

**COBHAM**

# SAILOR 6120/30/40/50

User manual





# **SAILOR 6120/30/40/50**

## **User manual**

**Document number:** 98-131590-C

**Release date:** September 17, 2015

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## Safety summary

The following general safety precautions must be observed during all phases of operation, service and repair of this equipment. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture and intended use of the equipment. Thrane & Thrane A/S assumes no liability for the customer's failure to comply with these requirements.

### Observe marked areas

Under extreme heat conditions do not touch areas of the units that are marked with this symbol, as it may result in injury.



### Microwave radiation hazards

During transmission the antenna in this system radiates Microwave Power. This radiation may be hazardous to humans close to the antenna. When the system is powered, make sure that nobody gets closer than the recommended minimum safety distance of 0.3 m (1 ft.).

### Dangers de rayonnements micro-ondes

Lors de transmissions, l'antenne émet des rayons micro-ondes puissants. Ce rayonnement peut être dangereux pour les personnes à proximité de l'antenne. Lorsque le système est sous tension, assurez-vous que personne ne s'approche à moins de 0,3 m (1 pi.) de l'antenne, la distance de sécurité minimale recommandée.

### Keep away from live circuits

Operating personnel must not remove equipment covers. Only qualified maintenance personal must make component replacement and internal adjustment. Under certain conditions, dangerous voltages may exist even with the cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

### Compass safe distance

Minimum safety distance: 5 m from the SAILOR 3027.

# About the manual

## Naming conventions

This manual covers four different types of system. For information that applies to all four types, the following naming conventions are used:

| Common name   | Used for   |
|---------------|--|
| mini-C system | SAILOR 6120 SSA System<br>SAILOR 6130 LRIT System<br>SAILOR 6140 Maritime System<br>SAILOR 6150 Non-SOLAS System         |
| SAILOR 3027   | SAILOR 3027 SSA Terminal<br>SAILOR 3027 LRIT Terminal<br>SAILOR 3027 Maritime Terminal<br>SAILOR 3027 Non-SOLAS Terminal |

## Intended readers

This manual is a user manual for the SAILOR 6120/30/40/50 systems. The manual is intended for anyone who is using or intends to use any of these four systems. No specific skills are required to operate the mini-C system. However, it is important that you observe all safety requirements listed in the beginning of this manual, and operate the system according to the guidelines in this manual.

## Manual overview

Note that this manual does not cover installation of the system. For information on installation and initial configuration, refer to *SAILOR 6120/30/40/50, Installation manual [1]*. Part numbers for related manuals are listed in the next section.

This manual has the following chapters:

- **Introduction** contains an overview of the mini-C system and a brief description of each unit in the system.

- **Getting started** explains how start up the system. It also contains a short guide to the most important functions.
- **Using easyMail** explains how to set up and use the system with the easyMail 2 application from a connected computer.
- **Using Distress and SSA buttons** explains how to use connected Distress buttons and SSA buttons.
- **Service** contains information on software update and a short troubleshooting guide and explains how to check the status of the system.

## Related documents

| Ref | Title and description   | Document no. |
|-----|---|--------------|
| [1] | SAILOR 6120/30/40/50,<br>Installation manual  | 98-131589    |
| [2] | SAILOR 6110 mini-C GMDSS,<br>User manual  | 98-130753    |
| [3] | SAILOR 6006 and SAILOR 6007 Message<br>Terminal, Installation manual                  | 98-130088    |
| [4] | SAILOR 6194 Terminal Control Unit,<br>Installation and user manual                    | 98-131593    |
| [5] | Software Interface Reference Manual for the<br>TT-3027C/D/M/LT/SSA mini-C transceiver | 98-147405    |

## Typography

In this manual, typography is used as indicated below:

**Bold** is used for the following purposes:

- To emphasize words.  
Example: “Do **not** touch the antenna”.
- To indicate what the user should select in the user interface.  
Example: “Select **SETTINGS > LAN**”.

**Italic** is used to emphasize the paragraph title in cross-references.

Example: “For further information, see *Connecting Cables* on page...”.

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# Introduction

## Welcome

Congratulations on the purchase of your mini-C system!

With the mini-C system you can send and receive data via satellite through the Inmarsat C network. Four variants of the mini-C system are described in this manual:

- SAILOR 6120 SSA System
- SAILOR 6130 LRIT System
- SAILOR 6140 Maritime System
- SAILOR 6150 Non-SOLAS System

Each of these systems uses its own variant of the SAILOR 3027 mini-C terminal.



This chapter has the following sections:

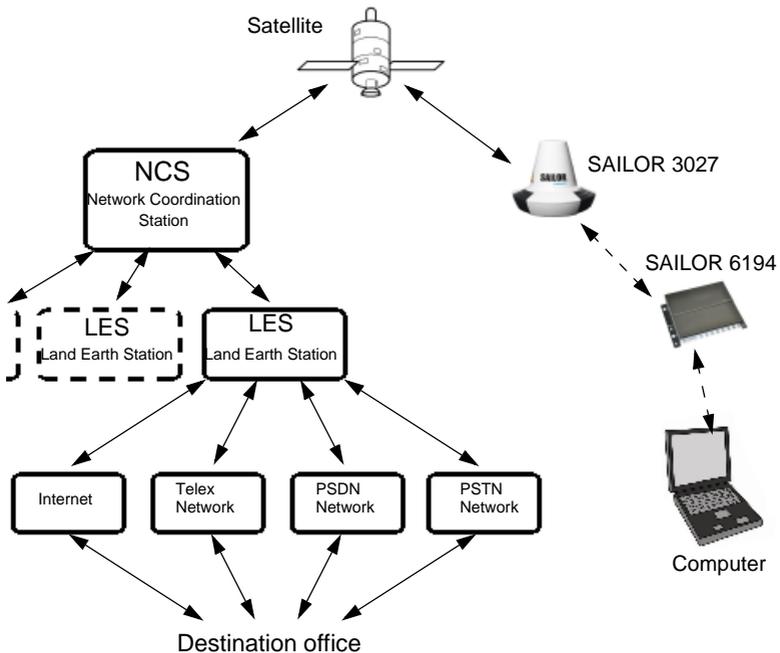
- *System overview*
- *System units*
- *User interfaces*
- *The Inmarsat C services*

## System overview

### The SAILOR 6120/30/40/50 mini-C system

The Inmarsat C satellite network is the link between the mini-C system and the destination office. It uses four geostationary satellites to cover the world. For each satellite there is an NCS, Network Coordination Station, handling registration of the mobile unit (in this case the SAILOR 3027) in the Inmarsat C system.

Each NCS is associated with a number of LESeS, Land Earth Stations, which handle the transmission between the mobile units and the destination office.



The SAILOR 3027 can work as a standalone system automatically transmitting data on the Inmarsat C network, or you can connect alarm buttons and/or a computer through the SAILOR 6194 Terminal Control Unit.

The SAILOR 3027 can be connected to a SAILOR 6006 Message Terminal, where you can read and write messages and send Distress Alerts (SAILOR 6150 only). This communication is transmitted via the SAILOR 3027 to/from the Inmarsat C satellite network.

## Scripting

The SAILOR 6194 Terminal Control Unit supports simple scripting, using Lua language. Scripting can be used e.g. for automatically reacting on events registered in the multipurpose input/output pins of the SAILOR 6194. With the Script option you can run custom-designed scripts dedicated to specific applications with the SAILOR 3027.

Typically a script monitors and controls the SAILOR 3027 by using commands via the command shell interface. The scripts are run from an SD memory card installed in the SD card slot of the SAILOR 6194. For further information on scripting, see the manual for the SAILOR 6194 Terminal Control Unit.

## System units

The basic mini-C system consists of a power supply and the following units:

- SAILOR 3027 mini-C terminal.  
Contains both transceiver, GPS receiver and omnidirectional antenna for the Inmarsat C system. Connects to other equipment, primarily the SAILOR 6194, through a CAN interface carrying both power and bi-directional communication.
- SAILOR 6194 Terminal Control Unit (only included with SAILOR 6120 and SAILOR 6150).  
Enables you to connect the SAILOR 3027 with other equipment, such as Distress buttons, SSA (Ship Security Alert) buttons or a computer. The SAILOR 6194 comes with the SAILOR 6120 and SAILOR 6150 systems only, but is available for the other systems as well.



For a more detailed description of the units, refer to the installation manual for the SAILOR 6120/30/40/50 mini-C system.

## User interfaces

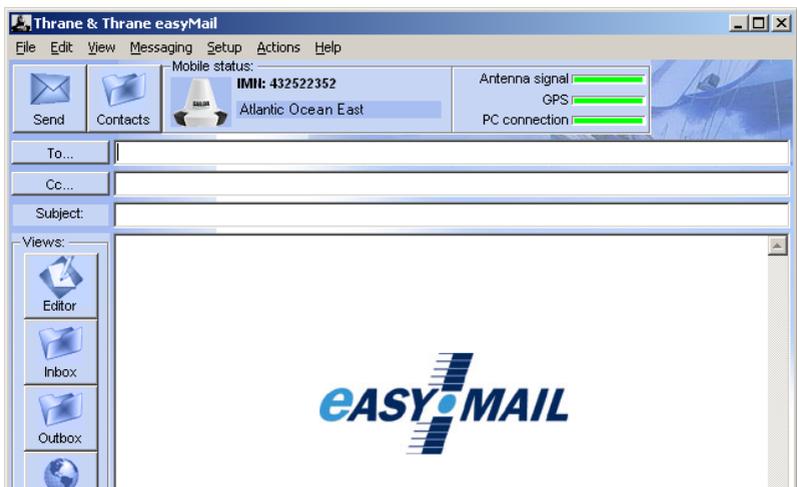
The basic mini-C system does not have a dedicated user interface. To have a user interface you must use one of the following options:

- a SAILOR 6194 Terminal Control Unit and a computer with the **easyMail** application installed. For details, refer to *SAILOR 6120/30/40/50, Installation manual [1]*.
- a SAILOR 6006 Message Terminal connected to the system through the CAN interface. The SAILOR 6006 has a built-in user interface.

For overall system status, diagnostics and live logging you may use the **ThraneLINK Management System (TMA)**. For details on the TMA, see *The ThraneLINK Management Application* on page 72.

## easyMail

easyMail is a user interface for the mini-C system. With easyMail you can send and receive messages, view status and configure the system. To use easyMail you must have a SAILOR 6194 Terminal Control Unit and a computer with the easyMail application installed. For information on how to get started with easyMail, see *easyMail application* on page 14.



For details on how to use easyMail, see *Using easyMail* on page 21.

## SAILOR 6006 user interface (for SAILOR 6150)

For the SAILOR 6150 Non-SOLAS system you can use the SAILOR 6006 Message Terminal. With the SAILOR 6006 Message Terminal you can send and receive messages, send Distress Alerts, view system status and configure the system.



The SAILOR 6006 has a touch-screen for operating the system. You can also use the keyboard.

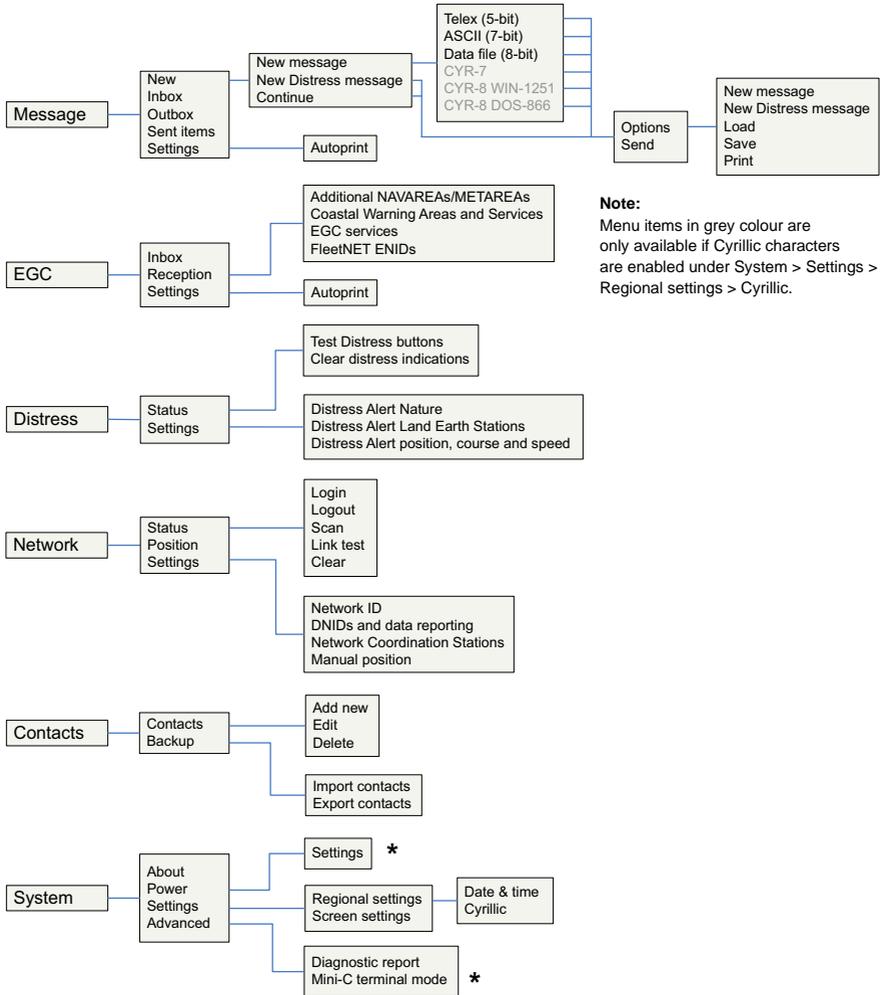


You may also have a second Distress button, e.g. an alarm panel, in your system. For information how to use it, see the manual for your alarm panel.

For details on how to use the SAILOR 6006, see *SAILOR 6110 mini-C GMDSS, User manual [2]*. To get started with the mini-C system, see *Getting started* on page 13.

## Menu overview, SAILOR 6006

The below drawing shows the menu system in the SAILOR 6006.



**Note:**  
Menu items in grey colour are only available if Cyrillic characters are enabled under System > Settings > Regional settings > Cyrillic.

The items in the menu overview are described in the following sections. Items marked \* are described in *SAILOR 6110 mini-C GMDSS, User manual [2]*.

## The Inmarsat C services

The mini-C system supports the following services through the Inmarsat C system. For a description of these services, see the next sections.

- *Distress alerting and Distress priority messaging*
- *Enhanced Group Calling (EGC)*
- *Message transmission*
- *Position reporting*
- *Data reporting and polling*

### Distress alerting and Distress priority messaging

If a ship or a crew is in grave and imminent danger, maritime Inmarsat C and some mini-C models are used to send a Distress Alert by pushing a dedicated Distress button.

The alert contains information on the ship's identity (Inmarsat C mobile number), ship's position (latitude and longitude), ship's course and speed, nature of Distress, date / time when the alert was sent and time when the ship's position was last updated.

All Distress Alerts are automatically routed through the addressed LES to an associated Maritime Rescue Coordination Centre (MRCC), which will establish communication with the ship and launch the search and rescue (SAR) operation the ship may need.

After sending the initial Distress Alert, if time permits, it is possible to send a more detailed Distress priority message to give more details about the Distress event and ask for the required assistance.

The Distress priority message should be sent via the same LES as the Distress Alert, to ensure that it is delivered automatically to the same MRCC.

## Enhanced Group Calling (EGC)

The Inmarsat C system has a special capability known as Enhanced Group Call (EGC), which enables authorised information providers to broadcast messages to selected groups of ships. Reception by ships that are fitted with Inmarsat C or mini-C terminals is automatic. A special header is added by the system to the EGC message to indicate the group of mobile terminals or the geographical area to which the message is to be sent.

Two EGC services are available:

- EGC SafetyNET - the international safety service, which allows authorised maritime safety information (MSI) providers, such as meteorological offices, hydrographic officers and MRCCs to broadcast messages to all ships in certain geographical areas.

MSI includes navigational and meteorological warnings, meteorological forecasts and other urgent safety-related information, which is addressed to all ships in NAVAREA / METAREA, user-defined circular or rectangular area or coastal area.

Reception of SafetyNET messages is a mandatory function of the GMDSS equipment that is required to be carried in certain ships under the provision of the International Maritime Organisation's Safety Of Life At Sea (SOLAS) convention.

- EGC FleetNET - the international commercial service, which allows authorised information providers, such as commercial subscription services, shipping companies or governments to broadcast messages to selected groups of vessels, each of which has registered with the information provider and been added to a FleetNET closed group / network. The mobile terminals on these groups of vessels are identified by an ENID (EGC Network IDentification) common to the group.

For further information on EGC via Inmarsat C read the Inmarsat Maritime Communications Handbook, Chapter 6, or visit the Inmarsat Maritime Safety Services website at [www.inmarsat.com](http://www.inmarsat.com).

## Message transmission

**Ship to shore:** Text and data from Inmarsat C and mini-C terminals can be sent to:

- An e-mail address
- Any telex or fax (text, one way only) number
- Any computer connected to the public telephone and data networks (PSTN and PSDN), using a telephone modem number
- Another Inmarsat C / mini-C terminal
- A Short (or Special) Access Code (SAC).

The maximum message size is 10 kb for the SAILOR 3027.

**Shore to ship:** Text and data can be sent via telex, e-mail and the data and telephone (PSDN / PSTN) networks. To be able to send messages to ships, a shore-based message originator needs to be registered (to have a commercial service agreement) with an Inmarsat C service provider of their choice.

**Ship to ship:** Messages can also be sent in a ship-to-ship direction from one Inmarsat C / mini-C terminal to another.

## Position reporting

Most of Inmarsat C and mini-C models are integrated with Global Navigational Satellite System (GNSS) receivers, such as GPS, to provide highly reliable, round-the-clock position information of a ship, which can be used for position reporting.

The position reporting service is based on using the data reporting and polling protocol and allows a shore-based subscriber (base station or shipping company) to request position information from a vessel, as a single report or automatic reception at fixed intervals, e.g. every six hours.

A ship's terminal can also be programmed to send regular position reports to any desired destination.

The position report includes ship's identity, latitude, longitude, course, speed, date / time of the position report and time of the last position update.

In the mini-C system, the report is sent to a DNID (Data Network Identifier) that is effectively a mailbox created on some LESes. The SAILOR 3027 sends its reports to this mailbox and other tracking systems can then access and empty the mailbox. The mini-C system supports up to 64 DNIDs.

Up to 255 mobile terminals can use the same DNID, and the specific terminal is identified by a member number between 1 and 255.

The DNID must be created on the LES before the position-reporting feature can be used. Once the DNID account is created, the LES can download the DNID information to the desired terminals, thereby enabling them to send reports to the DNID.

## **Data reporting and polling**

Inmarsat C users may need to acquire information (short data reports) from vessels, or to collect data automatically at fixed or variable intervals.

The data reporting service allows for the transmission of information, in packets of up to 32 bytes on request or at prearranged intervals from Inmarsat C or mini-C terminals, to shore-based customers.

Polling allows shore-based customers to interrogate an Inmarsat C or mini-C terminal or group of terminals by sending a special polling command. The polling command instructs a terminal or group of terminals to send a data report immediately, start sending regular reports, change transmission schedule of reports or perform another task of the polled terminal(s).



# Getting started

This chapter explains how to register, start up and log on your mini-C system. It has the following sections:

- *Registration*
- *Starting up the system*
- *User interfaces*

## Registration

Before using the SAILOR 3027 mini-C terminal on the Inmarsat-C system you must register the terminal to the system. In most cases the distributor has already filled in the Service Activation Registration Form (SARF) for your SAILOR 3027 when you receive your mini-C system.

For details on registration, see the Installation manual for the mini-C system.

After registration you must use a computer with the easyMail 2 application or a SAILOR 6006 Message Terminal to set up the mobile number in the SAILOR 3027. See *Entering the mobile number* on page 58 (easyMail) or *Setting the mobile number in the TT-3027A* on page 70 (SAILOR 6006).

## User interfaces

If you are going to use your mini-C system for anything other than automatically transmitting reports, you should have a user interface for accessing the mini-C system. In Non-SOLAS Distress systems a user interface is mandatory, because of the need for safety communication.

You can control the mini-C system in two ways:

- Using the easyMail 2 application installed on a computer. The computer must be connected via the LAN interface in the SAILOR 6194 Terminal Control Unit to the mini-C system.
- Using a SAILOR 6006 Message Terminal. The SAILOR 6006 must be connected to the CAN interface of the system.

## easyMail application

### Installing easyMail

To install the easyMail application on your computer, do as follows:

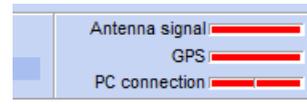
1. Go to [www.cobham.com/communications-and-connectivity/satcom](http://www.cobham.com/communications-and-connectivity/satcom).
2. Select **Service and Support**.
3. Select **AVIATOR, EXPLORER, SAILOR, Sea Tel Service and Support** and then **24-7 Self Service Centre / Technical Downloads**.
1. Select **Downloads > Maritime > Sat-C > Data Terminal 3606E/EasyMail > Software > easyMail 2**.
2. Click **Download**.
3. When the zip file is downloaded to your computer, extract the setup file from the zip file.
4. Run the setup file and go through the InstallShield Wizard.
5. When the Wizard is complete, you can start the application from the **easyMail 2** shortcut on the desktop, or from the **Start** menu.

## Accessing your SAILOR 3027 with easyMail 2

1. Acquire a SAILOR 6194 Terminal Control Unit, if it is not already part of your system.
2. Connect your SAILOR 3027 to the CAN interface on the SAILOR 6194 Terminal Control Unit.
3. Connect a computer to the RS-232 port or the LAN port of the SAILOR 6194 Terminal Control Unit.

Refer to *SAILOR 6194 Terminal Control Unit, Installation and user manual [4]* for information on how to connect and set up the interfaces.

4. Start the application from the **easyMail 2** shortcut on the desktop, or from **Start** menu.
5. If the PC connection is not already set up (the PC connection bar is red), see *Setting up PC communication with the SAILOR 3027* on page 61.



When all three bars are green, you can use the easyMail application to set up and control the mini-C system, send and receive messages etc. See *Using easyMail* on page 21.

## SAILOR 6006 Message Terminal

The SAILOR 6006 has its own built-in user interface. If you are using a SAILOR 6006 with your SAILOR 6150 Non-SOLAS system, you must configure the SAILOR 6006 before using it for the first time.

**Note** | The initial configuration may already have been done during installation of the system. If so, you can skip this section.

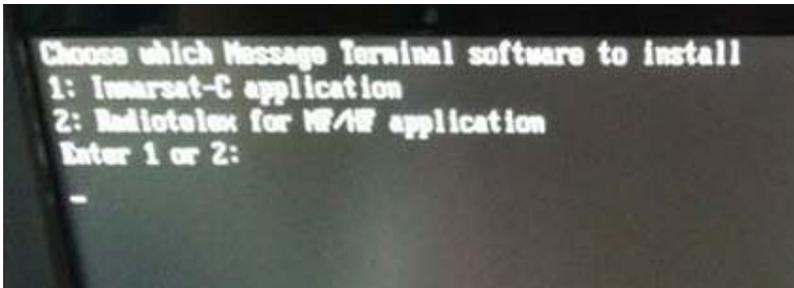
For configuration you must have a keyboard connected to the SAILOR 6006.

### To select the mini-C software

The first time the SAILOR 6006 is switched on, you are asked to select the Message Terminal software to use. The SAILOR 6006 Message Terminal can be used for Radiotelex or for Inmarsat C.

**Important** | Make sure you select the correct software for the system you are going to use. Once you have selected the software you cannot change it back!

Enter “1” for Inmarsat C.



After entering Inmarsat C, the SAILOR 6006 automatically restarts as an Inmarsat C Message Terminal. For information on how to send Distress alerts, see *Distress alert with SAILOR 6006* on page 67.

For details on how to use the SAILOR 6006, see *SAILOR 6110 mini-C GMDSS, User manual [2]*.

## Starting up the system

### easyMail

When the power source is on, the SAILOR 3027 automatically starts up and logs on to the satellite network.

You can see the logon status on screen on a connected computer with easyMail 2 installed.

### SAILOR 6006 (for SAILOR 6150 Non-SOLAS system)

#### Powering the system

When all units are connected correctly and you have registered the SAILOR 3027, do as follows to power the system:

1. Make sure the power source is on.
2. Switch on the SAILOR 6006.
  - Use the power switch in the right side of the SAILOR 6006, or
  - if you have installed a remote on/off switch, use that instead.



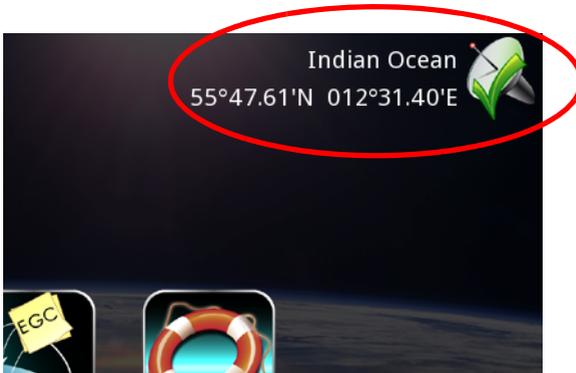
The SAILOR 6006 starts up and sends a signal to switch on the SAILOR 3027. The SAILOR 6006 shows the current status in the upper right corner of the display.



For an overview of the user interface, see *Overview of the screen* on page 24.

## Logging into the satellite network

If the system was not already logged into the Inmarsat C network, it logs in automatically at startup. The upper right corner of the display shows if the system is logged on.



If, however, the selected satellite is no longer available, you must manually select another satellite to log into.

To log into the satellite network manually, do as follows:

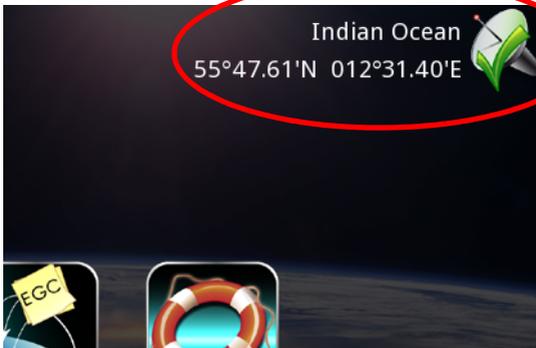
1. When the main menu of the SAILOR 6006 appears, select **Network**.



2. On the **Network Status** page select **Login**.



3. Select the Ocean Region to which you want to log in.  
If the selected satellite is available, the system will now log on.  
When the display shows the Ocean Region and the position, and there is a green check mark at the satellite symbol, the system is ready for use.

**Note**

The Ocean Region is only displayed if the system is idle and there are no errors - otherwise the text will show the current status.



# Using easyMail

This chapter describes how to operate the mini-C system using the easyMail 2 application. It has the following sections:

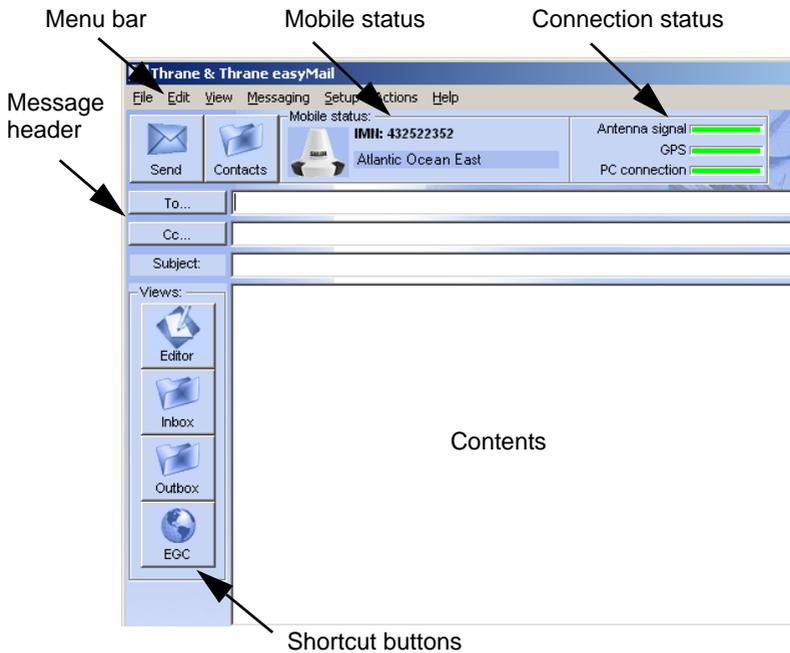
- *Overview of easyMail*
- *Distress functions (only SAILOR 6150)*
- *Working with messages*
- *Position reporting*
- *Receiving EGCs*
- *Network status and settings*
- *Viewing system details*
- *Viewing or changing position information*
- *Viewing status and Info log*
- *To see the Info log*
- *Setting up the default ISP and default LESes*
- *To set up the default LESes*
- *Setting up reception of EGCs*
- *Setting up ENIDs*
- *Setting up the Land Earth Stations (LES)*
- *Setting up Inmarsat Service Providers (ISP)*
- *Entering the mobile number*
- *Setting the local time*
- *Setting up password protection*
- *Setting the language*
- *Setting up PC communication with the SAILOR 3027*
- *Setting up easyMail*

## Overview of easyMail

For information on how to install and start up easyMail 2, see *easyMail application* on page 14.

### Overview of the screen

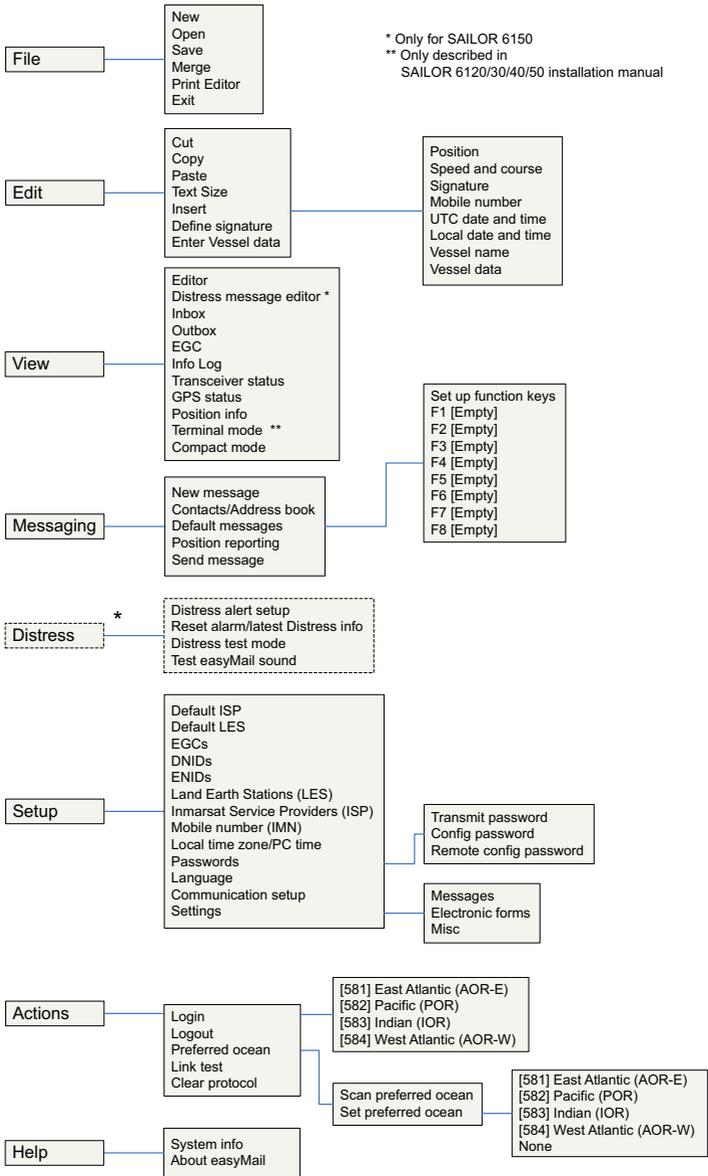
Below is an overview of the main screen in easyMail.



- The **menu bar** holds the menus. For an overview of all menus, see *Menu overview, easyMail* on page 24
- **Mobile status** shows the status of your SAILOR 3027. When connected and logged in, this field shows the mobile number (MMI) and the ocean region to which your SAILOR 3027 is logged in.

- **Connection status** shows the status of your PC connection, your mini-C antenna connection and your GPS connection.
- **Message header** contains the fields where you can enter recipients and subject for a message.
- **Shortcut buttons** may be used for quick access to some of the menu items. You can show/hide the shortcut buttons under **View > Compact mode**.
- **Contents.** Depending on the selected view, this area can show your message text or e.g. received messages or EGCs.

# Menu overview, easyMail



## Distress functions (only SAILOR 6150)

### Writing a Distress priority message

**Note** | Distress priority messages are sent to the MRCC only.  
Distress priority messages must be written in English.

To write a Distress priority message, do as follows:

1. From the menu bar, select **View > Distress message editor**.  
A warning appears.
2. Click **Yes** and then **OK** to continue to the Distress message editor.  
The position and mobile number of your SAILOR 3027 is automatically inserted at the beginning of the Distress message, together with the data you have entered under Vessel data (if any).
3. Type a subject for the message.

**Important** | The Subject field is important - some messages may not be received correctly if the subject is missing.

4. Type your message, describing the nature of the Distress.
5. Click **Send**.

### Setting up Distress alert

You can temporarily change the settings for your Distress function.

For information on how to use the Distress button to send a Distress alert, see *To send a Distress Alert (SAILOR 6150 only)* on page 65.

Default settings:

- Distress Alert Nature: Unspecified.
- Distress Alert Land Earth Stations: LES automatically selected by mobile. (the SAILOR 3027 selects the LES with the best signal).
- Distress Alert Position, Course and Speed: Always use latest position from GPS.

**Note**

The Distress Alert Nature and the Distress Alert Position, Course and Speed settings are only valid for the current Distress Alert or maximum one hour. Then these settings are returned to the default settings. The entered Distress LESes remain in the system.

To change the Distress alert settings, do as follows:

1. From the menu bar, select **Distress > Distress alert setup**.
2. Click **OK** after reading the warning popup window.

**Distress Alert Setup**

Land Earth Stations:

Atlantic Ocean Region West: LES automatically selected by mobile

Atlantic Ocean Region East: LES automatically selected by mobile

Pacific Ocean Region: LES automatically selected by mobile

Indian Ocean Region: LES automatically selected by mobile

Position:

Latitude: Deg. 55 Min. 47 Min/100 60 N/S N

Longitude: Deg. 012 Min. 31 Min/100 40 W/E E

Course: Deg. 117

Speed: Knots 0

Updated at UTC: Hour 08 Min. 07

Always use latest position from GPS

Nature of Distress:

Undesignated

Explosion/Fire

Flooding

Collision

Grounding

Listing

Sinking

Disabled & adrift

Abandoning ship

Req. assistance

Piracy

OK Cancel

3. From the drop-down list at each ocean region, select the LES to be used for Distress alerts or leave the setting at **LES automatically selected by mobile** (default setting).

4. If necessary, change the position, course and speed.

**Note**

Do not change the default setting unless you have good reasons to do so. The default setting is "Always use latest position from GPS". It is normally best to show your current GPS position when sending a Distress Alert.

You may need to change the position, e.g. if the person(s) that need help are no longer on board the ship (man overboard).

5. Select the nature of the Distress.
6. Click **OK**.

## Reset alarm/latest Distress info

After sending a Distress alert or receiving an urgent/distress priority EGC or message, you can reset the alarm light and sound in the alarm buttons. At the same time you can see status on Distress alerts and Distress test. Do as follows:

1. Select **Distress > Reset alarm/latest Distress info**.

A popup window shows information on the latest Distress Alert and the latest Distress test.

2. Click **OK**.

The light and sound in the alarm button(s) are switched off.

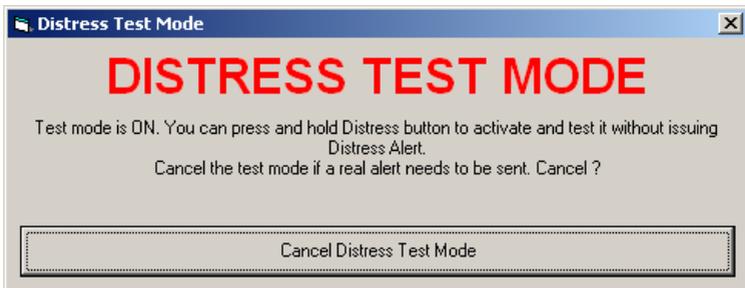
## Testing Distress buttons

**Important**

Never test the installation by sending an alert on-air!  
If an alert is sent by mistake, inform the relevant authorities immediately.

You can test the Distress button(s) in your system without sending a real Distress alert. Do as follows:

1. Select Distress > Distress test mode.



2. When you see the Distress test mode window shown above, press the connected Distress button(s) as you would in a real Distress situation. The light and buzzer in the Distress buttons should work the same way as in a real Distress situation. For details on the Distress buttons, see *To send a Distress Alert (SAILOR 6150 only)* on page 65.
3. To clear alarm indications, select **Distress > Reset alarms/latest Distress info**. The button light should go off.
4. Click **Cancel** to exit Distress test mode.

**Note**

The system automatically exits the test mode after 15 minutes, if you do not Cancel it.

## Testing easyMail alarm sound

To test the alarm sound in easyMail, do as follows:

1. Select **Distress > Test easyMail sound**.
2. Click **Start** to hear the sound on your computer.  
Your computer will now play the same sound that you will hear when a Distress alert is sent or an urgent/distress priority EGC or message is received.
3. Click **Stop** to stop the sound.
4. When you have finished testing, click **Cancel** or close the window.

## Working with messages

### Preparing the system

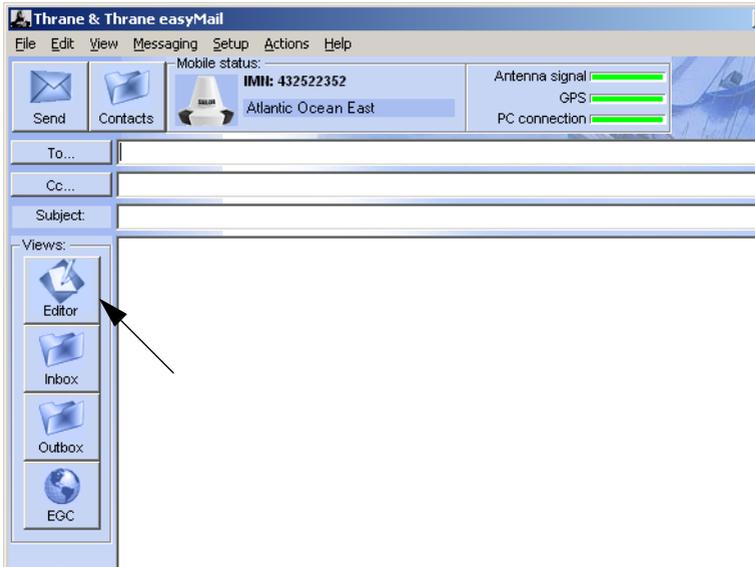
Before you can send a message:

- The recipient of the message must be listed in the Address book. For details, see *Managing the list of Contacts* on page 38.
- The SAILOR 3027 must be logged in to an Ocean Region. Normally the SAILOR 3027 logs in automatically. If it is logged out, see *Logging into and out of the network* on page 46.
- The default ISP must be set.  
See *Setting up the default ISP and default LESes* on page 51.
- Default LESes must be set for all Ocean Regions.  
See *To set up the default LESes* on page 51.
- The mobile number must be configured in the SAILOR 3027.  
This is normally set up during installation. If not, see *Entering the mobile number* on page 58.

## Writing a routine priority message

To write a routine priority message, do as follows:

1. If the editor is not already open, select **File > New** or click the **Editor** button to the left (if present).



2. Select **To...** in the top left corner and select the recipient(s) of the message from the Address book.

Alternatively you may type in the recipient manually.

3. In the **Subject** field, type in a subject title for your message.

**Important**

The Subject field is important - some messages may not be received correctly if the subject is missing.

4. If you want to send a data file instead of typing text in the text editor, skip the next step and go directly to step 6.
5. Type your message text in the editor.

For information on how to edit text, see *Editing your message* on page 33.

**Note**

If you want to save your message without sending it, you can save it as a file by selecting **File > Save**.

- When the message is ready to be sent, click **Send**.



- Select what you want to send.
  - If you want to send a data file, select **File from disk**, browse to the file you want to send and click **Open**.
  - If you want to send the text in the editor, select **Text in editor**.
- Select if you want:
  - Confirmation request
  - Print message upon sending
- Select **OK**.

The message is sent as soon as the network allows it. You can see the status of your message under **View > Outbox**.

## Options for writing and sending messages

In the **File** menu, you have the following options:

- **New.** Opens a new message.
- **Open.** Allows you to select a text file to be opened in the editor.
- **Save.** Allows you to save the message for later use.
- **Merge.** Allows you to insert the contents from a text file into your message at the cursor position.
- **Print editor.** Prints the message on a connected printer.
- **Exit.** Closes easyMail.

## Editing your message

When writing a message you have some editing options, described in the next subsections.

### To cut, copy and paste

In the **Edit** menu you can select **Cut**, **Copy** and **Paste** as in a normal editor.

### To change text size

To change the text size, press **Ctrl+F1** (smaller) and **Ctrl+F2** (larger), or select **Edit > Text size > + Ctrl+F2** or **- Ctrl+F1**.

## To insert information automatically

To insert information such as position and vessel data in your message, do as follows:

1. Select **Edit > Insert**.



2. Select the information you want to insert.

**Note** Signature and vessel data must first be defined. See the next section.

The information is now inserted in your message as part of the message text.

## To enter signature and vessel data

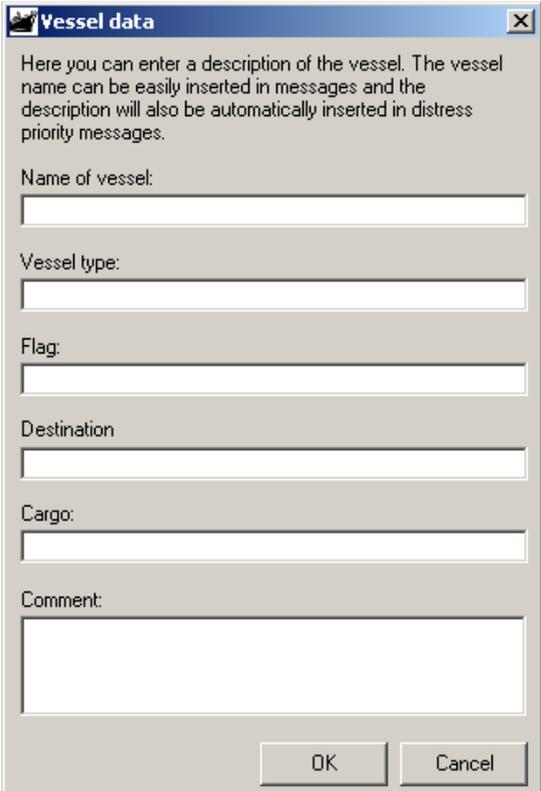
You can enter a signature and your vessel data for later automatic insertion in your messages (see previous section). To define your signature, do as follows:

1. Select **Edit > Define signature**.
2. Type in your signature and click **OK**.

The signature is now saved for later use with Edit > Insert.

To enter your vessel data, do as follows:

1. Select **Edit > Enter vessel data**.



**Vessel data**

Here you can enter a description of the vessel. The vessel name can be easily inserted in messages and the description will also be automatically inserted in distress priority messages.

Name of vessel:

Vessel type:

Flag:

Destination:

Cargo:

Comment:

OK Cancel

2. Fill in the vessel data for your ship and click **OK**.

## Using default messages

You can write a default message that you can recall and send by pressing one of the F-keys F1 to F8.

### Creating a default message

To **create** a default message, do as follows:

1. Open the message editor.
2. Type in your message.
3. Select **Messaging > Default messages**.
4. Select the F-key you want to use for the message.
5. Type a name for the message.
6. Click **Save and close**.

### Sending a default message

To **recall and send** the message, fill in the message recipient and a subject in the editor **To...** field and press the F-key you selected above.

**Important**

The Subject field is important - some messages may not be received correctly if the subject is missing.

## Viewing messages in the Inbox

To view the messages in the Inbox, do as follows:

1. Select **View > Inbox**.



2. Double-click the message you want to read.

From within the message you have the following options:

- **Print.** The message is printed on the connected printer.
- **Save.** You can browse to a location and save the message (.txt file)
- **Forward.** The message text is inserted into the editor so you can forward it to a new recipient.
- **Wrap text.** When selected, the text is wrapped to fit the window size.

3. Click **OK** or **Cancel** to close the message.

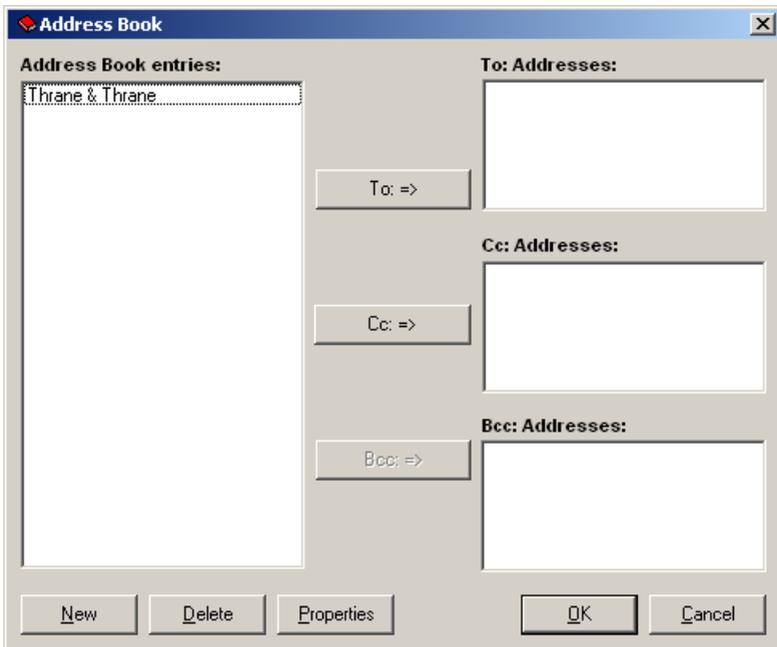
4. To delete one or more messages, right-click the message(s) and select **Delete message**

## Viewing sent messages (Outbox)

After writing a message and selecting Send, you can see the message and the status of the message in the Outbox. To view messages in the Outbox, select **View > Outbox**.

## Managing the list of Contacts

To manage your list of contacts, click  or select **Messaging > Contacts/Address book**.

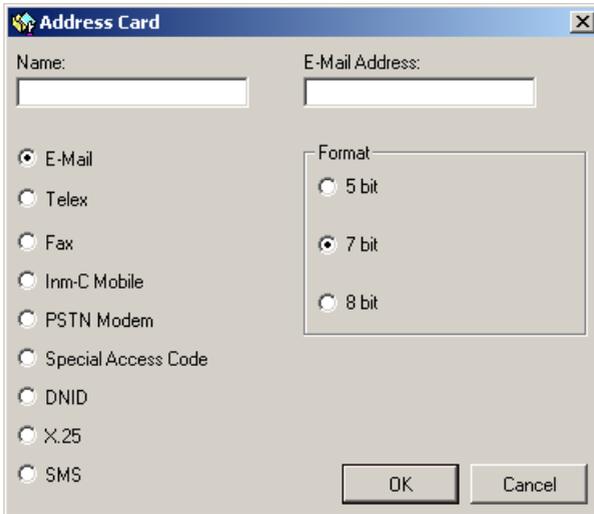


To see details for a contact, select it and click **Properties**.

## To add a new contact

Do as follows:

1. In the **Address book**, select **New** at the bottom of the page.



The screenshot shows a dialog box titled "Address Card" with a close button in the top right corner. It features two text input fields: "Name:" and "E-Mail Address:". Below the "Name:" field is a list of radio button options for address types: E-Mail (selected), Telex, Fax, Inm-C Mobile, PSTN Modem, Special Access Code, DNID, X.25, and SMS. To the right of these options is a "Format" section with three radio button options: 5 bit, 7 bit (selected), and 8 bit. At the bottom right of the dialog are "OK" and "Cancel" buttons.

2. Type in the name of your contact.
3. Select the address type below the name.
4. Type in the details for your contact. The format of the address/number depends on the selected address type. See the table on the next page.
5. Select **OK**.

The new contact is now listed in the Address book.

Message formats and presentation:

| Type                | Format of number  | Example         | Presentation  |
|---------------------|---|-----------------|---------------|
| E-mail              | Standard e-mail address   | info@cobham.com | 5, 7 or 8 bit |
| Telex               | Country code + subscriber no.   | 0045 99999999   | 5 or 7 bit    |
| Fax                 | Country code + subscriber no.   | 0045 99999999   | 5, 7 or 8 bit |
| Inmarsat-C mobile   | Mobile number   | 492388999       | 5, 7 or 8 bit |
| PSTN modem          | Country code + subscriber no.   | 0045 99999999   | 5, 7 or 8 bit |
| Special access code | Pre-defined codes: <ul style="list-style-type: none"> <li>• 32 - Medical Advice</li> <li>• 33 - Technical Assistance</li> <li>• 38 - Medical Assistance</li> <li>• 39 - Maritime Assistance</li> <li>• 41 - Meteorological Reports</li> <li>• 42 - Navigational Hazards and Warnings</li> <li>• 43 - Ship Position and Sail Plan Reports</li> </ul> | 32              | 5, 7 or 8 bit |
| X.25                | DNIC (country code) + subscriber no.  | 2380 99999999   | 5, 7 or 8 bit |

Table 1: Message formats and presentation

### To edit a contact

Do as follows:

1. In the **Address book**, select the contact.
2. Select **Properties**.
3. Edit the details.  
See the previous section for information on the contact details.
4. Select **OK**.

### To delete a contact

Do as follows:

1. In the **Address book**, select the contact.
2. Select **Delete**.
3. Select **Yes** to confirm.
4. Select **OK** to leave the Address book.

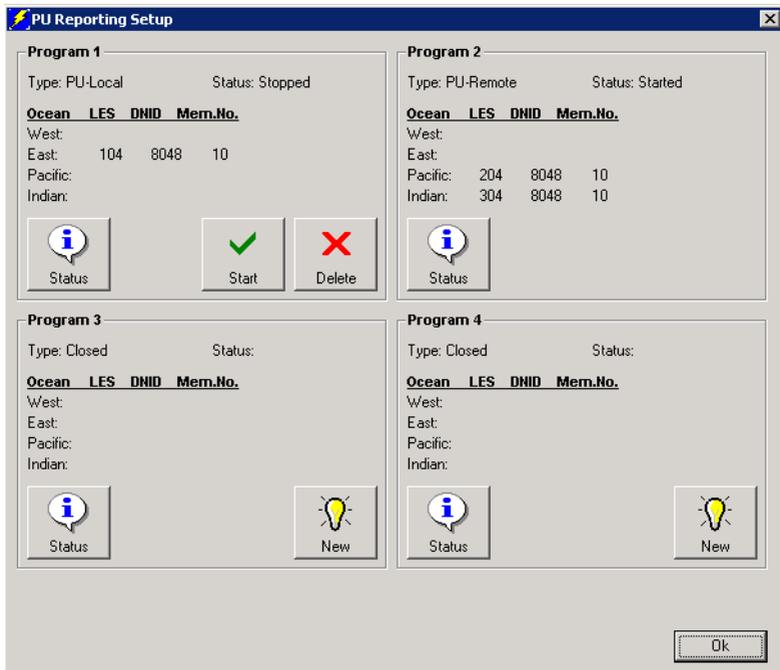
## Position reporting

For general information on the position reporting service, see *Position reporting* on page 10.

**Note** To be able to use the position reporting feature, a DNID must be downloaded and enabled in the SAILOR 3027. See *Setting up ENIDs* on page 53.

To access the PU reporting setup page, Select:  
**Messaging > Position reporting.**

The PU (Position Unreserved) reporting setup window shows the position reporting programs for the SAILOR 3027. For each program you can see the status and whether it is a local or remote program.



## To start a local position reporting program

**Note** Only local position reporting programs can be managed locally. You can see the remotely configured programs as well but you cannot change them.

To start a program that is already defined, do as follows:

1. From the PU Reporting Setup page, click the **Start** button at the program you want to start. The Start button becomes a Stop button



The SAILOR 3027 will now start sending position reports from the defined start time with the defined intervals until you stop it with the **Stop** button.

2. Click **OK**.

## To define a new position reporting program

To define a new local program, do as follows:

1. From the **PU Reporting Setup** page, select **New**.

2. Select the DNID information (provider, LES, DNID and member number) for each ocean region.
3. Select the time to start the position reporting or select Immediately.
4. Select the interval between the position reports.
5. Click **OK**.  
The program is now set up and you can start and stop it with the buttons as described in the previous section.
6. Click **OK** again to exit the PU Reporting Setup page.

## Receiving EGCs

You can receive various types of EGCs in easyMail. For details about how to set up which EGCs to receive, see *Setting up reception of EGCs* on page 52.

**Note**

To be able to receive FleetNET EGCs, an ENID must be downloaded and enabled in the SAILOR 3027. See *Setting up ENIDs* on page 53.

**Note**

When the EGC Inbox is full, the oldest EGCs are automatically deleted.

## Viewing incoming EGCs

To view EGCs, do as follows:

1. Select **View > EGC** from the main menu.

| Disk Filename | Modem Filename | LES | Service                  | Priority | Bits      | Date & Time    | Size | Ref.No. | Routing |
|---------------|----------------|-----|--------------------------|----------|-----------|----------------|------|---------|---------|
| 11032909.egc  | EGC.467        | 121 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-29 04:33 | 416  | 21430   | Mem     |
| 11032908.egc  | EGC.466        | 112 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 21:39 | 5670 | 14567   | Mem     |
| 11032907.egc  | EGC.465        | 112 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 21:32 | 2854 | 14567   | Mem     |
| 11032906.egc  | EGC.464        | 121 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 21:03 | 5606 | 21421   | Mem     |
| 11032905.egc  | EGC.463        | 102 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 17:36 | 251  | 8572    | Mem     |
| 11032904.egc  | EGC.462        | 102 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 17:36 | 364  | 8571    | Mem     |
| 11032903.egc  | EGC.461        | 102 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 17:36 | 2274 | 8569    | Mem     |
| 11032902.egc  | EGC.460        | 102 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 17:35 | 695  | 8570    | Mem     |
| 11032901.egc  | EGC.459        | 102 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 17:33 | 1318 | 8569    | Mem     |
| 11032820.egc  | EGC.458        | 112 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 09:36 | 4301 | 14515   | Mem     |
| 11032819.egc  | EGC.457        | 112 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 09:30 | 2598 | 14515   | Mem     |
| 11032818.egc  | EGC.456        | 121 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-28 09:03 | 5302 | 21409   | Mem     |
| 11032817.egc  | EGC.455        | 112 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-27 21:32 | 4175 | 14463   | Mem     |
| 11032816.egc  | EGC.454        | 121 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-27 21:08 | 5051 | 21375   | Mem     |
| 11032815.egc  | EGC.453        | 112 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-27 09:31 | 3510 | 14411   | Mem     |
| 11032814.egc  | EGC.452        | 121 | MET.NAV Warning/Forecast | Safety   | 7 Bit IA5 | 11-03-27 09:08 | 4138 | 21366   | Mem     |
| 11032813.egc  | EGC.451        | 144 | System Call              | Routine  | 7 Bit IA5 | 11-03-27 04:23 | 1170 | 346     | Mem     |
| 11032812.egc  | EGC.450        | 144 | System Call              | Routine  | 7 Bit IA5 | 11-03-27 04:01 | 1170 | 346     | Mem     |

2011-03-29 05:54:48: INFO 91: Receiving message successful.: File EGC.467 Message no. 21430 Priority 1 LES id 121 EGC service 31

2. Double-click an EGC to see the contents.  
From within the EGC you have the following options:
  - **Print.** The EGC is printed on the connected printer.
  - **Save.** You can browse to a location and save the EGC (.txt file)
  - **Forward.** The EGC text is inserted into the message editor so you can forward it to a new recipient.
  - **Wrap text.** When selected, the text is wrapped to fit the window size.
3. Click **OK** or **Cancel** to close the EGC.
4. To delete one or more EGCs, right-click the EGC(s) and select **Delete EGC**.

## Network status and settings

The Mobile status field at the top of the page shows the status of the network connection. When the SAILOR 3027 is logged in to the network, this field shows the ocean region to which the SAILOR 3027 is logged in.



### Logging into and out of the network

**To log into** the Inmarsat C network, select **Actions > Login** and select the Ocean region you are logging into.

If you want to use the preferred ocean configured in the SAILOR 3027, or simply the region with the best signal, use **Scan preferred ocean** instead (see the next section).

**To log out of** the network, select **Actions > Logout**.

### Scanning the network

If you want the system to find the best signal, select **Actions > Preferred ocean > Scan preferred ocean**. The system will then scan for the best signal and log in.

If an ocean region is selected under Set preferred ocean, the system will scan the selected ocean first.

### Setting the preferred ocean region

If you want the system to generally use a specific ocean region, select **Actions > Preferred ocean > Set preferred ocean** and select the ocean region you want to use. If you select **None**, the scanning process will use the ocean region with the best signal.

The selected ocean region is used when you select **Actions > Preferred ocean > Scan**.

## Link test

**Note** To test basic system connectivity, we recommend that you send a short message to yourself instead of using the link test. For details on how to send a message, see *Writing a routine priority message* on page 31.

If you still want to make a link test, do as follows:

1. In the easyMail application, click **Actions > Link test**.  
After the Link test is requested, the NCS assigns a LES for performing the Link test. This can take a while.
2. When the **Linktest** window appears, click **Execute** to start the test.

**Note** Because the link test has low priority in the network it can take a long time for the system to complete the link test, and during this time the system has limited functionality.

A popup window informs you that the test has started. When the test has ended another popup window informs you that the test was completed successfully or that it failed.

## Stop Transmission

If you want the system to immediately stop transmitting, select **Actions > Clear protocol**.

The current protocol is then cleared, and any ongoing transmission is stopped.

## Viewing system details

To see information on easyMail and the SAILOR 3027, click  or select **Help > System info**.



## Viewing or changing position information

To view or change your current position information, course and speed, do as follows:

1. select **View > Position info.**



The screenshot shows a dialog box titled "Position updated at 14:48:48". It contains the following information:

|            |                |
|------------|----------------|
| Latitude:  | 55 ° 47 ' 63 N |
| Longitude: | 12 ° 31 ' 41 E |
| Course:    | 0 degrees      |
| Speed:     | 0 knots        |
| Updated:   | 02:33 UTC      |
| Status:    | valid          |

At the bottom of the dialog box are two buttons: "OK" and "Cancel".

2. If there is no synchronization with the positioning system, you can enter a manual position, course and speed.
3. Select **OK**.

The manually entered position data will be used by the system until the automatic position data is available again.

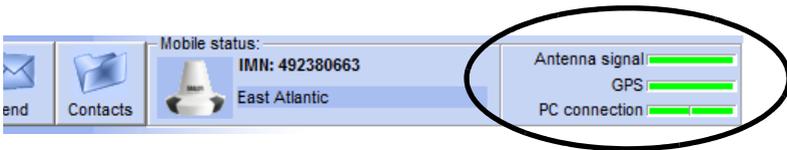
## Viewing status and Info log

### To see status

To see the status of the SAILOR 3027, select **View > Transceiver status**, or click the **Antenna signal** bar in the connections status field at the top of the page.

To see the GPS status, select **View > GPS status**, or click the **GPS** bar in the connections status field at the top of the page.

#### Connection status field



### To see the Info log

To see the information log, select **View > Info log**.

The information log shows the most recent events registered in your mini-C system.

## Setting up the default ISP and default LESes

### To set up the default ISP

To set up a default ISP, do as follows:

1. Select **Setup > Default ISP**.
2. Select the default ISP from the list.
3. Select **Set Default LESes to ISP settings** if you want to use the default ISP with the Default LESes.
4. Click **OK**.

### To set up the default LESes

To set up the default LESes, do as follows:

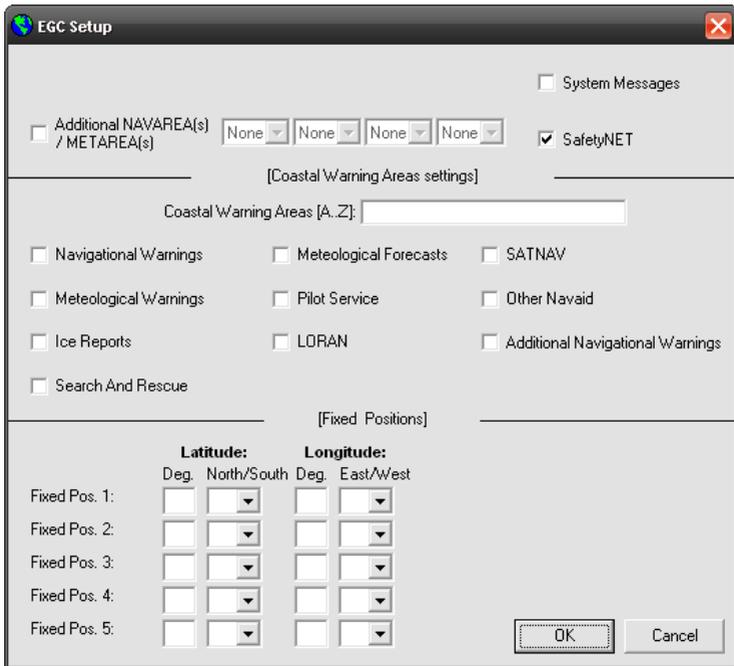
1. Select **Setup > Default LES**.
2. Select the default LES for each ocean region.
3. Click **OK**.

## Setting up reception of EGCs

For general information on EGCs, see *Enhanced Group Calling (EGC)* on page 9.

To set up reception of EGCs, do as follows:

1. Select **Setup > EGCs**.



2. To set up the additional areas from which you want to receive meteorological or navigational EGCs, select **Additional NAVAREA(s) /METAREA(s)**.

Then select the numbers of the areas from which you want to receive EGCs, and select **OK**.

**Note**

You always receive EGCs from the area in which you are located. The areas selected here are additional areas.

3. Select whether you want to receive **System Messages** or **SafetyNET** messages or both.
4. To change the Coastal Warning Areas, type in the new areas under **Coastal Warning Areas [A..Z]**.
5. Select the types of EGC service you want to receive.
6. If you want to receive EGCs at specific positions on your route, select **Fixed positions** and fill in the position information for each point on the route.
7. Click **OK**.

## Setting up ENIDs

ENIDs (EGC Network IDentification) are used for identifying the SAILOR 3027 on the network in order for the terminal to receive FleetNET EGCs.

ENIDs must be set up with your LES operator and downloaded to your SAILOR 3027 before you can use them.

To set up the ENIDs, do as follows:

1. Select **Setup > ENIDs**.  
The ENIDs are listed with provider, ENID and status.
2. Select the ENIDs you want to enable.
3. Click **OK**.

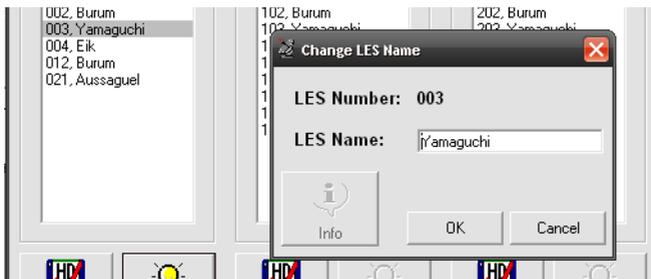
## Setting up the Land Earth Stations (LES)

To view or edit the list of Land Earth Stations for each ocean region, do as follows:

1. Select **Setup > Land Earth Stations (LES)**.



2. Select a LES and click **Edit**.



3. If necessary, type in the new name of the LES.
4. Click **OK**.
5. To use default LES numbers and names for an ocean region, click the **Default** button and click **Yes**.
6. Click **OK** to exit.

## List of currently supported LESes

The table below shows the LESes supported by the service providers at the time of writing. Note that the list is dynamic, so it may not be completely up to date.

| <b>Service Provider</b>   | <b>LES no.<br/>AOR-W</b> | <b>LES no.<br/>AOR-E</b> | <b>LES no.<br/>POR</b> | <b>LES no.<br/>IOR</b> |
|---------------------------|--------------------------|--------------------------|------------------------|------------------------|
| CTTC China                | -                        | -                        | 211                    | 311                    |
| Fucino                    | -                        | 105                      | -                      | 335                    |
| Haiphong                  | -                        | -                        | -                      | 330                    |
| KDDI SatMail-C Japan      | 003                      | 103                      | 203                    | 303                    |
| Morsviazspuznik Russia    | -                        | 117                      | 217                    | 317                    |
| OTE Greece                | -                        | -                        | -                      | 305                    |
| SingTel Mail (SAC65)      | 002                      | 102                      | 210                    | 328                    |
| Stratos Global C-email 02 | 002                      | 102                      | 202                    | 302                    |
| Stratos Global C-email 12 | 012                      | 112                      | 212                    | 312                    |
| VISHIPEL                  | -                        | -                        | -                      | 330                    |
| Vizada SkyFile C 01       | 001                      | 101                      | 201                    | 301                    |
| Vizada SkyFile C 04       | 004                      | 104                      | 204                    | 304                    |
| Vizada SkyFile C 21       | 021                      | 121                      | 221                    | 321                    |

Table 2: Supported LESes

## Setting up Inmarsat Service Providers (ISP)

**Note** Do not change these settings unless you know the exact formats to enter.

The Inmarsat Service Providers are already set up when you receive your system. However, if an Inmarsat Service Provider e.g. changes the format for email, you can change these settings to match the new format.

To set up the Inmarsat Service Providers in the SAILOR 3027, do as follows:

1. Select **Setup > Inmarsat Service Providers (ISP)**.

**Inmarsat Service Providers**

New Provider Delete Provider Load Default

Provider name: West: East: Pacific: Indian:  
CTTC China Add [ ] [ ] 211 311

Service Providers: To: TO: [ ]  
CTTC China Cc: CC: [ ]  
KDDI SatMail-C Japan Bcc: [ ]  
Morsviazsputnik Russia Subject: SUBJECT: [ ]  
OTE Greece Message Prefix: STX: [ ]  
SingTel Mail65 (SAC65) Address Type: SAC [ ]  
SingTel Mail65 (SAC6500) Address: EMAIL [ ]  
SingTel Mail65 (SAC6599) Delimiter: : [ ]  
Stratos Global C-email 02 SMS prefix: [ ] Postfix: [ ]  
Stratos Global C-email 12 SMS SAC: [ ]  
Telemar X25  
Vizada SkyFile C 01  
Vizada SkyFile C 04  
Vizada SkyFile C 21

OK Cancel

2. To edit the information for a provider, select the provider from the list and fill in the new information as specified from the provider.
3. Click **OK**.

## To add a new provider

To add a new provider to the list, do as follows:

1. In the Inmarsat service providers window, click **New provider**.

2. Type the name of the provider in the top left corner and click **Add**.  
The new provider is now added to the list, but without any information.
3. Fill in the information for the provider.
4. Click **OK**.

## Entering the mobile number

Before you can use the SAILOR 3027 on the Inmarsat C network you must configure the mobile number from your service provider in the SAILOR 3027.

To enter the mobile number, do as follows:

1. Select **Setup > Mobile number (IMN)**.
2. Type in the mobile number from your service provider.
3. Click **OK**.

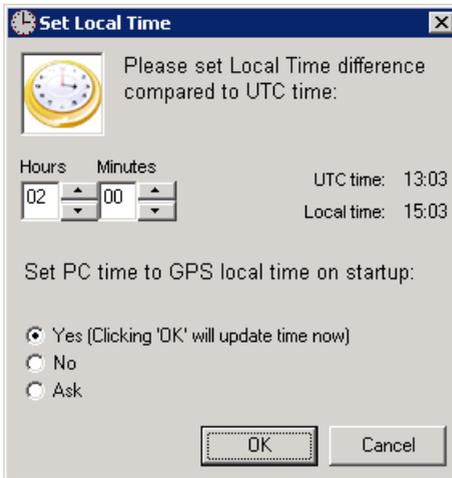
The number is now stored in the SAILOR 3027 and can be used to access the SAILOR 3027 on the Inmarsat C network.

## Setting the local time

The SAILOR 3027 gets the UTC time from the GPS receiver. You can convert this time to local time and set the time on your computer accordingly.

Do as follows:

1. Select **Setup > Local time zone/PC time**.



2. Use the up/down arrows to set the time difference between your local time and UTC time.
3. At the bottom of the window, select one of the following:
  - **Yes.** The PC time is automatically updated at startup
  - **No.** The PC time will not be updated.
  - **Ask.** You will be asked at startup whether you want to update the PC time or not.
4. Click **OK**.

## Setting up password protection

You can add password protection to three different actions: Transmission, configuration and remote configuration.

To add password protection, do as follows:

1. Select **Setup > Passwords**.
2. Select the password you want to add or change.
3. Type in the old password (leave empty if there was no password protection).
4. Type in the new password under **New password** and again under **Confirm password**.
5. Click **OK** and close easyMail.

With the password protection, easyMail will ask for a password when a person tries to access the password protected areas (transmit a message, configure the system or configure the system remotely).

To remove the password, repeat the above procedure and leave the fields with the new password empty.

## Setting the language

To change the language in easyMail, do as follows:

1. Select **Setup > Language**.
2. Select the language you want in easyMail.
3. Select at the bottom whether you want to show the language selection at startup.
4. Click **OK**.

## Setting up PC communication with the SAILOR 3027

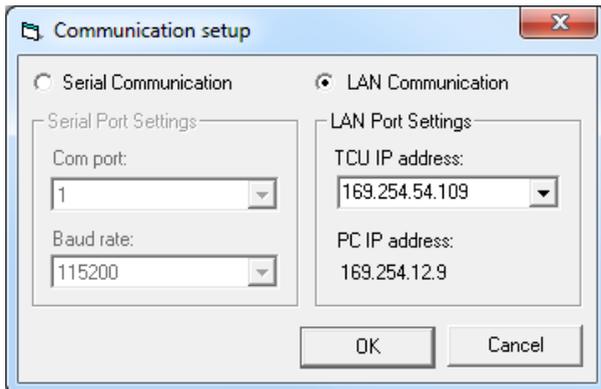
To connect a computer to the system you must use a SAILOR 6194 Terminal Control Unit. You can connect the computer to the LAN interface or the RS-232 interface on the SAILOR 6194.

**Note** | The Communication setup is not accessible when the computer has established a connection with the SAILOR 3027.

### To set up LAN communication

easyMail should connect automatically to the SAILOR 6194/SAILOR 3027. If not, set up the LAN communication as follows:

1. Select **Setup > Communication setup**.
2. Select **LAN communication**.



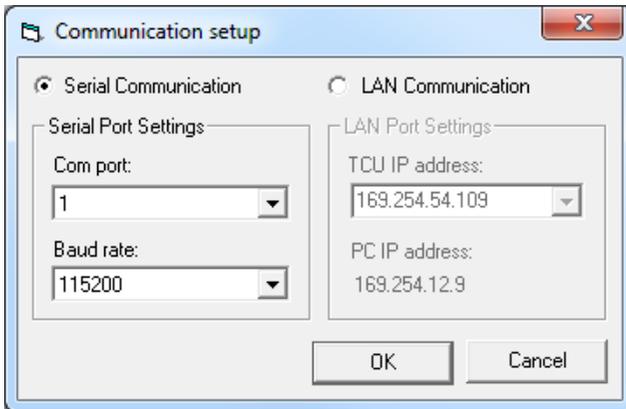
3. Select the **IP address** of the SAILOR 6194 Terminal Control Unit (TCU) from the drop-down list.  
**PC IP address:** Shows the IP address of your PC.
4. Click **OK**.

easyMail now tries to establish a connection to the SAILOR 6194 and thereby the SAILOR 3027. When the LAN connection is established the PC connection bar at the top of the easyMail window turns green.

## To set up RS-232 communication

To set up easyMail for RS-232 communication with the SAILOR 6194 and thereby the SAILOR 3027, do as follows:

1. Select **Setup > Communication setup**.



2. Select **Serial communication**.
3. Select the **COM port** you are using on your computer and the **Baud rate** of the SAILOR 6194 (default is 115200).
4. Click **OK**.

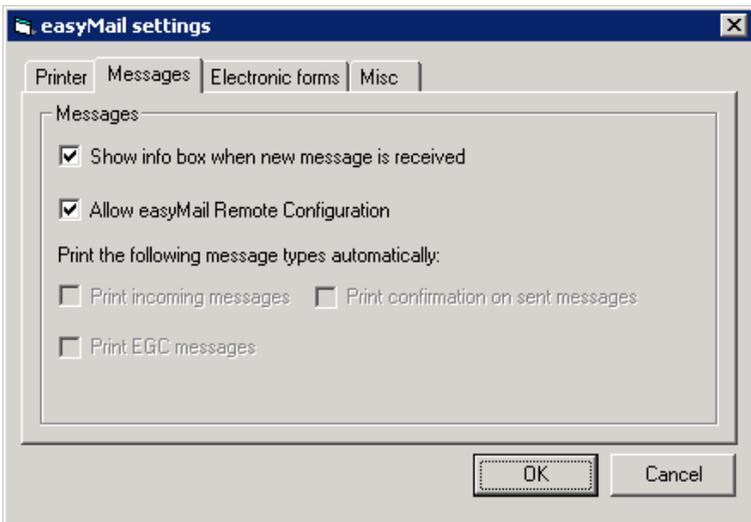
easyMail now tries to establish a connection to the SAILOR 6194 and thereby the SAILOR 3027. When the RS-232 connection is established the PC connection bar at the top of the easyMail window turns green.

## Setting up easyMail

### To change message setup

You can set up some general settings for messages in the Messages tab. Do as follows:

1. Select **Setup > Settings**.
2. Select the **Messages** tab.



3. If you want to get an info box when a new message has arrived, select **Show info box when new message is received**.
4. If you want to allow configuration of easyMail from a remote location, select **Allow easyMail Remote Configuration**.  
Selecting this option enables an authorised remote user to configure certain parts of easyMail using a special kind of message sent to your mini-C system.
5. If you have a printer connected, select the message types you want to print automatically (if any).

## To use electronic forms

Some users have a need for a specific layout, e.g. for fishery catch reporting. The files for this layout must be downloaded to the system before selecting the formats on this page.

## Miscellaneous settings

### In Harbour Button

Select **Setup > Settings > Misc > In Harbour Button** to select whether or not you want to show an In Harbour Button in easyMail. The In Harbour button is used for setting a longer reporting interval when the ship is in harbour.

### Reset HotList

The HotList is a list of the last used commands on the SAILOR 3027. To see the list, press F12.

To reset the HotList, select **Setup > Settings > Misc > Reset HotList**.

# Using Distress and SSA buttons

This chapter describes how to send Distress alerts with the SAILOR 3042E Non-SOLAS Alarm Panel or the SAILOR 6006 Message Terminal, and how to send a Ship Security Alert with the SSA buttons.

It has the following sections:

- *To send a Distress Alert (SAILOR 6150 only)*
- *To send a Ship Security Alert (SAILOR 6120 only)*

## To send a Distress Alert (SAILOR 6150 only)

### Distress alert with SAILOR 3042E

#### Important

Only send a Distress Alert if you are in immediate danger!  
The Distress Alert can be compared to a MAYDAY call.

With the SAILOR 6150 system you may have a SAILOR 3042E Inmarsat C Distress Alarm Box installed.

**To send a Distress Alert**, do as follows:

1. Open the cover for the Distress button.
2. Press and hold the button until the light is steady and the buzzer stops (more than 5 seconds).

During this time the button light flashes and the buzzer sounds. After 5 seconds the red light goes steady on and the buzzer is silent.

You must have a computer with easyMail 2 in a SAILOR 6150 system with SAILOR 3042E. You can use easyMail to see the status of the Distress and to follow up. See *Distress functions (only SAILOR 6150)* on page 25.



**Important**

The MRCC normally sends a message to the alerting unit to gather more information about the situation.

If possible, respond to such messages with a Distress message sent to the same LES that was used for the Distress Alert.

For information on how to send a Distress message, see *Writing a Distress priority message* on page 25.

The MRCC may also send Distress EGCs to other ships in the area to request assistance (typically as Distress Relay or SAR Coordination request).

See also *Setting up Distress alert* on page 25.

### To clear Distress indications

**Note**

This function will only turn off the visual and audible indications on board. It will not cancel the transmission of the Distress Alert.

If you want to turn off all Distress indications while a Distress Alert is still active, you can use **easyMail**: Select **Distress > Reset alarm/Latest Distress info**. For details, see *Reset alarm/latest Distress info* on page 27.

## Distress alert with SAILOR 6006

If you have a SAILOR 6006 Message Terminal connected to your SAILOR 6150 system, you can use the Distress button on the SAILOR 6006 to send Distress alerts, and you may also have additional SAILOR 6101 or SAILOR 6103 alarm panels connected.

The procedure below is the same on the SAILOR 6006 Message Terminal as on the SAILOR 6101/6103 Alarm Panel.

**Important** | Only send a Distress Alert if you are in immediate danger!  
The Distress Alert can be compared to a MAYDAY call.

**To send a Distress Alert**, do as follows:

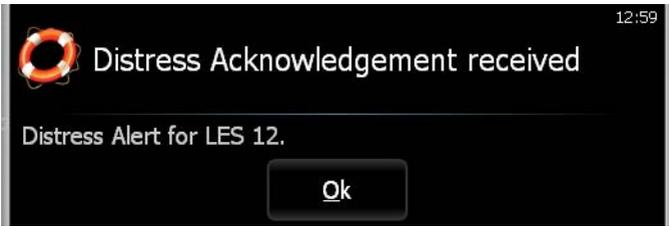
1. Open the cover for the Distress button.
2. Push and hold the button until the light is steady and the buzzer stops (more than 3 seconds).



During this time the button light flashes and the buzzer sounds. After 3 seconds the red light goes steady on and the buzzer is silent. The display shows that the message is being sent.



The display also shows when the Distress Alert is acknowledged from the LES. **Write down the LES number** - you must use the same number when you send a Distress message with more information for the MRCC.



The below table shows the behavior of the Distress button on the SAILOR 6006.

| Behavior                                  | Meaning  |
|---|--|
| Button light flashes, buzzer sounds       | The Distress button is pushed. Hold until light and sound changes (more than 3 seconds). |
| Button light constant, buzzer is silent   | The Distress Alert is being sent (normally within 10 to 30 seconds)                      |
| Button light shortly off every 15 seconds | The Distress Alert is confirmed  |

**Important**

The MRCC normally sends a message to the alerting unit to gather more information about the situation.

If at all possible, respond to such messages with a Distress message sent to the same LES that was used for the Distress Alert.

The LES used for the Distress Alert is shown in the Distress popup windows. An example is shown in the previous page.

For information on how to send a Distress message or changing the Distress alert settings, see *SAILOR 6110 mini-C GMDSS, User manual [2]*.

The MRCC may also send Distress EGCs to other ships in the area to request assistance (typically as Distress Relay or SAR Coordination request).

## To clear distress indications

If you want to turn off all distress indications while a Distress Alert is still active, do as follows:

**Note** This function will only turn off the visual and audible indications on board. It will not cancel the transmission of the Distress Alert.

1. On the SAILOR 6006, select **Distress**.
2. Select **Status**.



3. Select **Clear distress indications**.

## To send a Ship Security Alert (SAILOR 6120 only)

The recipient(s) of the Ship Security Alert must be configured in the SAILOR 3027 according to the Flag Administration under which the vessel is sailing. The recipients can be e-mail addresses, phone numbers (SMS), fax numbers or telex numbers.

Install the SSA buttons and configure the SAILOR 3027 as described in *SAILOR 6194 Terminal Control Unit, Installation and user manual [4]* and *SAILOR 6120/30/40/50, Installation manual [1]*.

## To send a covert Ship Security Alert (SSA)

To send a covert SSA, do as follows:

1. Open the cover for the red covert alert button.
2. Push the button.
  - **Instant activation button:** When pushed, an alert is sent immediately to the configured SSA recipient(s).
  - **Standard activation buttons:** When pushed, an alert is sent after 30 – 33 seconds. If released (pushed again) within the 30 seconds, the alert is not sent.
3. An SSAS message is now sent every 30 minutes until you stop it.
4. To stop sending SSAS messages:
  - **Instant activation button:** Send an SSAS test message (push test + push SSAS within 30 seconds)
  - **Standard activation button:** Release the button (push the button again)



## To use the green or yellow test button

The green or yellow button is a test button with a lamp. The button has momentary action (closed only as long as the button is pressed and held). When the system is operational<sup>1</sup>, the test button is permanently lit. When the test button is pressed the light switches off and the covert alert buttons can be pressed without sending any alerts. If a covert alert button is pressed for 30 – 33 seconds during test, an SSA Test Message is sent to all recipients configured to receive test messages.

- 
1. “Operational” means the following criteria are met: GPS fix obtained, logged in, recipient(s) of covert alert configured, all SSA buttons connected correctly.

# Service

This chapter gives guidelines for updating software and for troubleshooting and provides an overview of the different means of status signalling. It has the following sections:

- *Getting support*
- *Updating software*
- *Troubleshooting guide*

## Getting support

If this manual does not provide the remedies to solve your problem, you may want to contact your Airtime Provider or your local distributor.

To help with the troubleshooting, please generate a diagnostic report as described in the next page, and enclose the diagnostic report file when asking for support.

## Airtime support

If you need assistance from your Airtime Provider, check your Airtime subscription documents for a contact number to call.

## System support

Lists of certified partners and distributors are available on [www.cobham.com/communications-and-connectivity/satcom](http://www.cobham.com/communications-and-connectivity/satcom). Select **Service and Support** from the top menu bar and then **AVIATOR, EXPLORER, SAILOR, Sea Tel Service and Support**. Then select one of the dealers or partners lists shown.

# Updating software

## Before updating software

### Tool for software update

To update software in the mini-C system units (e.g. the SAILOR 3027 and/or the SAILOR 6101/03 Alarm Panel), use the TMA (ThraneLINK Management Application). For information on how to install the TMA, see the next sections.

### The ThraneLINK Management Application

The ThraneLINK Management Application (TMA) is a Windows program that provides monitoring and software update of connected Cobham SATCOM devices with ThraneLINK support. The devices must be on the same LAN.

### Installing the TMA

#### PC requirements

- Standard PC with Windows 7, 8, 10, Vista or XP, and Ethernet connection.
- Make sure that you have administrator rights for the PC.

#### Installation

To install the TMA, do as follows:

1. Go to [www.cobham.com/communications-and-connectivity/satcom](http://www.cobham.com/communications-and-connectivity/satcom).
2. Select **Service and Support**.
3. Select **AVIATOR, EXPLORER, SAILOR, Sea Tel Service and Support** and then **24-7 Self Service Centre / Technical Downloads**.
4. Select **Downloads > Maritime > ThraneLINK Management Application > Software**.
5. Locate the TMA software package and download it to your PC.

6. Extract the files from the zip file.
7. Click **setup.exe** to start the installation wizard.  
On Windows Vista/7/8/10, when prompted, select **Yes** to allow the installation to make changes to the computer.
8. Follow the instructions in the wizard.

When the wizard is complete an icon appears on your PC desktop. You can also find the TMA under Programs > Thrane > TMA.



If you have problems with your Firewall settings, please refer to the TMA quick guide, available on the Self Service Center under **Downloads > Maritime > ThraneLINK Management Application > Manuals**.

## Updating software with the TMA

To update software in a ThraneLINK product, do as follows:

1. Connect the PC to the LAN with the ThraneLINK products for which you want to update software.
2. Click the TMA icon on the PC's desktop. The program starts and displays the ThraneLINK products found on the network.  
If a Windows Security Alert pops up click **Allow access** (Windows 7) or **Unblock** (Windows XP).
3. Insert a USB memory stick with the new software version (placed in the root) into a USB connector in the PC. <sup>1</sup>  
The TMA automatically discovers the new software version(s) and a software update icon flashes next to the unit(s) for which the software can be installed.
4. From the main page of the TMA, select the product you want to update.

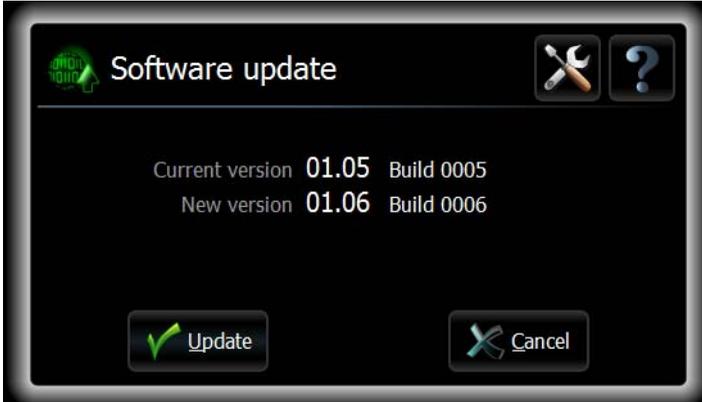
- 
1. If the new software is not automatically found, you can point to the location of the software. Select the tool icon in the **Software update** page, select **Search for software** and enter the location of the software.



5. Select **Software update** at the bottom of the product page.



Check that the new software version is correct.



6. Select **Update**.

The progress of the software update is shown in percent under the product icon. When installation is completed, a check mark appears instead.

**Note**

The installation is not complete until the SAILOR 3027 has rebooted. Check the new software version after reboot to verify that the installation is successfully completed.

## Troubleshooting guide

The below table provides information on some of the problems that might occur, including possible causes and remedies to solve the problems.

| Problem   | Possible cause  | Remedy   |
|---|---|--|
| The system cannot be switched on using the SAILOR 6006. | The SAILOR 6006 has a remote on/off switch, so the power button is disabled.                          | If the SAILOR 6006 is using a remote on/off switch, use that instead of the power button.  |
|   | There is no power on the input to the SAILOR 6006.  | Check that all power cables between the ship power source and the SAILOR 6006 are connected correctly, and that the power source is on.  |
| The SAILOR 6006 cannot switch off.                      | Software error  | Push and hold the Power button for 10 seconds, or reboot via the power cable.  |
| There is no signal or weak signal from the satellite.   | The view to the satellite is blocked, or there is a hardware problem.                                 | <p>Make sure the SAILOR 3027 has a clear view in all directions. See the installation manual for details.</p> <p>If the view is not blocked, check the error log. If the problem persists, contact your local distributor.</p> |
| No connection between SAILOR 6006 and SAILOR 3027       | The CAN cables between the SAILOR 3027 and the SAILOR 6006 are damaged or are not properly connected. | Make sure the CAN cables are properly connected and that the cables and connectors are not damaged.  |

| <b>Problem</b>   | <b>Possible cause</b>  | <b>Remedy</b>   |
|--|--|---|
| No connection between easyMail and SAILOR 3027   | The PC connection to the SAILOR 3027 is not set up properly.   | For information on how to set up the PC connection, see <i>Setting up PC communication with the SAILOR 3027</i> on page 61.   |
| The units in the mini-C system do not appear in the TMA (ThraneLINK Management Application). | The computer running the TMA is set up with a fixed IP address that does not match the local network with the mini-C system units. | Enable DHCP on your computer.<br><br>If you need to have a fixed IP address on your computer, there must be a DHCP server in the network, and the IP address of your computer must be within the range provided by the DHCP server. |

## Status signalling in easyMail

### Status information

The top of the display shows the most important status information.



You can click each status area to get details, or use the View menu to enter the status pages.

### Information of events

#### Popup windows

When an event requires your attention, a popup window appears.

When you have read the text, select **OK** to close the window. The latest event is shown in the info bar at the bottom of the page and is added to the information log.

#### Information log

To see the information log, select **View > Info log**.

The log shows the events that are registered in your mini-C system.

## Status signalling in SAILOR 6006

The SAILOR 6006 can show basic status and error messages. When an error occurs in the system, check the SAILOR 6006 for information first.

### Status information in SAILOR 6006

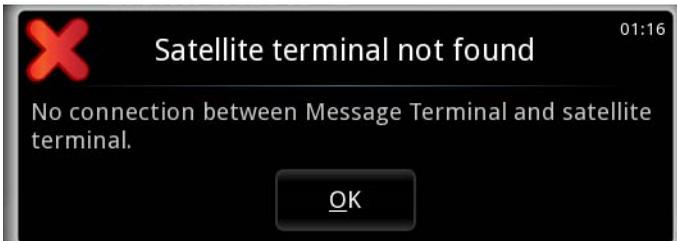
The upper right corner of the display shows the most important status information. You can also enter the individual pages from the main menu to see more detailed status information.

### Information of events

#### Popup windows

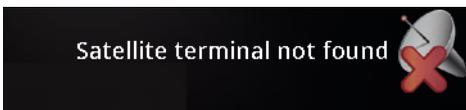
When an event requires your attention, a popup window appears.

Example:



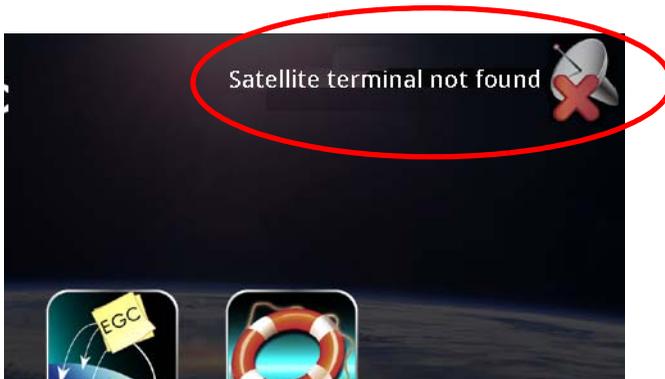
When you have read the text, select **OK** to close the window.

If the window indicates an error that requires your action, the warning or error icon will stay in the top right corner of the display as long as the problem persists.



## List of active warnings and errors

The top right corner of the display shows a short text about the current status. The icon in the corner can change depending on the situation.



From the list of active warnings and errors you can access the event log.

## Event log

From the list of active errors or warnings, you can select **Event log** to see a complete list of events. The list holds 100 events, including

- Errors
- Warnings
- Informational events
- Cleared warnings and errors.

## Service and repair

Should your Cobham SATCOM product fail, please contact your dealer or installer, or the nearest Cobham SATCOM partner. You will find the partner details on [www.cobham.com/communications-and-connectivity/satcom](http://www.cobham.com/communications-and-connectivity/satcom) where you also find the Cobham SATCOM Self Service Center web-portal, which may help you solve the problem. Your dealer, installer or Cobham SATCOM partner will assist you whether the need is user training, technical support, arranging on-site repair or sending the product for repair. Your dealer, installer or Cobham SATCOM partner will also take care of any warranty issue.

### Repacking for shipment

Should you need to send the product for repair, please read the below information before packing the product.

The shipping cartons for the mini-C system have been carefully designed to protect the equipment during shipment. The cartons and their associated packing material should be used when repacking for shipment. Attach a tag indicating the type of service required, return address, model number and full serial number. Mark the carton "FRAGILE" to ensure careful handling.

**Note**

Correct shipment is the customer's own responsibility.

# Conformity

The mini-C systems SAILOR 6120, SAILOR 6130, SAILOR 6140 and SAILOR 6150 are CE certified (R&TTE directive) as stated in “Declaration of Conformity with R&TTE Directive”, enclosed in electronic copy on the next pages (one declaration for each system).

## Thrane & Thrane A/S

### Declaration of Conformity with R&TTE Directive

The undersigned of this letter declares that the following equipment complies with the specifications of EC directive 1999/5/EC concerning Radio & Telecommunications Terminal Equipment.

#### Equipment included in this declaration

|             |                                       |                 |
|-------------|---------------------------------------|-----------------|
| TT-6120A    | SAILOR 6120 SSA System consisting of: |                 |
| TT-3027SSA  | SAILOR 3027 SSA Terminal              | PN = 403027SSA  |
| TT-6194A    | THRANE 6194 Term. Ctrl. Unit          | PN = 406194A    |
| And         |                                       |                 |
| TT-6100-913 | SAILOR 6100-913 SSA Kit               | PN = 406100-913 |
| or          |                                       |                 |
| TT-6100-916 | SAILOR 6100-916 SSA US Kit            | PN = 406100-916 |

The system will exist in a SAILOR, SAM and HIGHLANDER variant and NEUTRAL variant for other OEMs. The only difference is in labeling and extension in PN.

#### Equipment Applicability

The TT-6120A SAILOR 6120 SSA System is a Non SOLAS system without Distress capability that provides global data communication and tracking information through the Inmarsat satellite service world wide between a vessel and any destination in the world.

#### Declaration

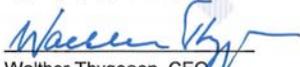
The requirement with respect to the LVD directive 73/23/EC is met by conforming to the harmonized EU standard EN 60950. The protection requirement with respect to the EMC directive 89/336/EC is met by conforming to the harmonized EU standard EN 60945. Effective use of frequency spectrum is met by conforming to the harmonized EU standard ETSI EN 301 426 and ETSI ETS 300 460.

#### Manufacturer

Thrane & Thrane A/S  
Lundtoftegårdsvej 93D, DK-2800 Kgs. Lyngby, Denmark  
Porsvej 2, DK-9200 Aalborg SV, Denmark

#### Place and Date

Kgs. Lyngby, 13. May 2011

  
Walther Thygesen, CEO  
Thrane & Thrane A/S



Doc. no. 99-133104-A

Thrane & Thrane A/S · T +45 39 55 88 00 · F +45 39 55 88 88 · info@thrane.com · www.thrane.com

Head office: Lundtoftegårdsvej 93 D · 2800 Kgs. Lyngby · Denmark

Aalborg office: Porsvej 2 · PO Box 7071 · 9200 Aalborg SV · Denmark

Bank: Danske Bank · Comp.reg.: 65 72 46 18 · VAT: DK-20 64 64 46



Page: 1 of 1



## Thrane & Thrane A/S

### Declaration of Conformity with R&TTE Directive

The undersigned of this letter declares that the following equipment complies with the specifications of EC directive 1999/5/EC concerning Radio & Telecommunications Terminal Equipment.

#### Equipment included in this declaration

TT-6130A SAILOR 6130 LRIT System consisting of:  
TT-3027LT SAILOR 3027 LRIT Terminal PN = 403027LT

The system will exist in a SAILOR, SAM and HIGHLANDER variant and NEUTRAL variant for other OEMs. The only difference is in labeling and extension in PN.

#### Equipment Applicability

The TT-6130A SAILOR 6130 LRIT System is a Non SOLAS system without Distress capability that provides global data communication and tracking information through the Inmarsat satellite service world wide between a vessel and any destination in the world.

#### Declaration

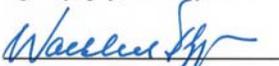
The requirement with respect to the LVD directive 73/23/EC is met by conforming to the harmonized EU standard EN 60950. The protection requirement with respect to the EMC directive 89/336/EC is met by conforming to the harmonized EU standard EN 60945. Effective use of frequency spectrum is met by conforming to the harmonized EU standard ETSI EN 301 426 and ETSI ETS 300 460.

#### Manufacturer

Thrane & Thrane A/S Lundtoftegårdsvej 93D, DK-2800 Kgs. Lyngby, Denmark  
Porsvej 2, DK-9200 Aalborg SV, Denmark

#### Place and Date

Kgs. Lyngby, 13. May 2011



Walther Thygesen, CEO  
Thrane & Thrane A/S



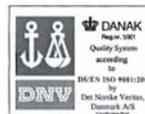
Doc. no. 99-133103-A

Thrane & Thrane A/S · T +45 39 55 88 00 · F +45 39 55 88 88 · info@thrane.com · www.thrane.com

Head office: Lundtoftegårdsvej 93 D · 2800 Kgs. Lyngby · Denmark

Aalborg office: Porsvej 2 · PO Box 7071 · 9200 Aalborg SV · Denmark

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# Thrane & Thrane A/S

## Declaration of Conformity with R&TTE Directive

The undersigned of this letter declares that the following equipment complies with the specifications of EC directive 1999/5/EC concerning Radio & Telecommunications Terminal Equipment.

### Equipment included in this declaration

TT-6140A SAILOR 6140 Maritime System consisting of:  
 TT-3027M SAILOR 3027 Maritime Terminal PN = 403027M

The system will exist in a SAILOR variant and NEUTRAL variant for OEMs. The only difference is in labeling and "-NEU" extension in PN.

### Equipment Applicability

The TT-6140A SAILOR 6140 Maritime System is a Non SOLAS system without Distress capability that provides global data communication and tracking information through the Inmarsat satellite service world wide between a vessel and any destination in the world.

### Declaration

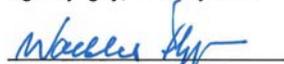
The requirement with respect to the LVD directive 73/23/EC is met by conforming to the harmonized EU standard EN 60950. The protection requirement with respect to the EMC directive 89/336/EC is met by conforming to the harmonized EU standard EN 60945. Effective use of frequency spectrum is met by conforming to the harmonized EU standard ETSI EN 301 426 and ETSI ETS 300 460.

### Manufacturer

Thrane & Thrane A/S Lundtoftegårdsvej 93D, DK-2800 Kgs. Lyngby, Denmark  
 Porsvej 2, DK-9200 Aalborg SV, Denmark

### Place and Date

Kgs. Lyngby, 13. May 2011

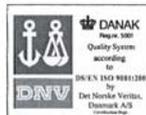


Walther Thygesen, CEO  
 Thrane & Thrane A/S



Doc. no. 99-133102-A

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 Head office: Lundtoftegårdsvej 93 D · 2800 Kgs. Lyngby · Denmark  
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## Thrane & Thrane A/S

### Declaration of Conformity with R&TTE Directive

The undersigned of this letter declares that the following equipment complies with the specifications of EC directive 1999/5/EC concerning Radio & Telecommunications Terminal Equipment.

#### Equipment included in this declaration

|          |   |              |
|----------|---|--------------|
| TT-6150A | SAILOR 6150 Non SOLAS System consisting of: |              |
| TT-3027D | SAILOR 3027 Non SOLAS Terminal              | PN = 403027D |
| TT-3042E | SAILOR 3042E Distress Panel                 | PN = 403042E |
| TT-6194A | THRANE 6194 Term. Ctrl. Unit                | PN = 406194A |

The system will exist in a SAILOR, SAM and HIGHLANDER variant and NEUTRAL variant for other OEMs. The only difference is in labeling and extension in PN.

#### Equipment Applicability

The TT-6150A SAILOR 6150 Non SOLAS System is a Non SOLAS system with Distress capability that provides global data communication and tracking information through the Inmarsat satellite service world wide between a vessel and any destination in the world.

#### Declaration

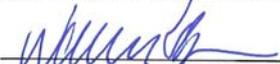
The requirement with respect to the LVD directive 2006/95/EC is met by conforming to the harmonized EU standard EN 60950-1. The protection requirement with respect to the EMC directive 2004/108/EC is met by conforming to the harmonized EU standard EN 60945. Effective use of frequency spectrum is met by conforming to the harmonized EU standard ETSI EN 301 426 and ETSI ETS 300 460.

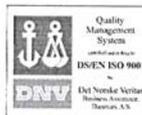
#### Manufacturer

Thrane & Thrane A/S                      Lundtoftegårdsvej 93D, DK-2800 Kgs. Lyngby, Denmark  
 Porsvej 2, DK-9200 Aalborg SV, Denmark

#### Place and Date

Kgs. Lyngby, 7. September 2012

  
 \_\_\_\_\_  
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 Thrane & Thrane A/S





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Version 2, June 1991

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## Appendix B: GNU License texts

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signature of Ty Coon, 1 April 1990

Ty Coon, President of Vice

## C

**CAN** Controller-Area Network. A message based protocol designed to allow microcontrollers and devices to communicate with each other within a vehicle without a host computer.

## D

**DNIC** Data Network Identification Code

**DNID** Data reporting Network IDentification code. An address code to an electronic mailbox at the Land Earth Station.

## E

**EGC** Enhanced Group Call. The system for broadcasting messages via the mobile satellite communications system operated by Inmarsat. EGC is part of the Inmarsat C system and supports two services: SafetyNET and FleetNET

**ENID** EGC Network IDentification code. An identification code for a group of EGC receivers. When an EGC message is sent using the ENID, all members of a group with that ENID receive the same message.

## G

**GMDSS** Global Maritime Distress and Safety System. The GMDSS system is intended to perform the following functions: alerting (including position determination of the unit in distress), search and rescue coordination, locating (homing), maritime safety information broadcasts, general communications, and bridge-to-bridge communications.

**GNSS** Global Navigational Satellite System

**GNU** GNU's Not Unix. A Unix-like computer operating system developed by the GNU project, ultimately aiming to be a "complete Unix-compatible software system" composed wholly of free software

**GPL** General Public License

**GPS** Global Positioning System. A system of satellites, computers, and receivers that is able to determine the latitude and longitude of a receiver on Earth by calculating the time difference for signals from different satellites to reach the receiver.

## I

**IMN** Inmarsat Mobile Number

**IMSO** International Mobile Satellite Organisation. An intergovernmental organisation that oversees certain public satellite safety and security communication services provided via the Inmarsat satellites.

**ISP** Inmarsat Service Provider. The company providing the Inmarsat services.

## L

**LAN** Local Area Network. A computer network covering a small physical area, like a home, office, school or airport. The defining characteristics of LANs, in contrast to wide-area networks (WANs), include their usually higher data-transfer rates, smaller geographic area, and lack of a need for leased telecommunication lines.

**LES** Land Earth Station

**LGPL** Lesser General Public License

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**LRIT** Long Range Identification and Tracking. A system established by the IMO applying to all passenger ships, cargo ships > 300 gross tonnage and mobile offshore drilling units. These ships/units must automatically report their position to their Flag Administration at least 4 times a day. Other contracting governments may request information about vessels in which they have a legitimate interest under the regulation.

**Lua** A lightweight multi-paradigm programming language designed as a scripting language with extensible semantics as a primary goal.

## **M**

**METAREA** A geographical area established for the purpose of coordinating the broadcast of marine meteorological information.

**Mobile** Mobile terminal. In this context the mini-C terminal

**MRCC** Maritime Rescue Coordination Centre

**MSI** Maritime Safety Information. Navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.

## **N**

**NAVAREA** A geographical area established for the purpose of coordinating the broadcast of navigational warnings

**NCS** Network Coordination Station

## **P**

**PSDN** Public Switched Data Network

**PSTN** Public Switched Telephone Network. The network of the world's public circuit-switched telephone networks. It consists of telephone lines, fibre-optic cables, microwave transmission links, cellular networks, communications satellites, and undersea telephone cables all inter-connected by switching centres which allows any telephone in the world to communicate with any other.

**PU** Position Unreserved

## S

**SAC** Short Access Code

**SAR** Search And Rescue

**SARF** Service Activation Registration Form. A form used to register your mobile equipment for activation of the services you are going to use.

**SOLAS** (International Convention for the) Safety Of Life At Sea. Generally regarded as the most important of all international treaties concerning the safety of merchant ships.

**SSA** Ship Security Alert. The ship security alert system is provided to a vessel for the purpose of transmitting a security alert to the shore (not to other vessel!) to indicate to a competent authority that the security of the ship is under threat or has been compromised.

## T

**TCU** Terminal Control Unit

**TMA** ThraneLINK Management Application. An application used to monitor and control products connected in a ThraneLINK network.

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