

Sailor

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INSTRUCTION BOOK FOR
SAILOR STANDARD-C
TRANSCEIVER H2095



A/S S. P. RADIO · AALBORG · DENMARK

Thrane & Thrane

TT-3000

Capsat Software News

Version 1.30

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Capsat Software News

This section explains the features of the new enhanced version of the Thrane & Thrane Capsat Software.

The guide will also act as a quick introduction to the use of the system for new users.

If you find that a topic is not covered in this guide, please refer to the **Operators Guide 1.20** that came with your system.

New features

Among the new features in the Capsat system are:

- Four ocean region operation
- PSDN (X.25) data message service
- PSTN (Fax and telephone modem) message service
- Automatic updating of logs
- Mail indication in main window
- Position- and general data reporting service
- New power-on operation

The new name is Capsat

The new 1.30 software from Thrane & Thrane have now got a trademark name, and this is Capsat.

When starting your new Capsat software you will only notice a small difference in the main window area.

The notice in the middle of the first line of the screen now states **Capsat** instead of Thrane & Thrane Std-C.

West-Atlantic	Capsat	Signal *****	13:56
File Edit Transmit Logs Distress Position Options			

ASCII:	1 Chars	Line 1 Col 1	Inserting

The reason for this change is that the Thrane & Thrane version of an Inmarsat-C transceiver is called Capsat. The name Capsat is now a trademark and the logo looks like this.

Capsat[®]

Users of the TT-10202A PC Software version should note that the program on the supplied disk is now named:

capsat.exe

With this programme on disk you will find an updating program called:

update.exe

This program will allow you to automatically install the new Capsat Software 1.30 without losing your current setup, like your addressbook, the message routing and colors.

Please read the section **Changing Capsat Software** before attempting to use the system.

From three to four ocean regions

Operating in four ocean regions means that, wherever you may be located, you will be able to reach an Inmarsat-C satellite.

Previously the earth was covered from 3 geostationary satellites which left out parts of the world from coverage by the system.

Inmarsat has now put a new satellite in use, so two satellites will be covering the east and west part of the Atlantic ocean region.

The following figure shows the four ocean regions:

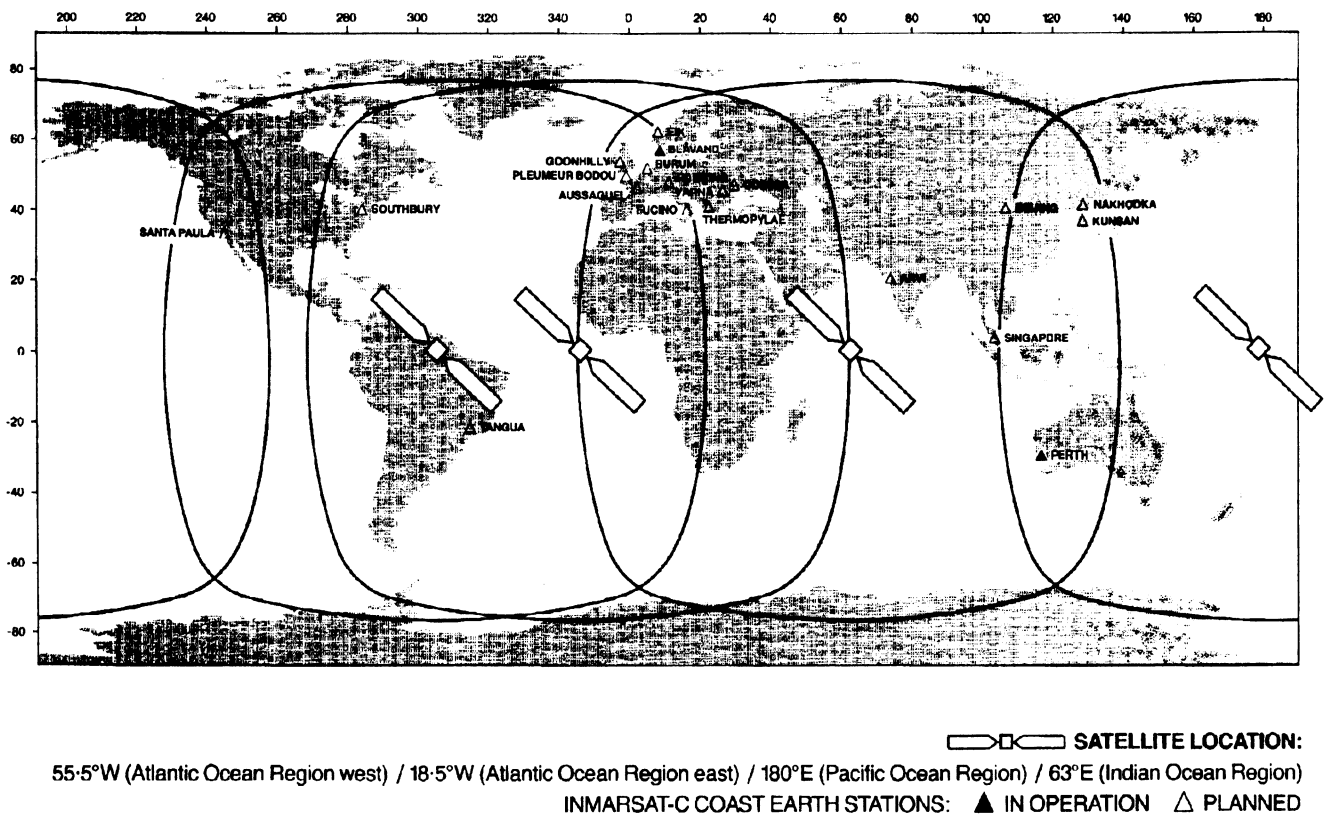


Fig 1: Inmarsat-C four ocean region operation

Logging in and out

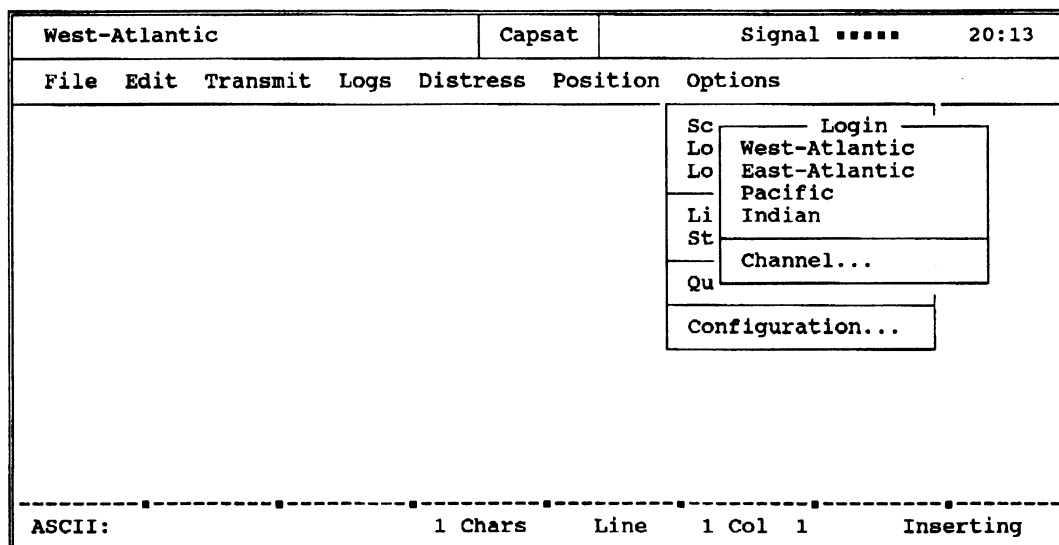
The login and logout command is used by you to inform other users of the Inmarsat-C system that you are available or unavailable for receiving messages.

Login

To login you should select the menus:

Options - Login At...

From there you should select a Network Coordinating Station that you expect to be able to reach in your part of the world.



The login can also be performed on a certain NCS that you specify yourself. This will be explained in a following section.

Logout

If you want to tell the system that you are no longer available in the Inmarsat-C system, you will have to perform a logout operation.

You select:

Options - Logout

You should answer yes to the prompt by hitting the **Y** key if you really want to logout.

When you turn on the system again it will automatically perform a login for you, if your system has been commissioned.

Inserting a new NCS table entry

A new NCS can be inserted in the NCS table if you want to use a particular station. The new station could be a spot beam, servicing a small geographical area with a high amount of traffic, or a stand-alone Coast Station in an area where the Inmarsat-C system has not yet entered full scale operation.

When inserting the new NCS you must know the ID and channel number. This will be sent to you by Inmarsat when the information is available.

To enter the new information you select

Options - Configuration - Ncs Channels...

This will display a small menu with an insert and a delete command. Select

Insert

and enter the ID and channel number when prompted.

West-Atlantic		Capsat	Signal *****		20 14																																																
File Edit Transmit Logs Distress Position Options																																																					
<table border="1"> <tr> <td colspan="2"></td> <td>NCS</td> <td colspan="3"></td> </tr> <tr> <td colspan="2">Insert</td> <td colspan="4">!Delete</td> </tr> <tr> <td>ID</td> <td>Ocean</td> <td colspan="4">Chan.</td> </tr> <tr> <td>043</td> <td>West-Atlantic</td> <td colspan="4">11088</td> </tr> <tr> <td>044</td> <td>West-Atlantic</td> <td colspan="4">11080</td> </tr> <tr> <td>144</td> <td>East-Atlantic</td> <td colspan="4">12580</td> </tr> <tr> <td>244</td> <td>Pacific</td> <td colspan="4">12580</td> </tr> <tr> <td>344</td> <td>Indian</td> <td colspan="4">10840</td> </tr> </table>								NCS				Insert		!Delete				ID	Ocean	Chan.				043	West-Atlantic	11088				044	West-Atlantic	11080				144	East-Atlantic	12580				244	Pacific	12580				344	Indian	10840			
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144	East-Atlantic	12580																																																			
244	Pacific	12580																																																			
344	Indian	10840																																																			

ASCII:		1 Chars	Line	1 Col	1 Inserting																																																

The first advantage of inserting new NCS's is that your system will automatically scan the stored NCS list and select a new for you, if you enter for instance enter a spot beam region, with a strong signal.

The second advantage is that you can select one of these NCS's to login to if you need to use a stand-alone Coast Station.

To select a specific NCS (a Stand-alone Coast Station) you select the menus:

Options - Login At... - Channel

and point to the NCS that you want to use and hit the **ENTER** key.

Transmitting messages

Before you transmit a message you should load a file into the editor or type a small message yourself. You need not to worry about formatting the message in any special way. Any text will do.

To transmit a telex message to Thrane & Thrane's telex machine in Denmark, telex number 55 19298, you must follow the procedure described below:

Select the transmit menu:

Transmit

and select the destination menu from there:

Destination

To insert the new telex number you select the

Insert

menu. In the 'Name of destination' box you can type

T&T Telex

In the 'dialling number' box you insert the number

55 19298

You can omit leading zeroes in the country code, as the program will remove these anyway, and add any number of spaces for improved readability.

The program will ask you for a destination type. You can select from

- Telex (5 or 7) for addressing land telex
- Fax (5, 7 or 8) for land based fax machines
- Mobile (5, 7 or 8) for other mobile units
- X.25 (5, 7 or 8) for land data networks
- PSTN (5,7 or 8) for land telephone lines

The numbers shown in parentheses refer to the way the information is transferred via the satellite link: as 5 bit, 7 bit or 8 bit.

For this demonstration you should just select:

Telex 7 bit

Select

Edit

and hit the **ENTER** key until you see '**7bit**' after '**telex**'.

Last you will be prompted for the answerback. You should leave this field empty for now:
Just hit the **ENTER** key.

Return to the transmit menu by choosing:

Select

and hitting the **ENTER** key.

West-Atlantic		Capsat	Signal *****		13 57
File Edit Transmit Logs Distress Position Options					
Mobile No: 4294967295		Transmit	Serial No: 890254		
Destination	Filename	Coaststation	TxTime	Priority	Send
<div style="border: 1px solid black; padding: 5px;"> <div style="display: flex; justify-content: space-between;"> <div>T&T telex</div> <div>55 19298</div> <div>Destination Telex 7bit</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <div>Filename</div> <div>-- Text in editor --</div> </div> <div> <div>Coaststation</div> <div></div> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <div>Transmission time</div> <div>Immediate transmission</div> </div> <div> <div>Delivery priority</div> <div>Routine (ROU)</div> </div> </div> </div>					
----- ASCII					

You will now have to select a Coast Station:

Coaststation

You will probably only have one available so you should just hit **ENTER**.

Now choose:

Send

You will be asked if you want confirmation on the message delivery, and you may answer

Y

for yes to this.

To view the progress of the transmission you will have to inspect the transmit log.

To help you select the proper representation for the destination in your addressbook, the difference between 5, 7 and 8 bit is described in the next section.

Selecting representation

Whether you select 5, 7 or 8 bit representation only has an effect on the satellite link to the Coast Station.

When sending a message to a telex destination, your information will always be limited to the telex alphabet, also called the Baudot alphabet.

This alphabet consists of the following characters:

- letters a - z
- numbers 0 - 9
- specials - ? : () . , ' = / + (space)
- nationals @ # %

When you send your message to a telex destination, the three characters @, # and % will be translated into three national characters in the receiving country: The actual translation depends on the standards in the particular country. In Scandinavia the three characters will normally be æ, ø and å (in that order).

- Sending 5 bit information, also called 'packed baudot', can be used to send text messages containing the telex alphabet in a compressed form.

Sending in 5 bit representation will lower the transmission cost as the information can be packed closer on the satellite link (hence the term 'packed baudot').

- The difference between 7 and 8 bit is unimportant when sending plain text, but if you want to send formatted text (from another text editor) or data, you must use the 8 bit representation.

There is no saving in sending 7 bit representation as opposed to 8 bit representation, as the Inmarsat-C system uses the last bit for data verification (parity check).

To find out if a certain Coast Station has a particular service you may find some of the information in the menu:

Transmit - Coast Station - Information

If you can not find the information here, you will have to contact the PTT authorities in that country, or the operator at the Coast Station.

New transmission services

With your new version of the Capsat Software you are now able to use three new transmission services:

- FAX fax modem
- PSDN X.25 data transmission
- PSTN telephone modem

FAX

The FAX service is used to send text messages to a destination with a faxmachine connected.

PSDN

The Public Switched Data Network (PSDN) service is used to send data information via an X.25 data network to an X.25 connection.

When sending to an X.25 network in a country you must precede the address number with a three digit country code and a one digit data network number. These four digits are together called the DNIC, the Data Network Identification Code.

PSTN

The Public Switched Telephone Network (PSTN) service is used to send messages to a destination with a telephone modem connected.

When sending to a PSTN address you use the normal telephone country code, e.g. 44 for the U.K in front of the destination number.

To use the services you should insert new entries into your addressbook with the appropriate service and representation selected.

Note:

Please remember that if you only send text messages, you will be able to save money by sending the messages with 5 bit representation.

For more information on how to access the data networks in your country, please contact your local PTT authorities.

Viewing the logs

To view one of the three message logs, select:

Logs

and then the particular log that you want to see.

To select the transmit log, choose

Transmit Log...

West-Atlantic		Capsat	Signal *****		14 04		
File Edit Transmit Logs Distress Position Options							
From :							
To	Transmit log						
Thi							
Pla	Logprint	Delete	Confirm	Update			
Bes							
	Name	Destination	Time	Date	Type	Pri CES Status	
	OUT.162	581 482380010	05:31	12-12	Mobil 7	ROU 102	Acknowlg
	OUT.163	581 482380010	05:34	12-12	Mobil 7	ROU 102	ConfReq
	OUT.171	581 482380010	07:44	12-12	Mobil 7	ROU 102	Failed
	OUT.172	581 482380120	10:17	12-12	Mobil 7	ROU 102	ConfOK
	OUT.173	55 19298	14:03	12-12	Telex 7	ROU 102	ConfReq

AS							

For each destination that you have sent a message, you will see one line in the log. If you have sent the same message to several addresses you will see the same message file (e.g. OUT.120) for all these addresses.

You have four commands in the transmit log menu:

- Logprint make a hardcopy of the log
- Delete remove an entry from the log
- Confirm ask Coast Station for confirmation
- Update display log changes

The new feature in the logs, is that the Update command, when selected, will automatically update the information on your screen.

In the receive log and the EGC log you will see the commands:

- View view received message contents
- Logprint make a hardcopy of the log
- Update display log changes

If the message is stored on the disk that you are currently using, you will be able to view it. If the message was only sent to your printer you will get an error message.

Mail indication

When one of the receive logs change, and an incoming message is stored on disk, you will notice an indication in the upper left corner displaying **Mail** or **Egc-mail**:

[illegible]

This indication will disappear again after you have selected the appropriate log and leave it again by hitting the **ESC** key.

Using position data reporting

Until now you have been able to use Thrane & Thrane's position report service to send a specially formatted telex message containing geographical position to a certain destination.

The new position data report service is a fast and efficient way of the same position information.

The position data report service is different from the normal message transmission service, in that it only uses one channel for approximately 1/2 second to send the position data in a compressed form.

To be able to use this new service you will have to arrange the data report storage with the particular Coast Station that you are going to use.

You must obtain, from Inmarsat, a Closed Network Identification (CNID) that is to be stored in the TT-3020A Capsat Transceiver. You will then also be given a Member Number.

The CNID will automatically be loaded into your TT-3020A Capsat Transceiver via the EGC service and a message will be printed. This informs you that you are now able to use the position data report service.

To set up report transmission you must select :

Options - Configuration - Position Report...

and enter the CNID and Member Number that you have been given.

West-Atlantic	Capsat	Signal *****	14:07
File Edit Transmit Logs Distress Position Options			
From : To : Thrane & Thrane, Denmark This is a small test message from Please ignore this call. Best regards			
		Position report OK Edit	
		Status ON Destination 591482380010 Coaststation 102 Local printer copy OFF Pincode 1001 Send as DataReport ON Closed Network ID 255 Closed Network member ID 2 Interval reporting ON Interval spacing 01:00	
-----		---	
ASCII: 136			

You can activate report transmission (of both kinds) in three ways:

- Schedule up to four transmission a day at fixed hours
- Send reports with a fixed interval down to ten minutes.
- Poll your system from the outside by sending it a *Position request*.

The next section will describe you activate reporting yourself.

Activating reports

To send your position as 'position data report's you use the EDIT command until you read the line:

Send as DataReport Yes

To send your position as a telex message you use the EDIT command until you read the line:

Send as DataReport No

Selecting the Interval Reporting line changes the way reports are activated:

Interval Reporting Yes

If you specify interval reporting, the first report will be sent within the next five minutes.

Polling the Capsat system for position

If somebody sends you a message (a normal message or an EGC message) containing the text line:

position request from pin xxxxx

this will cause your Capsat system to send a position report if the reporting was enabled and the number xxxxx matched the PIN code that you have specified in the menu.

The text line sent must be identical to the one shown above where the underline indicated. Lettercase and placement of the textline in the message is unimportant , as long as 'position' is the first word of the line.

The pincode can be in the range 1 to 4.000.000.000.

Power-on operation

When turning on the power of the TT-3020A Capsat Transceiver you will find that it will sometimes perform an operation on itself. This depends on which status the unit had when you last turned off the power.

- Un-commissioned and logged out
This is the status that the system will have when it comes from the factory.

When powered-on the system will start a scanning of all ocean regions, find the best signal, and login to this NCS. This will normally start an automatic commissioning of your equipment (a link test). You will then have a commissioned system ready for use.

- Commissioned and logged out
This is the status your system will have if you logged-out before turning it off, as we recommend that you do

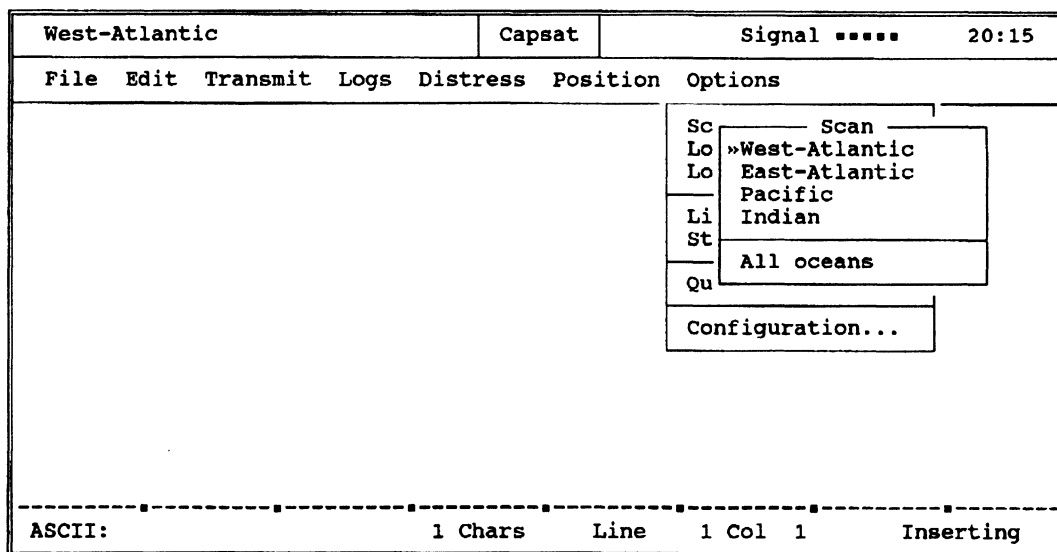
The system will start a login procedure. After the operation you are ready to transmit and receive messages.

If the system is logged in, it will not perform any operation by itself except for a regular 24 hour scanning of the preferred ocean region.

Your preferred ocean region is the region marked with a double arrow in the:

Options - Scan

menu.



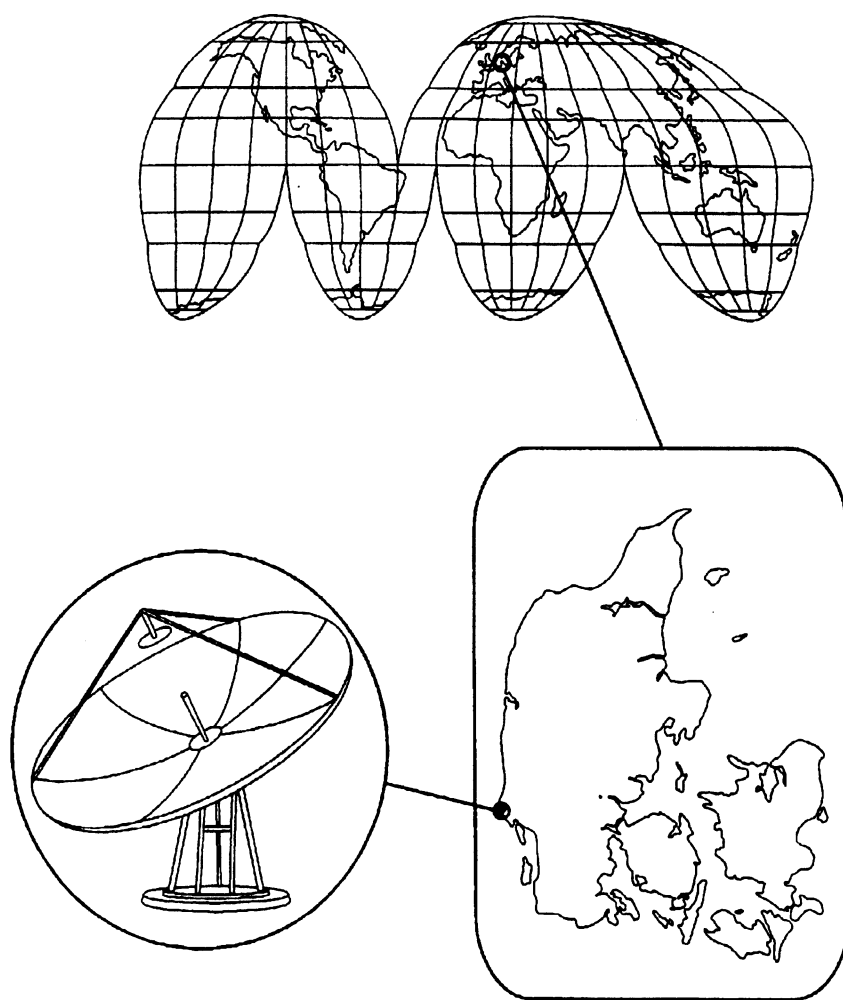
If your system does not find any signal in your preferred ocean region it will automatically

scan all ocean regions for you and login to the one with the strongest signal.

Using the Blåvand Coast Station. (Blaavand)

The Danish Coast Station named Blåvand, means blue-water in Danish, is situated on the west coast of Denmark with antennas pointing towards the East Atlantic Ocean Region satellite.

Blåvand has been used by the Danish PTT for telecommunications to Greenland and North sea radiotelex communication for many years



The station supports telex traffic in 5 and 7 bit representation, distress and EGC traffic and will soon also support the PSDN and PSTN services.

To use Blåvand you should select Coast Station number **131** from you Coast Station menu in the transmit menu.

Call procedures from land

The Blåvand station uses one or two stage selection from the land telex side.

To send a message to a mobile unit, e.g. from a computer you will use one stage selection.

To interactively enter a message, view a message, send the same message to multiple mobile units, send EGC messages or ask for message status you will use two stage selection.

One stage selection

To send a message to mobile number **482380001** in the East Atlantic ocean, you call telex number **581482380001**, and exchange answerbacks with the Coast Station.

If you send the characters **CI** within 3 seconds from the Coast Station answerback has appeared, your transaction will take place in a non-interactive mode with the Coast Station. This would normally be used when sending telexes from a computer, but can also be used from a normal Telex.

When the message is finished you send either **NNNN** or **NNNNACK** to terminate the message. The four N's means end of message and the last form will also request a confirmation of the message to be sent back to your telex terminal.

Two stage selection

To use two stage selection you call the International telex number **78900** in Denmark, international **+55 78900**.

After exchanging answerbacks you will see the ready prompt:

cmd:

You can now type a command, use the Message command:

MSG

After typing MSG you will get the 'Go ahead' prompt:

ga+?

You should now type the mobile number that you will like to send to like this:

482380120+

BT

telex message text

NNNN

The mobile number must always be the first word of the line.

The letters **BT** mark the beginning of the text and **NNNN** the end.

After typing **NNNN** you will receive a line of text indicating if the message has been accepted for delivery and at what time. You will also be given a message reference number that you can use later asking for message status.

This line will look like:

itd 18-12-90 15:30 000185

After this you will see the ready prompt again:

cmd:

The HELP command

If you type a question mark you will get a list of available commands. If you then type

help (command name)

You will receive instructions on how to use this command.

Advanced use of two stage selection

You should now type all the mobile numbers that you need to send to like this:

482380001+,ACK(Mr. Jones), L02,D01

482380002+,ACK

...

BT

...

message text

...

NNNN

The mobile number must always be the first word of the line. The other values may come in any order you like:

- ACK request confirmation.
- (Mr. Jones) message to attention of Mr. Jones.
- L02 delivery within two hours from start.
- D01 start delivery in one hour from now.

The letters **BT** mark the beginning of the text.

After typing **NNNN** you will receive a line of text indicating if the message has been accepted for delivery and at what time. You will also be given a message reference number that you can use when later asking for message status.

This line will look like:

itd 18-12-90 15:30 000185

Other commands in two stage selection

At the **cmd:** prompt you can type:

sta r (number)

to ask for message status with a given reference number or

view (number)

to see the entered message, or

exit

to break the connection.

If you have questions regarding two stage selection when using the Blåvand station you should address these to:

**Telecom Denmark
Trafikområdet
Maritime radiotjenester
Telegade 2
DK-2630 Taastrup**

Tel: +45 42529111

Appendix A

Telex Country Destinations Codes (F69)

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
ALASKA	200	UA
ALBANIA	604	AB
ALGERIA	408	DZ
ANGOLA	991	AN
ANTIGUA & BARBUDA	393	AK
ARAB UNITED EMIRATES	893	EM
ARGENTINE	33	AR
ATLANTIC EAST OCEAN	581	X
ATLANTIC WEST OCEAN	584	X
AUSTRALIA	71	AA
AUSTRIA	47	A
BAHAMAS	297	BS
BAHRAIN	490	BN
BANGLADESH	780	BJ
BARBADOS	392	WB
BELGIUM	46	B
BELIZE	371	BZ
BENIN	972	BC
BERMUDA	290	BA
BOLIVIA	309	BV
BOTSWANA	962	BD
BRAZIL	38	BR
BRUNEI	809	BU
BULGARIA	67	BG
BURKINA FASO	978	UV
BURMA	83	BM
CAMEROON	970	KN
CANADA	21	CA
CAPE VERDE	993	CV
CAYMAN ISLANDS	293	CP
CENTRAL AFRICAN REP.	971	RC
CHILE	34	CL, CK, CZ, CB, CT
CHINA	85	CN

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
COLOMBIA	35	CO
CONGO	981	KG
COOK ISLANDS	772	RG
COSTA RICA	376	CR
CUBA	28	CU
CYPRUS	605	CY
CZECHOSLOVAKIA	66	C
DENMARK	55	DK
DIEGO GARCIA	938	DG
DJIBOUTI	979	DJ
DOMINICA	394	DO
DOMINICAN REP.	201	DR
ECUADOR	308	ED
EGYPT	91	UN
EL SALVADOR	373	SR
ETHIOPIA	980	ET
FALKLAND ISLANDS	306	FK
FAROE ISLANDS	502	FA
FIJI	701	FJ
FINLAND	57	SF
FRANCE	42	F
FRENCH POLYNESIA	702	FP
GABONESE REP.	973	GO
GUIANA FRENCH	300	FG
GUYANA	295	GY
HAITI	203	HI
HAWAII	704	HM
HONDURAS	374	HO
HONGKONG	802	HX
HUNGARIAN	61	H
ICELAND	501	IS
INDIA	81	IN
INDIAN OCEAN	583	X
INDONESIA	73	IA
INMARSAT ATLANTIC E.	581	X
INMARSAT PACIFIC	582	X
INMARSAT INDIAN	583	X
INMARSAT ATLANTIC W.	584	X
IRAN	88	IR
IRAQ	491	IK
IRELAND	500	EI
ISREAL	606	IL
ITALY	43	I
JAMAICA	291	JA
JAPAN	72	J
JORDAN	493	JO
KAMPUCHEA	807	KA
KENYA	987	KE

Country Name	Code	Characters in Answerback
KOREA REP.	801	K
KUWAIT	496	KT
LEBANON	494	LE
LESOTHO	963	LO
LIBERIA	997	LI
LIBYA	901	LY
LUXEMBOURG	402	LU
MALTA (TELEMALTA)	406	MW
MEXICO	22	ME
MONTSERRAT	396	MK
MOROCCO	407	M
MOZAMBIQUE	992	MO
NAMIBIA	908	WK
NETHERLANDS	44	NL
NETHERLANDS ANTILLES	390	NA
NEW CALEDONIA	706	NM
NEW ZEALAND	74	NZ
NICARAGUA	375	NU
NIGER	975	NI
NIGERIA	905	NG
NORWAY	56	N
OMAN	498	ON
PACIFIC OCEAN	582	X
PAKISTAN	82	PK
PANAMA	379	PG
PAPUA NEW GUINEA	703	NE
PARAGUAY	305	PY
PERU	36	PE
PHILIPPINES	75	
POLAND	63	PL
PORTUGAL	404	P
PUERTO RICO (RCAC)	205	PT
PUERTO RICO (AACR)	206	PD
QATAR	497	DH
REUNION	961	RE
ROUMANIA	65	R
SAINT. LUCIA	398	LC
SAINT VINCENT	399	VQ
SOMALI	900	SM
SOUTH AFRICA	95	SA
SPAIN	52	E
SRI LANKA	803	CE
SUDAN	984	SD
SURIMANE	304	SN
SWAZILAND	964	WD
SWEDEN	54	S
SWITZERLAND	45	CH
SYRIA	492	SY

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
TAIWAN	855	
TANZANIA	989	TZ
TELEMALTA	406	MW
THAILAND	86	TH
TOGOLESE	977	TO
TONGA	777	TS
TRINIDAD & TABAGO	294	WG
TUNESIA	409	TN
TURKEY	607	TR
TURKS ISLANDS	296	TQ
U.S.S.R.	64	SU
UGANDA	988	UG
UNITED KINGDOM	51	G
USA (ITT)	230	UD
USA (TRT)	231	UT
USA (RCA)	232	UR
USA (GRAPHNET)	233	UB
USA (ITT)	234	UI
USA (DTS)	235	
USA (MCI)	236	UW
USA (CCI)	237	UC
USA (FTCC)	238	UF
USA (TCC)	239	UE
VANUATU	771	NH
VATICAN CITY STATE	504	VA
YUGOSLAVIA	62	YU
ZAIRE	982	ZR
ZAMBIA	902	ZA
ZIMBABWE	907	ZW

Corrected Appendix A 30 July 1991 Telex Country Destinations Codes (F69)

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
AFGANISTAN	79	AF
ALASKA	200	UA
ALBANIA	604	AB
ALGERIA	408	DZ
ANGOLA	991	AN
ANTIGUA & BARBUDA	393	AK
ARAB UNITED EMIRATES	893	EM
ARGENTINE	33	AR
ATLANTIC EAST OCEAN	581	X
ATLANTIC WEST OCEAN	584	X
AUSTRALIA	71	AA
AUSTRIA	47	A
BAHAMAS	297	BS
BAHRAIN	490	BN
BANGLADESH	780	BJ
BARBADOS	392	WB
BELGIUM	46	B
BELIZE	371	BZ
BENIN	972	BC
BERMUDA	290	BA
BOLIVIA	309	BV
BOTSWANA	962	BD
BRAZIL	38	BR
BRUNEI	809	BU
BULGARIA	67	BG
BURKINA FASO	978	UV
BURMA	83	BM
BURUNDI	903	BDI
CAMEROON	970	KN
CANADA	21	CA

Appendix A
Telex Country Destination Codes (F69)

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
CAPE VERDE	993	CV
CAYMAN ISLANDS	293	CP
CENTRAL AFRICAN REP.	971	RC
CHILE	34	CL, CK, CZ, CB, CT
CHINA	850	CN
COCOS KEELING ISLAND	766	IO, KL
COLOMBIA	35	CO
CONGO	981	KG
COOK ISLANDS	772	RG
COSTA RICA	376	CR
CUBA	28	CU
CYPRUS	605	CY
CZECHOSLOVAKIA	66	C
DENMARK	55	DK
DIEGO GARCIA	938	DG
DJIBOUTI	979	DJ
DOMINICA	394	DO
DOMINICAN REP.	201	DR
ECUADOR	308	ED
EGYPT	91	UN
EL SALVADOR	373	SR
ETHIOPIA	980	ET
FALKLAND ISLANDS	306	FK
FAROE ISLANDS	502	FA
FIJI	701	FJ
FINLAND	57	SF
FRANCE	42	F
FRENCH POLYNESIA	702	FP
GABONESE REP.	973	GO
GAMBIA	996	GV
GERMANY (EAST)	69	DD
GERMANY (WEST)	41	D
GREECE	601	GR
GHANA	94	GH
GIBRALTAR	405	GH
GREENLAND	503	GD
GRENADA	395	GA
GUADALOUPE	299	GL
GUAM	700	GM
GUATEMALA	372	GU
GUIANA FRENCH	300	FG
GUYANA	295	GY
HAITI	203	HI
HAWAII	704	HM
HONDURAS	374	HO

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
HONGKONG	802	HX
HUNGARIAN	61	H
ICELAND	501	IS
INDIA	81	IN
INDIAN OCEAN	583	X
INDONESIA	73	IA
INMARSAT ATLANTIC E.	581	X
INMARSAT PACIFIC	582	X
INMARSAT INDIAN	583	X
INMARSAT ATLANTIC W.	584	X
IRAN	88	IR
IRAQ	491	IK
IRELAND	500	EI
ISREAL	606	IL
ITALY	43	I
IVORY COAST	983	
JAMAICA	291	JA
JAPAN	72	J
JORDAN	493	JO
KAMPUCHEA	807	KA
KENYA	987	KE
KOREA REP.	801	K
KUWAIT	496	KT
LEBANON	494	LE
LESOTHO	963	LO
LIBERIA	997	LI
LIBYA	901	LY
LUXEMBOURG	402	LU
MACAO	808	OM
MADAGASCAR	986	MG
MALAWI	904	MI
MALAYSIA	84	MA
MALDIVES	896	MF
MALI	985	MJ
MALTA (TELEMALTA)	406	MW
MARSHALL ISLANDS	765	MS
MARTINIQUE	298	MR
MAURITANIA	974	MTN
MEXICO	22	ME
MICRONESIA	764	FM
MONTSERRAT	396	MK
MOROCCO	407	M
MOZAMBIQUE	992	MO
NAMIBIA	908	WK
NETHERLANDS	44	NL

Appendix A
Telex Country Destination Codes (F69)

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
NETHERLANDS ANTILLES	390	NA
NEW CALEDONIA	706	NM
NEW ZEALAND	74	NZ
NICARAGUA	375	NU
NIGER	975	NI
NIGERIA	905	NG
NORWAY	56	N
OMAN	498	ON
PACIFIC OCEAN	582	X
PAKISTAN	82	PK
PANAMA	379	PG
PAPUA NEW GUINEA	703	NE
PARAGUAY	305	PY
PERU	36	PE
PHILIPPINES	75	PH, PM, PN
POLAND	63	PL
PORTUGAL	404	P
PUERTO RICO (RCAC)	205	PT
PUERTO RICO (AACR)	206	PD
QATAR	497	DH
REUNION	961	RE
RODRIGUEZ	825	
ROUMANIA	65	R
SAINT. LUCIA	398	LC
SAINT VINCENT	399	VQ
SAIPAN	760	MN
SALOMON ISLANDA	778	HQ
SAMOA, AMERICAN	770	SB
SAMOA, WESTERN	779	SX
SAUDI ARABIA	495	SJ
SENEGAL	906	SG
SIERRE LEONE	998	SL
SINGAPORE	87	RS
SOMALIA	900	SM
SOUTH AFRICA	95	SA
SPAIN	52	E
SRI LANKA	803	CE
SUDAN	984	SD
SURIMANE	304	SN
SWAZILAND	964	WD
SWEDEN	54	S
SWITZERLAND	45	CH
SYRIA	492	SY
TAIWAN	859	TW
TANZANIA	989	TZ

Appendix A
Telex Country Destination Codes (F69)

<u>Country Name</u>	<u>Code</u>	<u>Characters in Answerback</u>
TELEMALTA	406	MW
THAILAND	86	TH
TOGOLESE	977	TO
TONGA	777	TS
TRANSKEI	968	TT
TRINIDAD & TABAGO	294	WG
TUNESIA	409	TN
TURKEY	607	TR
TURKS ISLANDS	296	TQ
U.S.S.R.	64	SU
UGANDA	988	UG
UNITED KINGDOM	51	G
USA (ITT)	230	UD
USA (TRT)	231	UT
USA (RCA)	232	UR
USA (GRAPHNET)	233	UB
USA (ITT)	234	UI
USA (DTS)	235	
USA (MCI)	236	UW
USA (CCI)	237	UC
USA (FTCC)	238	UF
USA (TCC)	239	UE
VANUATU	771	NH
VATICAN CITY STATE	504	VA
VENDA	95	SA, CX, VM
VENEZUELA	31	VC
VIRGIN, S. CROIX	208	VN
YEMEN (P. D. R. OF)	806	YD
YEMEN A.R.	895	YE
YUGOSLAVIA	62	YU
ZAIRE	982	ZR
ZAMBIA	902	ZA
ZIMBABWE	907	ZW

Appendix B

International Telex Service Codes (F60)

Used At Thrane & Thrane LES.

ABS	Absent subscriber (Office closed). Subscriber not available for communication. Also given in case that Mobile/Ship Earth station is not logged in or logged into another Ocean Region.
BK	I cut off.
BMC	No end of message or end of transmission received, therefore message cancelled.
CI	Conversation impossible.
DER	Out of order.
FMT	Format error.
GA	You may transmit (May I transmit).
IAB	Invalid answer- back from destination.
IMA	Input message acknowledgement.
ITD	Input transaction accepted for delivery.
LDE	Maximum acceptable length or duration has been exceeded.
NA	Correspondence with this subscriber is not admitted.
NC	No circuits.
NCH	Subscribers number has been changed.

- NP** The called party is not or no longer a subscriber.
- OCC** Subscriber is engaged.
- OK** Agreed / do you agree?.
- RSB** Retransmissions still being attempted.
- XXX** Error.
Is used as default error code if the LES is not able to more precise to specify the error conditions leading to message rejection.