	<p style="text-align: center;">HEALTH, SAFETY, ENVIRONMENT AND QUALITY MANAGEMENT SYSTEM</p> <p style="text-align: center;">46.0 EFFECTIVE USE OF PORTABLE RADIOS</p> <p style="text-align: center;">ON THE JOB TRAINING</p>	<p>OJT : 046 Page : 1 of 6 Date : 07-Nov-25 Rev : 10.1 Appr : DPA</p>
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VESSEL: _____

DATE: _____

Details of Training: Effective use of Portable Radios

Portable radios are an essential item aboard any ship. They are used for operational communication reasons, and most importantly, in emergency situations. Despite the fact that they are used daily for operational purposes also, they must be considered to be critical items of safety equipment. The correct use and handling of portable radios is thus of great importance.

Communications


Regardless of the make and model, there are certain rules to follow if communications are to be clear and effective:

- Verify that the radio is on, and that the battery is fully charged.
- Verify that the battery is properly fitted – damaged (broken lugs) on Entel batteries should NOT be used as they are not intrinsically safe.
- Check that the antenna is the correct type (incorrect antennae will reduce range,) is in good condition, and is fitted with a cap.
- Verify that the power output is on “High (4W)” not on “M” or “L (1W).” (see lcd display, right bottom column on Entel) If not, toggle side-button below PTT button on pre-2016 radios (or long press orange top button for about 3 seconds on post 2016 models.) – see Entel FAQ attached.
- Ensure that the microphone (regardless of whether this is the instrument’s mic, or an external lapel microphone) is placed about 5cm from the mouth with the mic positioned directly in front of the audio source, never to the side. The mic on the Entel is located under the “S” of “Submersible,” top left of the speaker. Microphones are optimised by the manufacturers to be 2 to 5cm from the audio source when in use.
- Take care to depress the PTT button only, and not the “Monitor” button simultaneously, unless you are using the remote mic (lapel mic). If you press PTT correctly, you will see the signal bar on the right side, and the top LED light up steadily. If you don’t, it may squeal.
- Speak in a loud, clear, and controlled voice to maximize audio intelligibility, choose your words carefully, and keep them to the minimum. DO NOT SHOUT
- Speak English at all times.
- Do not transmit confidential or sensitive i Keep the channels open and clear.
- Shield the microphone from noise sources to improve the intelligibility of the audio in high noise environments. Turn or move away from the noise source, OR use a free hand to shield the microphone from noise
- Shield the microphone from wind, rain and spray or you may not be heard

Interference

Interference can be caused by other users using the same channel, or nearby electronic equipment.

- Move away from electronic equipment which may cause electro-magnetic interference with the signal,

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- Switch to a different channel, in case the other equipment is interfering with the frequency you are using.
- In the event of interference from other users, switch to a quieter channel.
- Consider using lower power, depending on the range and ulkhead penetration needed. (Not advisable during cargo ops, stations, or emergencies.)

Handling

This equipment should always be looked after in such a way that it will not let you down in an emergency.

- Portable radios should be carried in pouches when on deck, not in overall pockets.
- Radios should never be handled by the antennae.

Battery charging

Look after your batteries, and they will look after you!

- Ensure radios are switched OFF before replacing in the charger
- Never switch a radio on whilst in the charger
- Do NOT recharge an already fully-charged battery

The above has been read and understood. Other users to be informed and trained accordingly

CO: _____

2O: _____

3O: _____

XO _____

D/C _____

CEO _____

2EO _____

3EO _____

4EO _____


ETO _____

XEO _____

EC _____

Verified by: Master _____

Feedback:

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FAQ on Entel 2-way UHF Radios

1.	<p>Problem with coverage issues OR Message Received is not clear</p> <ul style="list-style-type: none"> • Verify your OUTPUT POWER settings:- <ul style="list-style-type: none"> ○ Check if the LCD (bottom right corner) for the power output is “L”, “M” or “H”. ○ If it is “L” or “M”, refer to Section 1A) and depress on <u>bottom side button</u> a few times until you see “H” to ensure transmission in High Power. ○ Depress only the PTT button when transmitting OR <u>use a Remote Spkr Mic (preferable)</u>. • Verify your MICROPHONE POSITION:- <ul style="list-style-type: none"> ○ Refer to Section 2) for the position of the Microphone. ○ Speak directly to it and ensure that the mic is not obstructed or covered (eg by the way you hold the set with your hand).
2.	<p>You heard a very noisy sound from radio:-</p> <ul style="list-style-type: none"> • Verify if you have depressed the MONITOR button. <ul style="list-style-type: none"> ○ Refer to Section 1A) for the feature of this button. (Only applies to radio supplied before 2016)
3.	<p>Battery flat out fast:-</p> <ul style="list-style-type: none"> • Refer to Section 3) for the CHARGING instruction.
4.	<p>Interference:-</p> <ul style="list-style-type: none"> • Refer to Section 4) for the CHANNEL usage.

If you encounter any problem, please inform your procurement team or you may contact below for assistance:-
Telesources (S) Pte Ltd, Tel:65-67493825 or email: sales@telesources.com.sg

1A) OPERATION IN HIGH / LOW POWER


Entel UHF Radio supplied BEFORE 2016 are set with default settings as follows:

	<p>A1) TOP Side Button</p> <ul style="list-style-type: none"> • Program to “MONITOR” • If depressed, allows the user to monitor a channel. & the user is able to listen to the traffic, i.e. the radio will unmute to the actual voice (include noise). <p>A2) PTT Button</p> <ul style="list-style-type: none"> • Depress to “PUSH TO TALK” <p>A3) BOTTOM Side Button</p> <ul style="list-style-type: none"> • Program to “POWER TOGGLE” • If depress, it will toggle & change output power between Low, Medium & High Power.
	<p>A4) POWER OUTPUT Verification Refer to the LCD Display, right bottom column for the identification of Transmit Power set.</p> <p>“L” – Low Power “M” – Medium Power “H” – High Power</p> <ul style="list-style-type: none"> • If it is operating in “L” or “M”, pls toggle the BOTTOM Side Button till you see “H”. • When you correctly press PTT, you will see the signal bar on the right side & top LED light up steadily. <p>A5) REMOTE SPEAKER MICROPHONE Recommend to use Remote Speaker Mic, user will not depress the side button accidentally. Just ensure you are operating in “H” power (check LCD).</p>

A6) During transmission of signal (PTT):

Pls ensure :-

- Depress the correct **PTT button** (PTT) only.
- Ensure the **Transmit Power** is in “H” power.
(by referring to LCD and rectify by depress Bottom Side Button to toggle until see “H”)
- When you correctly press PTT, you will see the signal bar on the right side & top LED light up steadily



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A7) If WRONG button is depressed, then:-


TOP Side Button:	<ul style="list-style-type: none"> • <i>you will hear very noisy signal.</i>
BOTTOM Side Button:	<ul style="list-style-type: none"> • <i>you will not be transmitting but toggling output power.</i>

1B) OPERATION IN HIGH / LOW POWER

B) Entel UHF Radio supplied **FROM 2016 ONWARDS** are set with default settings as follows:

	<p>B1) TOP & BOTTOM side buttons are programmed to PTT function.</p> <ul style="list-style-type: none"> • PTT Function • i.e. if you depress either of the 2 side buttons or PTT button, it will work as PTT - "PUSH TO TALK" function.
	<p>B2) ORANGE Top Button</p> <p>This top button is programmed as follows:-</p> <ul style="list-style-type: none"> • Short Press (SP) : Emergency Siren Alarm Depress about 1 second to activate this continuous siren during emergency to call for attention. To deactivate this siren, user must remove the battery. • Long Press (LP) : Power Toggle (for radio supplied in June 2016 onwards) • Depress about 3 second to toggle output power to "L", "M", "H" • Default setting is "H". Use LCD to check the setting. • Note that operation in "L" will reduce your transmission coverage.

2) MICROPHONE POSITION



Entel HT Series Microphone Position

*Talk **DIRECTLY** onto the Entel HT Series Radios' microphone OR Speaker Microphone.*

Speaking to the incorrect position or covering the microphone will result in low speech volume & quality and increased background noise.

Hold the Radio or Spkr Mic **about 5cm away from your mouth** from when you speak.

Entel Radio MICROPHONE

- Microphone is located **just below the "S"**

3) BATTERY CHARGING

- Ensure radio is **Switch OFF** before placing it in the charger.
- **NEVER** switch **ON** a radio whilst in the charger.
- **DO NOT** recharge the battery pack if it is already fully charged. Doing so may cause the life of the battery pack to shorten or damaged.

4) OTHER CONSIDERATIONS

Interferences

- If you hear interferences from your radios, try to switch to other available frequency programmed in your radios. Use the "clean" frequency (ie no interferences).
- Interference of certain frequency may be caused by surrounding equipment onboard.
- When at ports, vessel may also need to change to another channel as crew from nearby vessels could be using the same frequency as yours too (either with or without tone).