# Sailor

Rx - R1117

Sailor

## BETJENINGSFORSKRIFTER FOR SAILOR MF/HF TELEFONISTATION

## OPERATING INSTRUCTIONS FOR SAILOR MF/HF TELEPHONY STATION

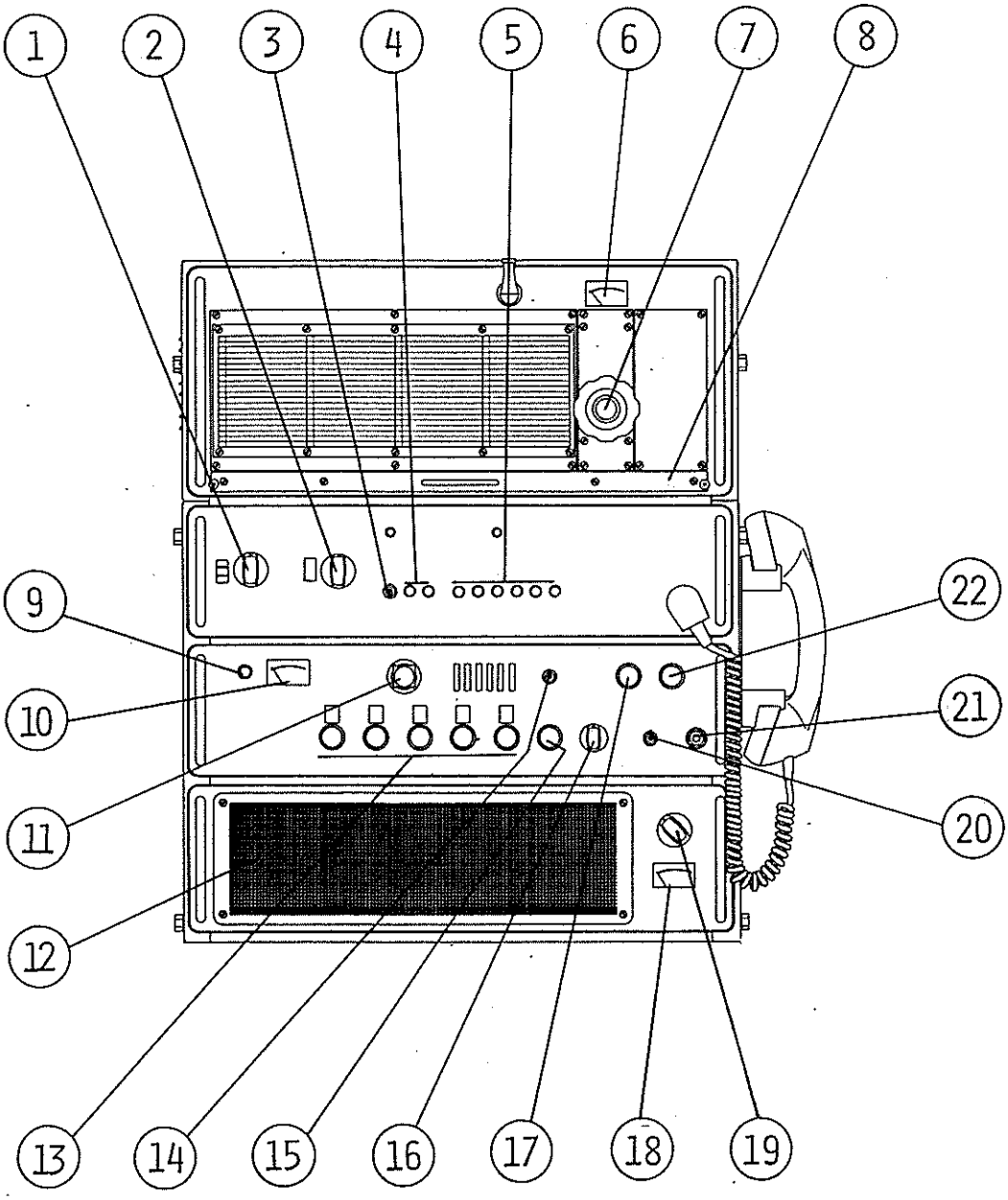
A/S S. P. RADIO · AALBORG · DENMARK

OPERATING INSTRUCTIONS FOR
SAILOR MF/HF TELEPHONY STATION COMPRISING:

| | | |
|---|---|---|
| TRANSMITTER T1127 | SERIAL NUMBER: | 173118 |
| EXCITER S1300 | SERIAL NUMBER: | 200890 |
| RECEIVER R1117 | SERIAL NUMBER: | 172624 |
| POWER SUPPLY N1400 | SERIAL NUMBER: | 173822 |

CONTENTS:

# CONTROLS



# CONTROLS

(1.) and (2.) FREQUENCY SELECTOR
On the frequency board and on the frequency table in this manual each transmit frequency has been indicated by a figure and a letter.
By means of 1. select figure (1-60)
By means of 2. select letter (A-B-C-D)

(3.) POWER
Normally to be in position FULL. Under certain circumstances it can be advantageous to reduce the output of the transmitter by using the positions MED. (medium) or LOW.

(4.) SIMPLEX - DUPLEX
Switching between simplex and duplex operations.

(5.) A3A, A3J (SSB) and A3H (AM)
Selection of transmission mode.

TUNE
For tuning of T1127, a two-tone signal is generated.

TEST ALARM
Activate TEST ALARM and the two-tone-alarm signal will be heard in the microtelephone handset.

ALARM
Activate TEST ALARM and ALARM for transmitting two-tone-alarm signal on the DISTRESS frequency 2182 kHz.

(6.) AERIAL METER
Shows the aerial current in Amp.

(7.) AERIAL TUNE
For tuning of aerial.
Keep the button TUNE (5) pressed and tune for max. aerial current.

(8.) AIR FILTER - TRANSMITTER
See special paragraph in this manual.

(9.) NOISE GENERATOR
Disconnects the aerial and activates the built-in noise generator.

(10.) METER
The meter shows the field strength of the received signal.

(11.) AERIAL TUNE
Tunes the RF filters to the selected frequency, when the noise generator (9) has been activated.

(12.) AIR FILTER - POWER SUPPLY
See special paragraph in this manual.
The fuses are placed behind the filter. Also spare fuses are stored there.

(13.) FREQUENCY SELECTORS
For selection of receiving frequency.

(14.) LOUDSPEAKER ON/OFF
Switches ON, all the loudspeakers.

(15.) CLARIFIER
Corrects for small frequency errors in SSB signals (16) .
To be set for clearest reception of SSB signals.

(16.) MODE SWITCH
Switches between reception of SSB (A3A and A3J) signals, AM (A3, A3H, A2 and A2H) signals and distress frequency signals (2182 kHz).

(17.) RF-GAIN
Controls the amplification in the IF-amplifier.

(18.) SUPPLY VOLTAGE
Shows the input voltage to the station.
Must be in the green area, also when the transmitter is keyed.

(19.) MAIN SWITCH
Main switch for the station.
Switches between the positions:

| | |
|---|---|
| OFF | The station is switched off |
| RECEIVER ONLY | Only the receiver is switched ON |
| STAND BY | The receiver is switched ON and the transmitter is ready for immediate use. |
| ON | Both receiver and transmitter are switched on. The transmitter is ready for use if the delay time (30 sec.) has past either in position STAND BY or ON. |
| | The positions STAND BY and ON should not be used more than necessary, as this will result in a not necessary power consumption, wear and tear on the output tube of the transmitter and dirty air filters. |

(20.) AGC ON/OFF
Switches the automatic gain control from ON to OFF.

(21.) HEADPHONES
When the headphone in connected, the loudspeakers are switched off.

(22.) AF-GAIN
Controls the audio output.

# OPERATING INSTRUCTIONS FOR TELEPHONY

SAILOR R1117 is capable of receiving on all frequencies in the below mentioned frequency bands, including the mentioned duplex channels.

| | DUPLEX CHANNELS | FREQUENCY BANDS |
|---|---|---|
| coast telephony | | 1600 - 4000 kHz |
| short-wave 4 MHz | 401 - 426 | 4063 - 4438 kHz |
| short-wave 6 MHz | 601 - 606 | 6200 - 6525 kHz |
| short-wave 8 MHz | 801 - 831 | 8195 - 8815 kHz |
| short-wave 12 MHz | 1201 - 1332 | 12330 - 13200 kHz |
| short-wave 16 MHz | 1601 - 1641 | 16460 - 17360 kHz |
| short-wave 22 MHz | 2201 - 2240 | 22000 - 22720 kHz |
| short-wave 25 MHz | | 25010 - 25600 kHz |

The transmitter SAILOR T1127 is capable of transmitting the frequencies, for which the exciter is programmed (max. 240).

The exciter (S1300) can be programmed for any frequency in the maritime communication bands between 1,6 and 27,5 MHz.

## TELEPHONY

1. Switch on the station by turning the MAIN SWITCH (19) in the power supply unit to pos. ON.
2. Set the loudspeaker switch LOUDSPEAKER ON/OFF (14) and the AGC switch AGC ON/OFF (20) to pos. ON.
3. Turn the radio frequency amplification control RF-GAIN (17) clockwise to its extreme position.
4. Select the mode of reception wanted A3H/AM or A3J/SSB by means of the MODE SWITCH (16).
5. Turn the volume control AF-GAIN (22) clockwise for suitable volume.
6. Set FREQUENCY SELECTORS (13) to the wanted frequency (see frequency table in this manual) and the CLARIFIER (15) to center position.
7. Activate NOISE GENERATOR (9) and tune AERIAL TUNE (11) for max. METER (10) deflection.
8. If the received signal is an SSB signal, the CLARIFIER (15) is to be set for max. clearness.
9. If necessary the AERIAL TUNE (11) can be fine adjusted on the received signal.

10. If the reception of SSB signals is disturbed by noise from rigging etc., turn the RF-GAIN (17) anticlockwise, until the volume is just reduced, and set the AGC ON/OFF (20) to position OFF.

11. Select the wanted transmit frequency be setting the FREQUENCY SELECTORS (1) (2) to the figure and letter indicated on the frequency table at the front of the T1127 or in this manual.

12. Set POWER (3) to full.

13. Activate TUNE (5) and tune the AERIAL TUNE (7) for max. deflection on AERIAL METER (6) .

14. Select transmitting mode by activating one of the buttons A3A, A3J (SSB) or A3H (AM) (5) .

15. Select simplex or duplex operation by activating SIMPLEX - DUPLEX (4) .

16. Remove the handset from its holder and when the handset key is activated the transmitter is started.

# OPERATING INSTRUCTIONS FOR DISTRESS CALLS

TRANSMITTER

1. Turn MAIN SWITCH (19) in the power supply N1400 or N1401 to position ON.
2. Turn the left FREQUENCY SELECOTR (1) until the figure 1 (red) is visible in the window.
3. Activate SIMPLEX (4) .

RECEIVER

1. Turn RF-GAIN (17) fully clockwise.
2. Turn MODE SWITCH (16) to position 2182 Distress.
3. Switch AGC ON/OFF (20) to ON.
4. Turn AF-GAIN (22) to suitable volume.

TRANSMITTER (30 seconds after switching ON the transmitter (19) )

4. Press the two buttons marked TEST ALARM (5) and ALARM (5) simultaneously and keep them pressed for about 30 seconds (after 45 seconds the distress signal will automatically be interrupted).
5. Release buttons TEST ALARM (5) and ALARM (5).
6. Take the handset, press the key and make your distress call (MAY-DAY - name of ship - position etc.).
   Release the handset key and listen for an answer.

# CLEANING OF AIR FILTERS

The station has two air filters, one, which is on the front of the power supply, and one, which is on the front of the transmitter. (See drawing under the section Controls).

These filters must be cleaned, maybe replaced, at regular intervals.

How often this must be done naturally depends of the conditions under which the station is working (quantity of dust in the air), and therefore it is impossible to give general rules for how often the filters must be cleaned.

Therefore, we recommend that you at the beginning keep an eye on how fast the filters will be dirty (at least once a month) and then you can determine the cleaning intervals.

Normally it will be sufficient to clean once every second month.

The filter on the power supply must be cleaned as follows:

1. Remove the 4 milled nuts and take off the cover with the mounted filter.

2. The filter mat is fixed on the back of the cover by means of two round sticks.
   By passing the filter mat perpendicular on these sticks along the back of the cover, the filter mat can be taken out and put back.
   If the filter mat goes too high this can be remedied by slacking off the one of the two screws on the front of the cover.

3. Clean the filter mat in lukeward water or by vacuum cleaning followed by wash in lukeward water.

4. Put the filter mat back as described under 2. (However not until the mat is quite dry).

5. Mount the cover again on the front of the power supply.

If the filter mat is very damaged, it must be replaced. With every station we deliver an extra filter mat. If necessary you can ask for more.

The filter in the transmitter must be cleaned as follows:

1. Remove the two milled nuts.

2. Pull out the filter drawer.

3. Clean the filter in lukeward water (without removing the filter mat from the drawer) or by vacuum cleaning followed by cleaning in lukewarm water.

4. Let the filter drawer dry completely and put it then back in the station.

If the filter material is damaged, the filter mat must be replaced by removing the frame, which keep the mat on its place (4 screws), then the new filter can be mounted.
We deliver an extra filter mat with every set, and if necessary you can ask for more.

## MONTHLY RUN-IN OF THE STATION

In order to obtain a great reliability of operation for the transmitter it must, out of consideration for the PA-tubes, be used for at least 10 minutes once a month, or it should be tested regularly once a month in accordance with the below procedure:

1. Set FREQUENCY SELECTOR (1) (2) to a frequency lower than 4 MHz (not 2182 kHz).
2. Set POWER (3) to low and activate A3J (5) .
3. Set MAIN SWITCH (19) to ON, and key the transmitter for 10 min. by means of the microphone plug marked KEY, supplied with the station, (to be inserted in S1300 instead of the handset plug).

## RUN-IN OF THE STATION AFTER A LONGER LAY UP PERIOD

1. Set FREQUENCY SELECTOR (1) (2) to a frequency lower than 4 MHz (not 2182 kHz).
2. Set POWER (3) to low and activate A3J (5) .
3. Turn MAIN SWITCH (19) to STAND BY for 30 minutes.
4. Turn MAIN SWITCH (19) to ON and key the transmitter for 60 minutes by means of the microphone plug marked KEY, supplied with the station, (to be inserted in S1300 instead of the handset plug).
5. The station will now be ready for use.