSAT-C Satellite Communications System IAW TM 11-5895-1847-12P.			
5. Direct receiveing distress using MF/HF DSC Controller IAW TM-11-5895-1847-12P.			
6. Directed receiving distress using the VHF/FM DSC Tranceiver IAW TM 11-5895-1847-12P.			
7. Acknowledged the distress call IAW TM 11-5895-1847-12P.			
8. Logged the distress call IAW TM 11-5895-1847-12P.			

**Supporting Reference(s):** None

**Environment:** None

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :** None

**Supported Individual Tasks :** None

**Supported Collective Tasks :**

Task Number	Title	Proponent	Status
N/A	N/A	Not Selected	Obsolete