User Manual

Inmarsat C
Vox Maris is a technical training tool. It is a PC-based simulator to train sea-faring people in the use of GMDSS communications equipment, within a controlled and safe environment.

Vox Maris simulates the functionality of marine radio and satellite communications equipment according to the operational norms determined by The International Telecommunication Union. It also emulates real conditions of the marine radio communications such as noises, attenuation by distance in terrestrial and ionospheric propagation, and different types of sound effects from communication.
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Chapter I

Overview
1 Overview

Introduction

The Inmarsat C is a via satellite system that provides worldwide Telex and data transmission / reception of written information to owners of Inmarsat C transceivers or a terrestrial Telex network.

Inmarsat C fulfills the majority of the communications requirements of the GMDSS. Also, the system enables to send e-mail using internet. Thus, Inmarsat C is a very flexible system that can easily handle as much personal, commercial and operative messages as communications relative to distress and security.

Communication mode is store-and-forward Telex: A MES (Mobile Earth Station) transmits a message into packed data to a LES (Land Earth Station). The LES stores and remakes the packets, and finally transmits them to the designated party using national and international communication networks. In the opposite direction, messages can be sent to a Inmarsat C station or group of stations.

Inmarsat C provides the following satellite service for digital interchange of data through simple and economic portable terminals:

- E-mail and messaging
- Fax and Telex
- SMS text
- Remote monitoring / Tracking
- Chart and weather updates
- Maritime safety information
- Messages GMDSS for aid and security
- EGC messages: SafetyNET and FleetNET

Inmarsat-C terminals can receive multiple-address messages known as Enhanced Group Calls (EGC), and a special header is added to the text to indicate the group of mobiles or the geographical area to which the message is to be sent. EGCs can be transmitted in most languages or alphabets. There are two main types of EGC:

SafetyNET provides an efficient and low-cost means of transmitting maritime safety information to vessels at sea and is used by hydrographic, search and rescue, meteorological and coastguard co-ordination authorities. Messages can be directed to mobiles in or approaching specific regions such as one of the IMO NAV/MET areas or the sea area around a search and rescue incident.

FleetNET allows commercial information to be sent to a virtually unlimited number of predesignated mobile terminals simultaneously. It is suitable for use by services specializing in the distribution of news, stock exchange reports, sporting results, weather analyses, and road/port information.

Maritime Inmarsat-C terminals are equipped with a distress-alerting feature which,
in the event of an emergency automatically generates and sends a priority distress alert, incorporating position and other information, to a land-based rescue co-ordination center (RCC)

**Inmarsat Coverage Map**

There are four Ocean Regions covering the world each with its own operational satellite.

Atlantic Ocean Region East (AOR-E), Inmarsat-3 F4 satellite at 54,0° W
Atlantic Ocean Region West (AOR-W), Inmarsat-3 F2 satellite at 15,5° W
Indian Ocean Region (IOR), Inmarsat-3 F3 satellite at 178,0° E
Pacific Ocean Region (POR), Inmarsat-3 F1 satellite at 64,0° E

The Inmarsat C system consists of the Operation Control Center (OCC), Satellite Control Centers (SCC), four Network Coordination Stations (NCS) (one for each ocean region), Land Earth Stations (LES) and Mobile Earth Stations (MES). The OCC, located at Inmarsat's London headquarters, coordinates a wide range of activities in the Inmarsat system, including commissioning of mobile earth stations.

Transmission and reception of signals are co-ordinated by network co-ordination stations (NCS). Each NCS monitors the flow of communications traffic through its satellite to ensure that calls are correctly set-up and that all LESs are working correctly.
Types of MES

There are three types of MES: class 1, class 2 and class 3. The device simulated by Vox Maris is a class 2 MES.

Class 1:  1) Transmits messages to LES
         2) Receives messages from LES

Class 2:  1) The functions of class 1 plus operation as an EGC receiver when not transmitting or receiving.
         2) EGC-only receiver

Class 3:  The function of class 1 plus simultaneous operation as an EGC-only receiver.
Chapter II

Operational overview
2 Operational overview

The terminal unit is the main component of the system, creating, transmitting and receiving messages.

*Turning the power on/off*

Press the [POWER] switch to power or turn off the terminal unit

*DISTRESS button*

Use the [DISTRESS] button to transmit the distress alert when there is a life-endangering situation in your ship.
Floppy disk drive, floppy disks

The terminal unit provides a floppy disk drive for storing transmitted and received messages on floppy disks. The floppy disks used with the system are 2HD (1.44 MB) and 2DD (720 KB).

Note: Vox Maris enables to work without a floppy. To do this, run the Configurador.exe application and specify a Windows folder for storing messages. Such folder will act as the root directory of the floppy disk.

Audio alarm

The audio alarm is released in the following instances:

- Telex / e-mail received: Yes
- Distress acknowledge received: Yes
- EGC message received
  - Distress: Yes
  - Urgency: Yes
  - Other: NO

Keyboard

The terminal is almost 100% keyboard controlled. The main keys are the Esc key and the function keys. The other keys work of way similar to those of a computer.

- Esc: Cancels key input and return to previous display screen
- F1: File Menu (processes files)
- F2: Edit Menu (provides text editing facilities)
- F3: Transmit Menu (transmits messages)
- F4: EGC Menu (Sets up EGC message facilities)
- F5: Reports Menu (Sets up data/message reporting function)
- F6: Memory Menu (Displays sent and received message logs)
- F7: Options Menu (Login/Logout and other features)
- F8: Setup Menu (Sets up the system)
- F9: Position Menu (Enter ship’s position manually)
- F12: Stop Alarm (Silences audio alarm)

Display indications
The display is divided in three sections:

A) The working area
B) The function menu area
C) The operating status area

Below are the indications and meanings of the items in parentheses of the illustration above.

(1) Distress alert information message

No display: (no distress alert)
Sending Distress Alert
Sending Distress Alert Test
Distress Acknowledgement Received
Distress Message Call Activated
Distress Message Call Acknowledged
Distress Button Test Mode

(2) Communication network mode

No display: Normal operation
Restoration Mode (flushing): Problem at NCS
Restoration Mode (Reverse video): Previously designated LES is transmitting the NCS common channel signal.
(3) Terminal unit status

**IDLE:** Idle (awaiting receiving, awaiting transmitting)
**IDLE (PENDING):** Awaiting reply from LES
**SENDING:** Sending
**RECEIVING:** Receiving
**LOGIN:** Logged in with NCS
**LOGOUT:** Logging out with NCS
**DISTRESS ALERT:** When own vessel is transmitting the distress alert
**Data Report:** Sending data report
**TESTING:** Performance Verification (PV) testing
**TEST SETUP:** Requesting PV testing
**SCANNING NCS:** scanning
**EGC RECEIVER:** EGC-only receiver operation
**Delivery Status Req.:** Transmitting delivery status request
**Forced Clearing:** Stopping receiving, transmitting, or scanning

(4a) Communication status

**CALLING:** Now calling
**WAITING FOR ACKNOWLEDGEMENT:** Waiting for acknowledgement from LES.
**RECEIVING EGC MESSAGE:** Now receiving EGC message
**WAITING FOR BACKOFF:** Waiting to transmit data report
**Successful Login:** Login was successful
**Login failed:** Login failed
**Successful Logout:** Logout was successful
**Logout failed:** Logout failed
**Successful Distress Alert:** Distress alert successfully transmitted.
**Distress Alert Failed:** Distress alert could not be transmitted.
**Successful Forced Clearing:** Forced clearing successful
**Forced Clearing Failed:** Forced clearing unsuccessful
**SENDING MESSAGE PACKETS:** Sending TX message packets
**WAITING FOR ACKNOWLEDGEMENT:** Waiting for acknowledgement from LES
**Successful sending to LES:** Message successfully sent to LES
**Sending message failed:** Message could not be sent to LES
**Call rejected:** LES rejected your message
**Call pending:** LES temporarily suspending communications
**Received Call:** Call received from LES
**Received Call(ITA2):** Call(ITA2) received from LES
**RECEIVING MESSAGE PACKETS:** Receiving message packets
**CLEARING:** Clearing TX sequence
**Successful receiving:** You successfully received message
**Receiving failed:** You could not receive message
**Successful Data Report:** Data report successfully sent.
**Data Report failure:** Data report could not be sent.
**PV TEST CALL is rejected:** PV test call rejected by NCS
**PV TEST CALL is pending:** PV test pending by LES
**TEST-RECEIVING MESSAGE:** Receiving test message from LES
**TEST-SENDING MESSAGE:** Sending test message to LES
**TEST-DISTRESS ALERT:** Sending test distress alert to LES
WAITING FOR ACTIVATION: Waiting start of PV test
WAITING FOR TEST RESULT: Waiting for results of PV test
CLEARING: Clearing PV test
PV TEST is Completed: PV test is completed.
PV TEST Failure: PV test failed.

(4a) Version

Program Version number

(5) Frame synchronization

Blank: Changing channel, or during transmission
SYNC (NCS): Synchronizing with NCS
SYNC (LES): Synchronizing with LES
MES Sig. Ch: Changing MES signaling channel
MES Msg. Ch: Changing MES message channel
UNSYNC: Out of synchronization
Retuning: Synchronizing with NCS or LES

(6) Ocean region receiving

No display: Out of synch with satellite
AOR-W: Atlantic Ocean Region-West
AOR-E: Atlantic Ocean Region-East
IOR: Indian Ocean Region
POR: Pacific Ocean Region

(7) Logging status

LOGOUT: Logged out with ocean region
LOGIN: Logged in with ocean region

(8) Other information

No display: No receive message in memory, or printer is operating.
REC. MESSAGE EXISTS (Reverse video): Displayed when a routine message has not been printed, or a confidential message is received.
Data Report (Reverse video): When data reporting is activated.

(9) Date and time display

With connection of a navigator (internal GPS navigator or external navigator), date and time (received from satellite) are displayed. Manually input date and time are also displayed.

(10) Ship's position

With connection of a navigator (internal GPS navigator or external navigator), ship's position is displayed in latitude and longitude and updated every 30 seconds, or manually input position is displayed.
Chapter III

System Initialization
3 System Initialization

This chapter provides the information necessary for initializing the Inmarsat C unit. Once the equipment is initialized, you need do no more than press a few keys to get fully automatic transmission and reception.

Inmarsat assigns an MES an Inmarsat Mobile Number (IMN) when it applies for Inmarsat registration. The IMN is necessary to communicate in the Inmarsat system. It is entered into the terminal during the installation.

3.1 System settings

System setup

The System Setup menu provides a way for input of date, time, operating mode, and port function.

1. Press the [F8] key to choose the Setup menu.

```
Set up
1. Distress Alert Setup
2. System Setup
3. Editor Setup
4. Terminal Setup
5. EGC Setup
6. AutoMode Setup
7. E-Mail Setup
8. Directories
9. Configuration
```

2. Press the [2] key to display the System Setup menu.

```
System Setup
System Date _Time 06-12-01 12:09
IMN 423213213
MES Operation Mode INMARSAT-C
Nav Port EXT
Active Port INT
Message Output Port INT
EGC Output Port INT
Network Setup NONE
Command Window Not used
```

3. System Date & Time is selected; press the arrow keys to choose MES Operation
Mode.

4. **Note:** Entry of date is not necessary because it is taken from the simulation. The IMN is entered during installation. The IMN window cannot be opened.

5. Press the [Enter] key to open the MES operation mode options window.

<table>
<thead>
<tr>
<th>System Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Date _Time</td>
</tr>
<tr>
<td>IMN</td>
</tr>
</tbody>
</table>

6. Choose operating mode, INMARSAT-C or EGC. Press arrow keys to position itself in the wished option and press Space to select it.

The INMARSAT-C setting provides Telex communications and operates as an EGC receiver when the equipment is not transmitting or receiving. The EGC setting enables EGC-only operation. In this case, "Current State: EGC RECEIVER" appears (reverse video) at the bottom of the screen.

7. Press the [Esc] key to close the window.

8. Go to the Nav Port option and press the [Enter] key to open the nav port options window.

<table>
<thead>
<tr>
<th>Nav. Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT</td>
</tr>
<tr>
<td>EXT</td>
</tr>
<tr>
<td>OFF</td>
</tr>
</tbody>
</table>

9. Choose the navigator which is interfaced to the terminal and press Space to select it.

- **OFF:** No navigator interfaced or manual input of position
- **EXT:** Choose this setting to use external navigator.
- **INT:** Use the GPS receiver (option) built in the terminal unit.

10. Press the [Esc] key to close the window.

11. Go to Active Port option and press the [Enter] key to open the active port options
window.

12. Go to the suitable active port and press Space to select it.

**INT:** Use main terminal unit.

**ALL:** Use the terminal unit (PC, etc.) connected to the DTE port on the main terminal.

13. Press the [Esc] key to close the window.

14. Go to Message Output Port option and press the [Enter] key to open the message output port options window.

15. Go to the suitable unit where you want to route received messages and press Space to select it.

**INT:** All received messages are routed to the main terminal.

**EXT:** All received messages are routed to the terminal unit connected to the DTE port on the main terminal unit.

**INT+EXT:** All received messages are routed to both the main and external terminal units.

**AUTO:** The sub address for the DTE port is 001. Received messages having the sub address of 001 are routed to the DTE terminal. Messages having a sub address other than 001 are routed to the main terminal.

16. Press the [Esc] key to close the window.

17. Go to EGC Output Port option and press the [Enter] key to open the EGC output port options window.
18. Go to the suitable unit where you want to route received EGC messages and press Space to select it.

**INT**: All received EGC messages are routed to the main terminal.

**INT+EXT**: All received EGC messages are routed to both the main and external terminal units.

19. Press the [Esc] key to close the window.

20. Press the [Esc] key to open the update window.

21. Yes is selected; press the [Enter] key to update system settings.

### 3.2 Terminal Setup

The Terminal Setup menu enables for selection of date display format, currency unit, screen saver on/off and window colors.

1. Press the [F8] key to choose the Setup menu.

3. Date Disp. Form is selected; press the [Enter] key to open its options window.

4. Choose date display format desired and then press the [Enter] key to close the window.

5. Go to the Currency Unit choice and press the [Enter] key to open the currency unit options window.

6. Choose the currency unit to use to calculate toll charges and press the [Enter] key to close the window.

7. Go to the Screen Saver option and press the [Enter] key to open the screen saver options window.

8. Choose "ON" or "OFF" as desired and press the [Enter] key. ON to use screen saver, OFF to disable the screen saver. The screen saver automatically starts up 10 minutes after there is no key operation. To release the screen saver, press any key.

9. Go to the Window Color option and press the [Enter] key to open the window color options window.
10. You may change the background and foreground colors for the various display screens on the terminal unit as follows:

Choose Window Color Setup and press the [Enter] key.

Window is selected; use the arrows right or left key to choose the item to adjust and then press the [Enter] key.

- Base Window: Standby display
- RCV Message Display: Receive message display
- EGC Message Display: EGC message display
- Function: Menu
- Sub Menu1 – Sub Menu4: Sub menus 1-4
- Message: Status message

Choose Fore Color option; use the arrows right or left key to choose foreground color desired and then press the [Enter] key.

Choose Back Color option; use the arrows right or left key to choose background color desired and then press the [Enter] key.

Finally, press the [Esc] key to close the Terminal Setup window and to return to the Setup Menu.

3.3 Login / Logout

Each time the terminal unit is turned on, register your vessel with the Inmarsat C system to enable communications between your vessel and an LES. This is called login. The first time you login you must do it manually; thereafter is it done automatically, even when you move to another ocean region.

Note that you cannot transmit the distress alert or receive EGC messages unless you are logged in.

If you will not be using the Inmarsat C unit for a prolonged period, you should logout from the Inmarsat C system, before turning off the terminal unit. The Inmarsat C system will then register you as inactive, notifying anyone trying to call you that you are currently unavailable. If you do not log out before turning off the power, some LESs may attempt to send a message to you. They may charge your correspondent, even if you don't receive the message.

Login

1. Confirm that "SYNC (NCS)" and "Logout" appears at the bottom of the screen.
2. Press the [F7] key to display the Options menu.

![Options menu]

3. Press the [1] key to display the Login screen.

![Confirm Login?]

4. Yes is selected; press the [Enter] key to start login.

5. Login begins and "Login in progress" appears at the screen

6. When login is completed, the messages "Successful Login" and "LOGIN" appears. Then, the terminal unit goes into "Idle" status.

7. Press the [Esc] key to close the Options menu.

**Logout**

1. Confirm that the terminal is "IDLE" to logout. If not, wait until the terminal becomes "Idle".

2. Press the [F7] key to display the Options menu and then, press the [2] key to display the Logout screen.

![Confirm Logout?]

4. Yes is selected; press the [Enter] key to start logout.

5. Logout begins and "Logout in progress" appears at the screen

6. When logout is completed, the messages "Successful Logout" and "LOGOUT" appears. Then, you can turn off the terminal.
3.4 EGC

3.4.1 EGC Services

**EGC Overview**

The EGC (Enhanced Group Call) services provided in the Inmarsat C system offers two services: EGC FleetNET and EGC SafetyNET. Basically, EGC enables to broadcast messages to a specific group of ships, or to all ships within a defined geographical area.

**SafetyNET Overview**

In 1988 contracting governments to the Safety of Life at Sea (SOLAS) Convention, working with the International Maritime Organization (IMO), incorporated these developments into the Global Maritime Distress and Safety System (GMDSS).

Among other things, the GMDSS defines the means by which shore-based authorities broadcast distress, urgency and safety information to ships. As explained, the GMDSS relies on two forms of communications technology to broadcast Maritime Safety Information (MSI):

- NAVTEX, MF terrestrial radio to cover many coastal areas.
- SafetyNET, using the Inmarsat-C EGC service deals with the distribution of MSI by satellite, covering entire Inmarsat ocean regions including coastal areas.

**Arrangements for distribution of Maritime Safety Information (MSI)**
How does SafetyNET work?

The SafetyNET service provider determines which receivers are to receive the message by including identifying information, such as the NAVAREA/METAREA/geographical area for which the MSI is intended.

In the next figure, the shaded parts represent the EGC SafetyNET service.
Operation of the SafetyNET service, below illustrated, involves a sequence of events:
A registered Information Provider, such as a national Hydrographic Office, Rescue Co-ordination Center (RCC), or Meteorological Office, receives information from its specialized sources.

Each Information Provider prepares an MSI message in a standardized format, and submits it.
to the appropriate co-ordinator (Navigational Warning Co-ordinator, SAR Co-ordinator, or Meteorological Issuing Service).

The co-ordinator checks the message with any other information received, and edits it accordingly, then submits the finalized text to a selected Inmarsat-C CES. Included with the message are the following codes (known as the "C" codes), to instruct the CES and SES on how to process the message automatically:

- Priority Code (distress, urgency, safety, or routine);
- Service Code, to identify the message type, for example a shore-to-ship distress alert, or meteorological forecast;
- Address Code, to identify the geographical area for which the MSI is applicable - this may be a fixed geographical area, such as one of the 16 NAVAREAs/METAREAs, or a temporary area determined by the originator, such as a circular or rectangular area;
- Repetition Code, to indicate the number of times the message should be broadcast;
- Presentation Code, to indicate the character set in which the message will be transmitted and printed. (The character set used is always the International Alphabet Number 5, which is also known as 7-bit ASCII.)

The Information Provider may also choose the scheduled time(s) at which the message is to be broadcast, and, if a CES operates in more than one Ocean Region, the satellite to be used.

The CES receives the message with its instructions, and queues it with any other messages received, according to priority and scheduled time of transmission.

At the required time for transmission, the CES forwards the message over the Interstation Signalling Link (ISL) to the NCS for the Ocean Region.

The NCS automatically broadcasts the message on the NCS Common Signalling Channel over the entire Ocean Region.

All Maritime Inmarsat-C EGC receivers will receive the MSI message, and print it out, unless the operator has chosen to reject messages of that type, or it has recently been printed out by that terminal.

**EGC FleetNET Overview**

FleetNET is an Inmarsat Enhanced Group Calling (EGC) broadcast facility which allows a single message to be addressed and transmitted simultaneously to any number of Inmarsat-C Ship Earth Stations (SESs).

Inmarsat-C SES terminal numbers are continue to increase rapidly even after the implementation date for GMDSS passed on 1st February 1999. The requirements of Vessel Monitoring Systems (VMS) for fisheries has meant that many fishing vessels are also equipped with Inmarsat-C. All are capable of receiving EGC text messages and there is no maximum to the number of vessels that can be address at any one time. It is also possible, of course, to send individual e-mail messages to single, specific ships.

**Who can join and use FleetNET services?**

The FleetNETSM service is available to all authorized information providers, to
broadcast messages to selected groups of SESs. Authorized information providers may be commercial subscription services, Government departments, shipping companies, managers, or others who have registered with the LESO and been added to a FleetNETSM EGC closed network.

An SES in a closed network may, for example, belong to a fleet, or be a registered subscriber to a commercial service. Typical applications of FleetNETSM include but are not limited to:

- Fleet or company broadcasts
- News broadcasts
- Commercial weather services
- Localized medical information
- Market quotations
- Commercial messaging / advertising of services
- Government broadcasts to all vessels on a country's register

**How does FleetNET work?**

To join a FleetNET service, an SES must be registered with an information provider. Authorized information provider adds the SES to the group which is to receive the service, by downloading a Group Call ID (via an LES which supports FleetNETTM broadcasts), uniquely addressed to the SES. The SES stores the ID and can accept broadcasts from the information provider. The SES operator cannot change this stored EGC closed network IDs (ENIDs). Up to 64 ENIDs are stored on a non-volatile memory.

The ENID stored can be accessed for downloading and deleting via the satellite path. It is possible for an SES operator to inhibit (or activate as required), via the terminal unit, selected ENIDs previously downloaded. Along with the ENID, the name of the information provider is stored.

The pre-programming of an SES to receive FleetNET messages is performed by the LESO, in conjunction with the authorized FleetNET information provider, and not by the SES operator.

The FleetNET service employs closed user groups and unique receiver addressing to provide secure transmission of messages from the terrestrial information provider to the desired SES recipients. Adding or deleting an SES to a closed user group which is to receive the broadcasts is performed by the LESO, in agreement with the information provider.

The LESO initially downloads an EGC network identification (ENID) code for the closed user group, for storage in the SES. Details on how this is done and all addressing information will be provided by any LESO which offers FleetNET services.

To select the EGC receivers that are able to receive a message, the information provider prepares a message which includes an address to specify the area for which the message is intended. The address may specify any of the following groups:

- Individual EGC receivers;
All EGC receivers within a closed network; for example all ships belonging to a fleet, identified by a single EGC Network Identification Code ENID; All EGC receivers on ships of a certain flag.

Messages sent using FleetNETSM will be received simultaneously by all members of the group defined by the ENID. The SES remains able to accept all FleetNETSM messages addressed by the information provider to its user group, until the SES ceases to subscribe to the service. The information provider then cancels the ENID code stored in the SES, through the LESO downloading a cancellation code, sent as above, addressed uniquely to the SES.

**Distribution diagram for Inmarsat-C EGC services**

Note that an SES is not limited to receiving broadcasts from one FleetNET information provider, but may register with several.

Note also that the SES operator cannot change this stored information but can inhibit reception of FleetNET messages, if desired.

### 3.4.2 EGC Settings

#### 3.4.2.1 EGC Setup

The Inmarsat C terminal receives EGC messages directed to its present position and
Navarea without further programming. The EGC Setup screen lets you choose additional areas for which to receive messages and also the Navtex station and type of message for Coastal Warning (NAVTEX Re-broadcast).

1. Press the [F8] key to display the Setup menu and then, press the [5] key to display the EGC Setup menu.

<table>
<thead>
<tr>
<th>EGC Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive EGC Area --------------</td>
</tr>
<tr>
<td>Additional Position LAT LONG</td>
</tr>
<tr>
<td>Additional Navareas (1 2 3 4 5 6 7 8 9 10 11 12 13 14 15)</td>
</tr>
<tr>
<td>WayPoint (from NAV Equipment)</td>
</tr>
<tr>
<td>NAVTEX--------------------------</td>
</tr>
<tr>
<td>Station Code</td>
</tr>
<tr>
<td>Type of Message</td>
</tr>
</tbody>
</table>

2. The cursor is selecting Additional Position, where you can enter the L/L position of an ocean region you want to receive broadcasts about. Press the [Enter] key to open the additional position entry window.

<table>
<thead>
<tr>
<th>LATITUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>(input LATITUD-&gt;i.e: 60.40S or 60.40)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LONGITUD</th>
</tr>
</thead>
<tbody>
<tr>
<td>(input LONGITUD-&gt; i.e: 100.40W or 10W)</td>
</tr>
</tbody>
</table>

3. Enter position as follows:
   a) Enter latitude (Example: 37.40S)
   b) Enter longitude (Example: 54.35W)

4. Go to the Additional Navareas option and press the [Enter] key to open the Navareas entry window.

<table>
<thead>
<tr>
<th>NAVAREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15</td>
</tr>
<tr>
<td>(input NAVAREAS separated by spaces)</td>
</tr>
</tbody>
</table>

5. Input the additional Navarea numbers separated by spaces. Example: 1 3 11 14.

6. Press the [Enter] key to close the Navareas entry window.
7. Choose Waypoint and press the [Enter] key to open the Waypoint options menu.

8. Go to ON option and press spaces to receive broadcasts for the area which contains the destination waypoint set on the navigator. Then, press [Esc] key to close the Waypoint options window.

9. On the Station Code, press the [Enter] key to open the station code entry window.

10. Enter the Navtex station codes (A-Z) of the navarea, in upper case alphabet. (Example: A B F M). After that, press the [Enter] key to close the station code entry window.

11. Choose message type to receive: Use the arrow keys to choose message type, press the [Space bar] key to choose ON or OFF as appropriate. Finally, press the [Esc] key to close the window.

<table>
<thead>
<tr>
<th>Select Messages Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Type</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td>Ice Reports</td>
</tr>
<tr>
<td>Meteo. Forecasts</td>
</tr>
<tr>
<td>Pilot service</td>
</tr>
<tr>
<td>DECCA Messages</td>
</tr>
<tr>
<td>LORAN Messages</td>
</tr>
<tr>
<td>OMEGA Messages</td>
</tr>
<tr>
<td>SATNAV Messages</td>
</tr>
<tr>
<td>Other navaid messages</td>
</tr>
<tr>
<td>QRU (no message)</td>
</tr>
</tbody>
</table>

Note: Navtex messages "Coastal navigational information", "Meteorological warning" and "Search and rescue alert" (they do not appear on the EGC Setup menu) must always be received.

12. Press the [Esc] key to open the update window.
13. Yes is selected; press the [Enter] key to update EGC settings.

3.4.2.2 Saving/Printing EGC messages automatically

You may save and print EGC messages automatically as below.

**Automatically saving EGC messages**

1. Press the [F8] key to display the Setup menu.

2. Press the [6] key to display the Auto Mode Setup menu.

3. Press the arrows keys to choose Auto EGC Message Save and then press the [Enter] key to open the Auto EGC Message Save window.
4. Press the arrows keys to choose message type and then press the [Enter] key.

5. Go to ON option or OFF option as appropriate and press the [Space bar] key to select it. Then press the [Esc] key to close the window.

   **Note:** When SafetyNET (Safety) is turned off, SafetyNET (Safety) on the Auto EGC Message Print menu is automatically turned on.

6. Press the [Esc] key to close the Auto EGC Message Save window and to return to the previous menu

### Automatically printing EGC messages

You can turn on/off automatic printing of FleetNET, SafetyNET (Routine) and SafetyNET (Safety) messages. Distress and emergency SafetyNET (Safety) messages are automatically printed regardless of printing setting.

1. Press the [F8] key to display the Setup menu.

2. Press the [6] key to display the Auto mode setup menu.
3. Go to Auto EGC Message Print option and then press the [Enter] key.

4. On the Auto EGC Message Print window, press the arrows keys to choose message type and then press the [Enter] key.

5. Go to ON option or OFF option as appropriate and press the [Space bar] key to select it. Then press the [Esc] key to close the window.

**Note:** When SafetyNET (Safety) is turned off, SafetyNET (Safety) on the Auto EGC Message Save menu is automatically turned on.

6. Press the [Esc] key to close the Auto EGC Message Print window and to return to the previous menu

### 3.5 Directories

The user can create and specify the directory where to save received and sent messages in a floppy disk. If no directory is made, the messages are saved to the root directory of the floppy disk.

**Note:** Vox Maris enables to work without a floppy. To do this, run the `Configurador.exe` application and specify a Window folder for storing messages. Such folder will act as the root directory of the floppy disk.

#### Creating a directory where to store messages

The procedure below shows how to create a directory on a floppy disk.
1. Insert a floppy disk in the disk drive.

2. Press the [F8] key to display the Setup menu.

3. Press the [8] key to display the Directories menu.

4. Choose Message Directory and then press the [Enter] key to open the Directories window.

5. Press the [Insert] key. After that enter directory name and press the [Enter] key. Entered name appears.
Note 1: To create a directory within a directory, enter to a directory and repeat step 5.
Note 2: To return to the root directory, place the cursor on [. .] and press the [Enter] key.
Note 3: Pressing the [Tab] key you access the upon part, where you can create a new directory, change the current directory, etc.

6. Press the [Enter] key to select the directory where to store the messages

7. Press the [Esc] key to return to the previous menu

Note 4: To remove a directory, do steps 1-4 in the above procedure, choose the directory to remove and then press the [Delete] key.
Note 5: A directory for EGC messages can also be made as above. In this case choose EGC Message Directory at step 4.

Specifying directory where to store messages

You may specify the directory where to store messages on a floppy disk as follows:

1. Press the [F8] and [8] keys to show the Directories menu.

3. Press the arrows keys to place the cursor on the desired directory.

4. Press the [Enter] key to select the directory where to store the messages

5. Press the [Esc] key to return to the previous menu

**Note**: The directory where to store EGC messages can also be specified. In this case choose EGC Message Directory at step 2.

### 3.6 Scanning NCS Common Channel

Scanning is possible when the terminal is in idle state and functions as an Inmarsat C receiver. If the FELCOM 15 is not in idle state, it will wait until the equipment becomes idle.

1. Press the [F7] key to display the Options menu.

2. Press the [5] key to display the Ocean Region menu.
3. Press the arrows keys to choose another NCS and press the [Space Bar] key.

When AUTO is selected, the Unit explores each ocean region and selects the region that corresponds to the current position.

4. Press the [Esc] key to close the window and to start the scanning. The message "Scanning" appears during the scanning.

When the process is successfully done, the name of the new NCS appears at the bottom and the terminal pass to the IDLE status.
If the Ocean Region selected is not found the below window appears

5. Press the [Esc] key to close the Options menu
Chapter IV

File Operations
4  File Operations

4.1  Preparing files

4.1.1  Preparing a routine file

Files can be assigned a file name and saved to a floppy disk for later use. A message may contain maximum 32 Kbytes of characters.

To prepare a routine file, follow the below procedure

1. Press the [F1] key to open the File menu.

2. Press the [1] key to choose New (if the work area would have a message, the terminal will ask you for saving the message). The work area will show empty.

3. The cursor is on the first line. Type your message.

4. To transmit the message you have just prepared, go to paragraph "Transmitting prepared message". To store it to a floppy disk, for future transmission, go to paragraph "Saving files".

4.1.2  Working with text

Cutting and pasting text

1. Use the arrow keys to place the cursor on the first character of the text to be cut.

2. Highlight the text to be cut by pressing the arrow keys while pressing and holding the [Shift] key. The figure below shows the appearance of highlighted text.
3. Press the [F2] key to choose the Edit menu.

4. Press the [1] key to choose Cut. The highlighted text is cut and the remaining text is reformatted.

5. To move text to a new location after it has been cut, place the cursor at the exact position in the message where the cut text begins. When the text cursor is placed correctly, press the [F2] key and then the [3] (Paste) key.

Copying and pasting text

1. Use the arrow keys to place the cursor on the first character of the text to be cut.

2. Highlight the text to be copied by pressing the arrow keys while pressing and holding the [Shift] key.

3. Press the [F2] key to choose the Edit menu. Then press the [2] key to choose Copy. The selected text is copied to the clipboard.

4. Place the cursor at the exact place on the message where the copied text is to start. When the text cursor is placed correctly, press the [F2] key and then the [3] (Paste) key. The copied text is placed at cursor location.

Select All
To select the entire current file for cut and/or copy follow the below procedure:

1. Press the [F2] key to choose the Edit menu.

Searching Text

The Search function lets you search for text in a forward or backward direction.

1. At the Edit menu, press the [6] key to choose Search feature

2. Search word entry window is opened. Type the word to find and press the [Enter] key. Use the arrow keys to select "Forward" or "Back" search direction and press the [Enter] key.

3. Choose Yes to start search. The image below will appear.
4. Choose Next for search the next occurrence of the searched word or Ch.Direct to change the search direction.

5. A message shows when there aren't more occurrences of the word in the selected direction

6. Press the [Esc] key to close the Search window.

**Replacing Text**

The Replacing function enables you to replace occurrences of a word or phrase with another word or phrase.

1. At the Edit menu, press the [7] key to choose Replace feature
2. At the *Search Text* field, input the word or phrase to be replaced and press the [Enter] key.

3. At the *Replace by* field, input the replace word and press the [Enter] key.

4. Specify the search direction.

5. Choose *Query* or *All* and then press the [Enter] key.

   **Query:** Stop at each occurrence of word to answer yes or no to replacement.
   **All:** Replace every occurrence of word without stopping to confirm.

6. Choose Yes to start search and replace.
7. If Query option was selected, the terminal asks you about replacing the found occurrence.

8. A message shows when there aren't more occurrences of the word in the selected direction.

9. Press the [Esc] key to close the Replace window.

**Time / Position insert**

To insert the current time and the current position of the ship in a sentence, just open the Edit menu and select the option 8.
4.2 Saving Files

When you have created a message you may wish to save it to a floppy disk, for future use. The system uses 3 ½ floppy disks with High Density (2HD) or double density (2DD).

4.2.1 Formatting a floppy disk

In order to save a message to a floppy disk, it must be formatted first. Formatting prepares the disk to write information to its surface.

1. Insert a blank floppy disk into the disk drive.
2. Press the [F1] key.
4. Choose Yes and press the [Enter] key to start formatting.
4.2.2 Save a file

There are two ways to save a file: Save it without leaving the content of the work area ("save"), or save it before clearing the screen editor ("close").

Save file retaining editor screen

1. Press the [F1] key to open the File menu.

3. Enter the file name. The file name must contain up to 8 characters with extension (three characters). Colon, quotation mark, space and vertical line are not valid characters.

4. Press the [Enter] key to save the message.

Note: Pressing the [Tab] key you access the upon part, where you can create a new directory, change the current directory, etc.

Save file clearing the editor screen

1. Press the [F1] key to open the File menu.
3. Choose Yes and press the [Enter] key. The Save File window appears on the screen.

4. Enter the file name. The file name must contain up to 8 characters with extension name (three characters). Colon, quotation mark, space and vertical line are not valid characters.

5. Press the [Enter] key to save the message and clear the screen.

   **Note:** Pressing the [Tab] key you access the upon part, where you can create a new directory, change the current directory, etc.

### 4.3 Opening Files

1. Insert the floppy disk containing the desired file.

2. Press the [F1] key to open the File menu.

3. Press the [2] key to show the Open File window. This window displays the files stored in the floppy disk.
4. Press the arrow keys to choose the file (you can view the content file before opening by pressing the [Space bar] key).

5. Press the [Enter] key to open the file. The file name and the content of the file will appear at the screen.

### 4.4 Deleting files

1. Insert the floppy disk containing the file to delete.

2. Press the [F1] key to open the File menu.

3. Press the [5] key to show the Delete File window. This window displays the files stored in the floppy disk.
4. Press the arrow keys to choose the file you want to delete (you can view the content file before deleting by pressing the [Space bar] key).

5. Press the [Enter] key to delete the file. The message "Delete file ..." appears.

6. Choose Yes and press the [Enter] key to delete the file.
4.5 Renaming files

1. Insert the floppy disk containing the file to rename.

2. Press the [F1] key to open the File menu.

3. Press the [6] key to show the Rename File window. This window displays the files stored in the floppy disk.

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>E0061201.000</td>
<td>266</td>
<td>22/01/2007 11:45:16</td>
</tr>
<tr>
<td>E0061201.001</td>
<td>266</td>
<td>22/01/2007 11:48:16</td>
</tr>
<tr>
<td>E0061201.002</td>
<td>266</td>
<td>16/01/2007 20:46:46</td>
</tr>
<tr>
<td>E0061201.003</td>
<td>266</td>
<td>16/01/2007 20:51:46</td>
</tr>
<tr>
<td>E0061201.004</td>
<td>266</td>
<td>16/01/2007 20:56:44</td>
</tr>
<tr>
<td>E0061201.005</td>
<td>266</td>
<td>16/01/2007 21:01:46</td>
</tr>
<tr>
<td>E0061209.000</td>
<td>238</td>
<td>16/12/2006 11:20:02</td>
</tr>
<tr>
<td>E0061209.001</td>
<td>259</td>
<td>16/12/2006 11:20:02</td>
</tr>
<tr>
<td>E0061209.002</td>
<td>203</td>
<td>16/12/2006 11:20:02</td>
</tr>
<tr>
<td>E0061209.003</td>
<td>203</td>
<td>16/12/2006 11:21:02</td>
</tr>
</tbody>
</table>

4. Press the arrow keys to choose the file you want to rename (you can view the content file before renaming by pressing the [Space bar] key).

5. Press the [Enter] key to rename the file. The window to entry the new name appears.
6. Enter the new file name. The file name must contain up to 8 characters with extension name (three characters). Colon, quotation mark, space and vertical line are not valid characters.

7. Press the [Enter] key to rename the file.
5 Communications

This chapter explains how to transmit and receive. Before conducting any communications, be sure to login with the NCS in your area, following the instructions in "System Initialization - Scanning NCS Common Channel"

To transmit e-mail, you may need to register for e-mail services with appropriate LES which provides such services. Further, it is necessary to register with appropriate LES to receive e-mail from land mail system.

5.1 Transmitting

Basically, to transmit a message, the user have to accomplish the following steps:

1. Creating the message
2. Attaching the address of the recipient.
3. Sending the message to the LES.

The address of the recipient in the Inmarsat C system is his Telex number, for transmission via landline, or MES Inmarsat Mobile Number (IMN), when transmitting to a ship. Also, mails and faxes can be sent.

The message can be one the user has just prepared or one stored on a floppy disk.

Code description

Code can be specified at the terminal unit.

IA5: International alphabet No. 5, ASCII code (7 bit). Specify this code to transmit English containing lower case alphabet.

ITA2: No. 2 international communications alphabet (5 bit). Specify this code for message which contains only No. 2 international communications alphabet (see A-11). ITA2 code is transmitted faster than IA5 code. Land-based Telex equipment uses ITA2. The LES converts all codes into ITA2. Code which cannot be converted is shown with the question mark (?).

DATA: Data (8 bit). Use this code to transmit data.

Message language, subscriber, destination type and code
5.1.1 Transmitting prepared message

This section explains how to transmit a prepared message (non stored message).

5.1.1.1 Transmitting to a registered station on station list

1. Write the message on the screen. For e-mail, set Text Mode in the Editor Setup menu to Ascii.

2. Press the [F3] key to display the Transmit menu.

3. Display the Transmit Message window by selecting the Transmit Message option and pressing [Enter], or by pressing the [1] key.
4. Go to Station List option and press the [Enter] key to open the Station List

5. Press the arrow keys to choose the station and then press the [Space Bar] key. You can choose multiple stations* (simultaneous transmission) by pressing the Space bar at the desired stations. Selected stations are marked with an asterisk.

   **Note 1:** Messages having different communication format or prefix code (two-digit code) cannot be sent simultaneously.

   **Note 2:** To cancel selection (erase asterisk), choose station and press the [Space bar] key.

   For e-mail messages, follow the below procedures. For Fax or Telex, go to step 6.
**Procedures for e-mail message**

**a.** Go to the Subject field and press the [Enter] key to open the subject entry window.

**b.** Type subject and press the [Enter] key to close the window.

**c. Note:** Attaching files isn't enabled in Vox Maris

**d.** Continue in step 6.

6. Go to LES Id option and press the [Enter] key to open the LES list window. An asterisk determines the selected LES.

<table>
<thead>
<tr>
<th>Name</th>
<th>LES ID</th>
<th>Ocean Region</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing Marine</td>
<td>211</td>
<td>POR</td>
<td></td>
</tr>
<tr>
<td>Beizeq</td>
<td>311</td>
<td>IOR</td>
<td></td>
</tr>
<tr>
<td>Beizeq</td>
<td>127</td>
<td>AOR-E</td>
<td></td>
</tr>
<tr>
<td>CAT</td>
<td>327</td>
<td>IOR</td>
<td></td>
</tr>
<tr>
<td>CP Radio Marconi</td>
<td>319</td>
<td>IOR</td>
<td></td>
</tr>
<tr>
<td>Embratel</td>
<td>114</td>
<td>AOR-E</td>
<td></td>
</tr>
<tr>
<td>France Telecom</td>
<td>021</td>
<td>AOR-W</td>
<td></td>
</tr>
<tr>
<td>France Telecom</td>
<td>121</td>
<td>AOR-E</td>
<td></td>
</tr>
<tr>
<td>France Telecom</td>
<td>221</td>
<td>POR</td>
<td></td>
</tr>
</tbody>
</table>

7. If you want to change the selected LES, use the arrow keys to select the suitable LES and press the [Space bar] key.

8. Press the [Esc] key to close the LES list.

9. Select Confirmation and press the [Enter] key to open the confirmation window

![Requires notification of delivery?](image)

10. Use the left or right arrow key to select YES if you request notification of delivery from the LES.

11. Press the [Enter] key to close the window.

12. Choose Send Delay and press the [Enter] key to open the send delay entry window.
13. To send a message after a certain delay, enter a time up to 99 hours 59 minutes. (The Send Delay is used to time message arrival to suit recipient's office hours.)

14. Press the [Enter] key to close the window.

15. Choose Delivery Delay and press the [Enter] key to open the delivery delay options window.

16. Delivery Delay requests the LES for "Immediate" or "Deferred" transmission to the recipient designated. (This service depends of the LES where message is to be sent).

17. Press the [Enter] key to close the window.

18. Go to Code option and press the [Enter] key to open the code window.

19. Press the [Space bar] key to select an option as appropriate:  "IA5 (for e-mail, fax) ", "ITA2 (for Telex)" or "DATA".

20. Press the [Esc] key to close the window.

21. Press the arrow key to place the cursor on TRANSMIT.

22. Press the [Enter] key to open the start transmission window.

23. Choose YES and press the [Enter] key to start the transmission

5.1.1.2 Transmitting to a not registered station on station list

1. Write the message on the screen. For e-mail, set Text Mode in the Editor Setup menu to Ascii.

2. Press the [F3] key to display the Transmit menu.

3. Display the Transmit Message window by selecting the Transmit Message option and pressing [Enter], or by pressing the [1] key.

4. Go to Destination Type option and press the [Enter] key to open the destination types window.
5. Press the arrow keys to choose Destination Type among "TELEX," "FAX" or "E-mail" as appropriate and press the [Enter] key to close the window.

Continue the procedure according to the selected destination type.

**Procedures for TELEX message**

a. Go to Country/Ocean Code option and press the [Enter] key to open the country/ocean code entry window.

For ship-to-shore Telex, enter recipient’s Telex country code. For ship-to-ship Telex, enter recipient’s ocean region:

<table>
<thead>
<tr>
<th>Ocean Region</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOR-East:</td>
<td>581</td>
</tr>
<tr>
<td>POR:</td>
<td>582</td>
</tr>
<tr>
<td>IOR:</td>
<td>583</td>
</tr>
<tr>
<td>AOR-West:</td>
<td>584</td>
</tr>
</tbody>
</table>

b. Choose Station ID and press the [Enter] key to open the station ID entry window.

Type either recipient’s Telex subscriber number (ship-to-shore) or IMN (ship-to-ship). You can specify many station IDs delimiting them by commas.

d. Go to LES Id option and press the [Enter] key to open the LES list window. An asterisk determines the selected LES.
e. If you want to change the selected LES, use the arrow keys to select the suitable LES and press the [Space bar] key.

f. Press the [Esc] key to close the LES list.

g. Select Confirmation and press the [Enter] key to open the confirmation window.

```
Requires notification of delivery?

Yes  No
```

h. Use the left or right arrow key to select YES if you request notification of delivery from the LES.

i. Press the [Enter] key to close the window.

j. Choose Send Delay and press the [Enter] key to open the send delay entry window.

```
Send Delay
00:00
---------------------
(input HH:MM)
```

k. To send a message after a certain delay, enter a time up to 99 hours 59 minutes. (The Send Delay is used to time message arrival to suit recipient's office hours.)

l. Press the [Enter] key to close the window.

m. Choose Delivery Delay and press the [Enter] key to open the delivery delay options window.
n. Delivery Delay requests the LES for "Immediate" or "Deferred" transmission to the recipient designated. (This service depends of the LES where message is to be sent).

o. Press the [Enter] key to close the window.

p. Go to Code option and press the [Enter] key to open the code window.

q. Press the [Space bar] key to select an option as appropriate: "IA5 (for e-mail, fax)", "ITA2 (for Telex)" or "DATA".

r. Press the [Esc] key to close the window.

s. Press the arrow key to place the cursor on TRANSMIT.

t. Press the [Enter] key to open the start transmission window.

u. Choose YES and press the [Enter] key to start the transmission.

v. A window displays sending progress.

**Procedures for FAX message**
a. Go to Country/Ocean Code option and press the [Enter] key to open the country/ocean code entry window.

```
<table>
<thead>
<tr>
<th>Country/Ocean CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>054</td>
</tr>
</tbody>
</table>

(input CODE)
```

Enter recipient's FAX country code and press the [Enter] key to close this window.

b. Choose Station ID and press the [Enter] key to open the station ID entry window

```
<table>
<thead>
<tr>
<th>Station's IDs</th>
</tr>
</thead>
</table>

(input Station's Ids delimited by commas)
```

c. Type either recipient's fax number. You can specify many fax numbers delimiting them by commas.

d. Press the arrow key to choose Modem Type. Then press the [Enter] key to open the Modem Type entry windows. An asterisk determines the selected option.

```
<table>
<thead>
<tr>
<th>Modem Type</th>
<th>FAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>T30</td>
<td></td>
</tr>
<tr>
<td>V21</td>
<td>V.21 300 bps DUPLEX</td>
</tr>
<tr>
<td>V22</td>
<td>V.22 1200 bps DUPLEX</td>
</tr>
<tr>
<td>V22B</td>
<td>V.22bis 2400 bps DUPLEX</td>
</tr>
<tr>
<td>V23</td>
<td>V.23 600/1200 bps</td>
</tr>
<tr>
<td>V26B</td>
<td>V.26bis 2400/1200 bps</td>
</tr>
<tr>
<td>V26T</td>
<td>V.26ter 2400 bps DUPLEX</td>
</tr>
<tr>
<td>V27T</td>
<td>V.27ter 4800/2400 bps</td>
</tr>
<tr>
<td>V32</td>
<td>V.32 9600 bps DUPLEX</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
```
e. If you want to change the selected option, use the arrow keys to select the suitable modem type and press the [Space bar] key. For transmission to landline fax or to fax-equipped Inmarsat B MES, choose "T30." (You cannot transmit a FAX to another Inmarsat C MES.)

f. Press the [Esc] key to close the Modem Type list.

g. Go to LES Id option and press the [Enter] key to open the LES list window. An asterisk determines the selected LES.
h. If you want to change the selected LES, use the arrow keys to select the suitable LES and press the [Space bar] key.

i. Press the [Esc] key to close the LES list.

j. Select Confirmation and press the [Enter] key to open the confirmation window.

![Requires notification of delivery?](image)

k. Use the left or right arrow key to select YES if you request notification of delivery from the LES. After that, press the [Enter] key to close the window.

l. Choose Send Delay and press the [Enter] key to open the send delay entry window.

![Send Delay](image)

m. To send a message after a certain delay, enter a time up to 99 hours 59 minutes. (The Send Delay is used to time message arrival to suit recipient's office hours.) Then, press the [Enter] key to close the window.

n. Choose Delivery Delay and press the [Enter] key to open the delivery delay options window.
o. Delivery Delay requests the LES for "Immediate" or "Deferred" transmission to the recipient designated. (This service depends of the LES where message is to be sent). If you want to change the selected Delivery Delay, use the arrow keys to select the suitable option and press the [Space bar] key. Then, press the [Scape] key to close the window.

p. Go to Code option and press the [Enter] key to open the code window.

q. Press the [Space bar] key to select an option as appropriate: "IA5 (for e-mail, fax)", "ITA2 (for Telex)" or "DATA".

r. Press the [Esc] key to close the window.

s. Press the arrow key to place the cursor on TRANSMIT.

t. Press the [Enter] key to open the start transmission window.

u. Choose YES and press the [Enter] key to start the transmission

v. A window displays sending progress.

Procedures for E-mail message
a. Choose Station ID and press the [Enter] key to open the station ID entry window

<table>
<thead>
<tr>
<th>Station's IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>(input Station's IDs delimited by commas)</td>
</tr>
</tbody>
</table>

b. Type recipient's e-mail address (you can specify many addresses delimiting them by commas). Then, press the [Enter] key to close the station ID entry window.

c. Go to Subject option and press the [Enter] key to open the Subject entry window.

<table>
<thead>
<tr>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>(input SUBJECT of the message)</td>
</tr>
</tbody>
</table>

d. Type the subject's mail and press the [Enter] key to close the subject entry window.

e. Go to LES Id option and press the [Enter] key to open the LES list window. An asterisk determines the selected LES.

<table>
<thead>
<tr>
<th>Select LES</th>
<th>LES ID</th>
<th>Ocean Region</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing Marine</td>
<td>211</td>
<td>POR</td>
<td></td>
</tr>
<tr>
<td>Beijing Marine</td>
<td>311</td>
<td>IOR</td>
<td></td>
</tr>
<tr>
<td>Bezeq</td>
<td>127</td>
<td>AOR-E</td>
<td></td>
</tr>
<tr>
<td>Bezeq</td>
<td>327</td>
<td>IOR</td>
<td></td>
</tr>
<tr>
<td>CAT</td>
<td>319</td>
<td>IOR</td>
<td></td>
</tr>
<tr>
<td>CP Radio Marconi</td>
<td>118</td>
<td>AOR-E</td>
<td></td>
</tr>
<tr>
<td>Embratel</td>
<td>114</td>
<td>AOR-E</td>
<td></td>
</tr>
<tr>
<td>France Telecom</td>
<td>021</td>
<td>AOR-W</td>
<td></td>
</tr>
<tr>
<td>France Telecom</td>
<td>121</td>
<td>AOR-E</td>
<td></td>
</tr>
<tr>
<td>France Telecom</td>
<td>221</td>
<td>POR</td>
<td></td>
</tr>
</tbody>
</table>

f. If you want to change the selected LES, use the arrow keys to select the suitable LES and press the [Space bar] key.

g. Press the [Esc] key to close the LES list.

h. Select Confirmation and press the [Enter] key to open the confirmation window.
i. Use the left or right arrow key to select YES if you request notification of delivery from the LES. After that, press the [Enter] key to close the window.

j. Choose Send Delay and press the [Enter] key to open the send delay entry window.

k. To send a message after a certain delay, enter a time up to 99 hours 59 minutes. (The Send Delay is used to time message arrival to suit recipient's office hours.) Then, press the [Enter] key to close the window.

l. Choose Delivery Delay and press the [Enter] key to open the delivery delay options window.

m. Delivery Delay requests the LES for "Immediate" or "Deferred" transmission to the recipient designated. (This service depends on the LES where message is to be sent). If you want to change the selected Delivery Delay, use the arrow keys to select the suitable option and press the [Space bar] key. Then, press the [Scape] key to close the window.

n. Go to Code option and press the [Enter] key to open the code window.

o. Press the [Space bar] key to select an option as appropriate: "IA5 (for e-mail, fax)", "ITA2 (for Telex)" or "DATA".

p. Press the [Esc] key to close the window.

q. Press the arrow key to place the cursor on TRANSMIT.
r. Press the [Enter] key to open the start transmission window.

s. Choose YES and press the [Enter] key to start the transmission

<table>
<thead>
<tr>
<th>Start Transmision?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

t. A window displays sending progress.

Sending...

Sending in progress...

5.1.2 Transmitting a file stored on a floppy disk

This section explains how to transmit a message from a file.

1. Press the [F1] key to open the File menu.

File

<table>
<thead>
<tr>
<th>1. New</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Open</td>
</tr>
<tr>
<td>3. Close</td>
</tr>
<tr>
<td>4. Save</td>
</tr>
<tr>
<td>5. Delete</td>
</tr>
<tr>
<td>6. Rename</td>
</tr>
<tr>
<td>7. Print</td>
</tr>
<tr>
<td>8. Format Disk</td>
</tr>
</tbody>
</table>

2. Press the [2] key to show the Open File dialog.
3. Press the arrow keys to change to the suitable file and press [Enter] to open it. The file is displayed on the work area.

4. To transmit the message, follow the steps described on any of the previous topic:
   - Transmitting to a registered station on station list
   - Transmitting to a not registered station on station list
5.2 Receiving

Each time the terminal receives a Telex or e-mail it displays the message "Successful Receiving message." If Auto Receive Message Save and Auto Receive Message Print in the Auto Mode Setup are set to ON, the message is automatically saved and printed.

Received message alarm

If Receive Alarm in the Auto Mode Setup menu is set to ON, the audio sounds when a Telex or e-mail is received. You may silence the alarm with the [F12] key.

Receive message

Each message received is assigned a message number. This number is also used when saving the file to a floppy disk. The number's structure is:

```
R 0 0 7 0 1 1 8 0 0 1
```

Receive 0: main DTE
1: ext. DTE

Log

The Log (described below) shows message number, priority, date and time of transmission, LES ID and file size (in bytes) of the received and transmitted messages.

Printing

When Auto Receive Message Print in the Auto Mode Setup menu is set for ON, received messages are automatically printed. Manual printing is also available.

Saving and filing

Received messages are filed in the Display Message List, at the terminal unit specified with Message Output Port on the System Setup menu. The Display Message List shows the following:

- Received message number.
- LES ID
- Priority
- File size (in bytes)
- Message classification
- Date and time of transmission
- Status

Setting the receive alarm
An audio alarm may be set to sound when a routine or confidential Telex message or e-mail is received. The default setting is OFF.

1. Press the [F8] key to display the Setup menu.

```
Setup
1. Distress Alert Setup
2. System Setup
3. Editor Setup
4. Terminal Setup
5. EGC Setup
6. AutoMode Setup
7. E-Mail Setup
8. Directories
9. Configuration
```

2. Press the [6] key to display the Auto Mode Setup menu.

```
Auto Mode Setup

Auto Log Print | OFF
Receive Alarm   | OFF
Auto Receive Message Save | OFF
Auto Receive Message Print | OFF
Data Report_Polling Print | OFF
Auto EGC Message Save | <Enter> to see/alter values
Auto EGC Message Print | <Enter> to see/alter values
```

3. Press the arrow keys to choose Receive Alarm and press the [Enter] key to open the receive alarm options window.

```
Receive Alarm
ON
OFF
```

4. To enable the audio alarm, choose ON going to the ON option and pressing the [Space] key. Then, press the [Esc] key to close the window. The alarm will be released when a routine message is received.
4. Press the [Esc] key to close the Auto Mode Setup window.

Displaying received messages

Received messages are automatically printed when the Auto Receive Message Print is ON in the Auto Mode Setup. To see a received message follow the procedure below.

1. Press the [F6] key to open the Memory menu.

2. Press the [2] key to display the list of received messages.

<table>
<thead>
<tr>
<th>Message Nº</th>
<th>LES</th>
<th>Priority</th>
<th>Size</th>
<th>Address</th>
<th>Rec.date</th>
<th>Time</th>
<th>Status</th>
</tr>
</thead>
</table>

**Message Nº**: Received message number.

**LES**: LES name

**Priority**: Normal or distress

**Size**: Size of file in bytes
Addressee: Addressee code appears for confidential messages (Not implemented in Vox Maris). Nothing appears for routine messages.

Rec date & time: Date and time message was received.

Status: Printed: message printed // Saved: message saved to floppy disk // No display: not yet printed confidential message, or printer malfunction

3. Press the arrow keys to choose a file. To display a file selected, press the space bar.

4. Press the [Esc] key to close the view file window.

Automatically printing received messages

1. Press the [F8] key to display the Setup menu.

2. Press the [6] key to display the Auto Mode Setup menu.
3. Press the arrows keys to choose Auto Receive Message Print and then press the [Enter] key to open the Auto Receive Message Print window.

4. Go to ON option or OFF option as appropriate and press the [Space bar] key to select it. Then press the [Esc] key to close the window.

5. Press the [Esc] key to close the Auto Receive Message Print window and to return to the previous menu

**Automatically saving received messages to a floppy disk**

1. Press the [F8] key to display the Setup menu.

2. Press the [6] key to display the Auto Mode Setup menu.
3. Press the arrows keys to choose Auto Receive Message Save and then press the [Enter] key to open the Auto Receive Message Save window.

4. Go to ON option or OFF option as appropriate and press the [Space bar] key to select it. Then press the [Esc] key to close the window.

5. Press the [Esc] key to close the Auto Receive Message Save window and to return to the previous menu.

**Note:** To designate a directory where to store receive messages, see *Specifying directory where to store messages*.

### 5.3 Log

The Log stores the details of the received and transmitted messages.

**Displaying the display log**

1. Press the [F6] key to display the Memory menu.
2. Press the [4] key to show the Display Memory.

<table>
<thead>
<tr>
<th>S/R</th>
<th>Message No</th>
<th>Type</th>
<th>Pri</th>
<th>Date</th>
<th>Time</th>
<th>LES</th>
<th>Station</th>
<th>Size</th>
<th>Cond</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>E0061201.000</td>
<td>safetyNET</td>
<td>URG</td>
<td>06-12-01</td>
<td>12:35</td>
<td>114</td>
<td>- - - - - - -</td>
<td>84</td>
<td>Success</td>
</tr>
<tr>
<td>S</td>
<td>S0061201.000</td>
<td>MAIL</td>
<td>NOR</td>
<td>06-12-01</td>
<td>12:36</td>
<td>211</td>
<td>ship@inmail</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**S/R** S: Send message // R: Received message  
**Message No:** Message no. or file name  
**Type:** Message type (Telex, e-mail, etc.)  
**Pri:** Priority; Normal or Distress  
**Date:** Date message was received (transmitted).  
**Time:** Time message was received (transmitted).  
**LES:** ID of LES which handled the message  
**Station:** Transmitting station name. Blank for unregistered station or received message.  
**Size:** Size of message in bytes  
**Cond:** Transmission results: Blank if a received message // Success: Successful transmission // Fail: Failed transmission // Rejected: Message rejected by LES

3. To scroll the Display Log screen, press the arrow keys. You can see the message content by pressing the [Space bar] key.
4. Press the [Esc] key to close the view message window.

5.4 EGC Messages

When an EGC message is received, RECEIVING EGC MESSAGE appears at the bottom left corner of the display. If Auto Message Save in the Auto Mode Setup is ON, EGC messages are automatically printed. EGC messages are automatically received, printed and saved to the terminal unit selected with EGC Output Port on the System Setup menu.

Displaying EGC messages - EGC Message Memory


2. On Display EGC Message option press the [Enter] key to display the latest received EGC message.
3. Press the [Esc] key to close the Display EGC Message window.

You can also follow the below procedure to view the EGC Message Log:

1. Press the [F6] key to display the Memory menu.

2. Press the [3] key to show the EGC Message Log
3. To scroll the EGC Message Log screen, press the arrow keys. You can see the message content by pressing the [Space bar] key.

Receiving EGC distress or urgent message

When the terminal receives an EGC distress or an urgent message, the audio alarm sounds. To silence the alarm, press the [F12] (StopAlarm) key on the terminal unit.
Chapter VI
Distress Operations
6 Distress Operations

6.1 Transmitting the Distress Alert

Set the LES where to send the distress alert, following the next procedure:

a. Press the [F8] key to display the Setup menu.

<table>
<thead>
<tr>
<th>Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distress Alert Setup</td>
</tr>
<tr>
<td>2. System Setup</td>
</tr>
<tr>
<td>3. Editor Setup</td>
</tr>
<tr>
<td>4. Terminal Setup</td>
</tr>
<tr>
<td>5. EGC Setup</td>
</tr>
<tr>
<td>6. AutoMode Setup</td>
</tr>
<tr>
<td>7. E-Mail Setup</td>
</tr>
<tr>
<td>8. Directories</td>
</tr>
<tr>
<td>9. Configuration</td>
</tr>
</tbody>
</table>

b. Press the [1] key to display the Distress Alert Setup screen.

<table>
<thead>
<tr>
<th>Distress Alert Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>LES ID</td>
</tr>
<tr>
<td>Date / Time</td>
</tr>
<tr>
<td>LATITUDE</td>
</tr>
<tr>
<td>LONGITUDE</td>
</tr>
<tr>
<td>Protocol</td>
</tr>
<tr>
<td>Nature</td>
</tr>
<tr>
<td>Course</td>
</tr>
<tr>
<td>Speed</td>
</tr>
</tbody>
</table>

c. Press the [Enter] key to display the LES ID list. Press arrows keys to choose a suitable LES and then press the [Enter] key.
**d.** Press the [Esc] key to close the Distress Alert Setup window.

When a life-endangering situation arises on your vessel and you do not have the time to specify the nature of distress, do the following to transmit the distress alert to an LES.

1. Open the cover of the [DISTRESS] button on the terminal unit.

2. Press the [DISTRESS] button about five seconds.

The distress alert will not be transmitted until the audio alarm sounds. The message "Sending Distress Alert" appears on the screen while the distress alert is being transmitted.

When you receive acknowledgment of the distress alert from an LES, the message
"Distress Acknowledgement Received" appears on the screen, the lamp in the [DISTRESS] button flashes slowly and the audio alarm sounds intermittently. To silence the audio alarm, press the [F12] key on the keyboard.

**Note:** The [DISTRESS] button on the terminal cannot be used to silence the audio alarm for incoming distress or EGC urgency broadcast. The [DISTRESS] button is for transmitting distress alert for own ship. It cannot be used to silence the audio alarm. Use the [F12] key to silence the audio alarm.

### 6.2 Specifying Distress Nature

When a life-endangering situation arises on your vessel and there is time to specify nature of distress and recipient (LES) of distress alert send own ship data (position, time, speed and course) as follows:

1. Press the [F8] key to display the Setup menu.

```
<table>
<thead>
<tr>
<th>Setup</th>
<th>1. Distress Alert Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. System Setup</td>
<td></td>
</tr>
<tr>
<td>3. Editor Setup</td>
<td></td>
</tr>
<tr>
<td>4. Terminal Setup</td>
<td></td>
</tr>
<tr>
<td>5. EGC Setup</td>
<td></td>
</tr>
<tr>
<td>6. AutoMode Setup</td>
<td></td>
</tr>
<tr>
<td>7. E-Mail Setup</td>
<td></td>
</tr>
<tr>
<td>8. Directories</td>
<td></td>
</tr>
<tr>
<td>9. Configuration</td>
<td></td>
</tr>
</tbody>
</table>
```


```
<table>
<thead>
<tr>
<th>Distress Alert Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>LES ID</td>
</tr>
<tr>
<td>Date / Time</td>
</tr>
<tr>
<td>LATITUDE</td>
</tr>
<tr>
<td>LONGITUDE</td>
</tr>
<tr>
<td>Protocol</td>
</tr>
<tr>
<td>Nature</td>
</tr>
<tr>
<td>Course</td>
</tr>
<tr>
<td>Speed</td>
</tr>
</tbody>
</table>
```

3. Press the [Enter] key to display the LES ID list. Press the arrow keys to choose a suitable LES and then press the [Enter] key.
4. Choose Date / Time and then press the [Enter] key.

5. Enter date and time and then press the [Enter] key.

6. Choose LATITUDE and then press the [Enter] key.

7. Enter position in latitude. Enter co-ordinate with appropriate alphabet key N or S

8. Choose LONGITUDE and then press the [Enter] key.

9. Enter position in longitude. Enter co-ordinate with appropriate alphabet key E or W.

10. Press the [Enter] key to close the window.

Note: The menu item Protocol is fixed at Maritime.
11. Choose Nature and press the [Enter] key to display the Nature of Distress list and then choose appropriate nature of distress. If nature of distress is not specified, "Undesignated" is automatically selected.

![Select Distress Nature]

Press the arrow keys to choose the desired distress nature and press the [Space Bar] key to select it.

12. Press the [Esc] key to close the list.

13. Choose Course and then press the [Enter] key.

![Course]

14. Enter course and then press the [Enter] key to close the window.

15. Go to Speed choice and then press the [Enter] key.

![Speed]

16. Enter speed and then press the [Enter] key to close the window.

17. Press the [Esc] key to close the Distress Alert Setup screen.

18. Open the cover of the [DISTRESS] button on the terminal unit.
19. Press the [DISTRESS] button about five seconds.

The distress alert will not be transmitted until the audio alarm sounds. The message "Sending Distress Alert" appears on the screen while the distress alert is being transmitted.

When you receive acknowledgment of the distress alert from an LES, the message "Distress Acknowledgement Received" appears on the screen, the lamp in the [DISTRESS] button flashes slowly and the audio alarm sounds intermittently. To silence the audio alarm, press the [F12] key on the keyboard.

**Note:** The [DISTRESS] button on the terminal cannot be used to silence the audio alarm for incoming distress or EGC urgency broadcast. The [DISTRESS] button is for transmitting distress alert for own ship. It cannot be used to silence the audio alarm. Use the [F12] key to silence the audio alarm.

### 6.3 Distress Message

The distress alert provides the minimum distress information: own vessel's ID, speed, course, position and nature of distress. After receiving the distress alert acknowledgment from an LES and you are not pressed for time, you may send a distress message as below to provide more detailed information.

1. Press the [F1] key followed by the [1] key to display the editor screen.

2. Type distress message. For example:

```
MAYDAY MAYDAY MAYDAY
THIS IS ...........................(Ship's name)
I NEED HELP: .............................(Type of assistance required)
```

3. Press the [F3] key and the [1] key to choose Transmit Message. The following
A screen should appear.

<table>
<thead>
<tr>
<th>Transmit Message</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority</strong></td>
</tr>
<tr>
<td>Message File</td>
</tr>
<tr>
<td>Stations List</td>
</tr>
<tr>
<td>Destination Type</td>
</tr>
<tr>
<td>Country/Ocean Code</td>
</tr>
<tr>
<td>Station ID</td>
</tr>
<tr>
<td>Modem Type</td>
</tr>
<tr>
<td>Subject</td>
</tr>
<tr>
<td>Attach File</td>
</tr>
<tr>
<td>LES ID</td>
</tr>
<tr>
<td>Confirmation</td>
</tr>
<tr>
<td>Send Delay</td>
</tr>
<tr>
<td>Delivery Delay</td>
</tr>
<tr>
<td>Code</td>
</tr>
<tr>
<td><strong>TRANSMIT</strong></td>
</tr>
</tbody>
</table>

4. Priority is selected; press the [Enter] key to open the priority options window.

<table>
<thead>
<tr>
<th>Select Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>NORMAL</em></td>
</tr>
<tr>
<td>DISTRESS</td>
</tr>
</tbody>
</table>

5. Use the arrow key to choose DISTRESS and press the [Space bar] key to select the priority. Then, press the [Esc] key to close the window.

6. Choose LES ID and press the [Enter] key to open the LES list.

<table>
<thead>
<tr>
<th>Select LES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td><strong>Beijing Marine</strong></td>
</tr>
<tr>
<td>Beijing Marine</td>
</tr>
<tr>
<td>Bezeq</td>
</tr>
<tr>
<td>Bezeq</td>
</tr>
<tr>
<td>CAT</td>
</tr>
<tr>
<td>CP Radio Marconi</td>
</tr>
<tr>
<td>Embratel</td>
</tr>
<tr>
<td>France Telecom</td>
</tr>
<tr>
<td>France Telecom</td>
</tr>
<tr>
<td>France Telecom</td>
</tr>
</tbody>
</table>

Cursors/PgDown/PgUp: Scroll  Space: Mark/Unmark  Esc: Exit
7. Go to the LES where the distress message is to be transmitted, preferably the one where the distress alert was transmitted. Press the [Space bar] key to select the LES and press the [Esc] key to close the LES list window.

8. Press the arrow keys to place the cursor on TRANSMIT and press the [Enter] key.

   Start Transmission?
   
   Yes  No

9. Select YES and press the [Enter] key to transmit the distress message to the LES.

   The message "Distress Message Call Activated." appears (in red) while the distress message is being transmitted. When you receive acknowledgment from an LES, the message "Distress Message Call Acknowledged." appears.

   Note: Country/Ocean Code and Station ID are not required in a distress message.

6.4 Testing the Distress button

   The [DISTRESS] button on the terminal unit may be tested as below without transmitting the distress signal. Note that the distress alert cannot be transmitted while testing the [DISTRESS] button.

   1. Press the [F7] key to display the Options menu.

   Options
   
   1. Login
   2. Logout
   3. Abort
   4. Select NCS
   5. Ocean Region
   6. LES Information
   7. Test

   2. Press the [7] key to display the Test menu

   3. Press the [4] key to display the Test menu. Select Yes option and press the [Enter] key to start the test. A message shows that the button distress is under test mode.

   4. Open the [DISTRESS] button cover and press the [DISTRESS] button five seconds. The message "Distress Button works correctly." appears if the button is working properly.
5. Close the [DISTRESS] button cover.

6. To escape from the test, press the [Esc] key on the keyboard of the terminal unit twice. The test mode stops and a message appears to notifying you that normal operation has been restored.
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