

Getting Started

First Use of Radio

- IMPORTANT**
Long condition the battery. Refer to the Battery Charger User Guide.
- Install the Antenna
- Install the Battery
- Turn on radio then adjust speaker volume.
- Make a call

Radio Configuration

Your Tait Orca radio has been configured for your requirements by your authorised Tait Dealer or your company administrator. Therefore, some functions will vary in operation or will not be available. The configuration information can be written onto this User Guide. For more information on trunking call functions, contact your Network Operator.

Batteries

Use Tait Orca 5000 NiCd/NiMH batteries or Tait Orca Elan/Excel/Eclipse NiCd/NiMH batteries. For more information on batteries, refer to the Battery User Guide.

IMPORTANT
Do not put Tait Orca 5000 batteries into older battery chargers. Tait Orca 5000 NiCd/NiMH batteries are ONLY for Tait Orca battery chargers with software version 2.07+.

Parts

If any parts are damaged or missing, report this to your authorised Tait dealer immediately.

Making Calls

Normal mode
Illustration shows the recommended method for use in normal mode. Use the upper microphone to speak.

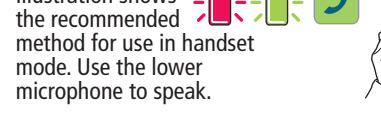


Handset mode
Illustration shows the recommended method for use in handset mode. Use the lower microphone to speak.



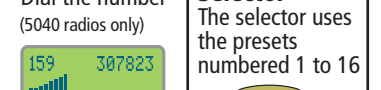
Keypad

Dial the number (5040 radios only)
Example: 159 307823



16-way Selector

The selector uses the presets numbered 1 to 16
Example: 159 PETER



Menu

Use the Menu to make a call
Example: MENU PETER



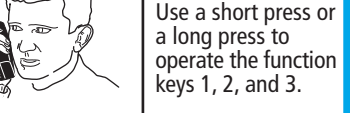
Function Keys

Use a short press or a long press to operate the function keys 1, 2, and 3.



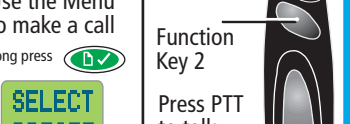
Status Label

Send a status label to a user or the dispatcher (not a group)



External Function Keys

Use external function keys 1 and 2



Call Information

- GO** Go. Call accepted. Press PTT to Talk. Release PTT to listen.
- QUEUED** Queued. Recipient has queued your call.
- ENGAGED** Engaged. Recipient is busy.
- SYS BUSY** System is busy.
- NOT HOME** Recipient has turned radio off. Recipient is in Quiet mode (do not disturb). Recipient is out of range.
- WAIT** Wait. System is busy but will connect you as soon as possible.
- UNAVAIL** Unavailable. Call is not permitted.
- UNOBTAIN** Unobtainable. Number is not supported.
- ACCEPTED** Accepted. Call has been accepted.
- QUIET** Quiet. Do not disturb.
- CALLBACK** Callback. Return call by pressing PTT or Menu.
- CAR9** Preset call numbers with label
- 208** Preset call number without label OR same fleet but not set as a preset call on your radio
- 0 FLEET** Call is from different fleet
- PHONE** Call is from PSTN
- PABX** Call is from PABX

Phonetic Alphabet	Letter
Alpha	A
Bravo	B
Charlie	C
Delta	D
Echo	E
Foxtrot	F
Golf	G
Hotel	H
India	I
Juliet	J
Kilo	K
Lima	L
Mike	M
November	N
Oscar	O
Papa	P
Quebec	Q
Romeo	R
Sierra	S
Tango	T
Uniform	U
Victor	V
Whisky	W
X-ray	X
Yankee	Y
Zulu	Z

Radio Configuration

Write your settings

Preset	Frequency
0	50
1	51
2	52
3	53
4	54
5	55
6	56
7	57
8	58
9	59
10	60
11	61
12	62
13	63
14	64
15	65
16	66
17	67
18	68
19	69
20	70
21	71
22	72
23	73
24	74
25	75
26	76
27	77
28	78
29	79
30	80
31	81
32	82
33	83
34	84
35	85
36	86
37	87
38	88
39	89
40	90
41	91
42	92
43	93
44	94
45	95
46	96
47	97
48	98
49	99

F3 Action List	Status Labels
1	16
2	17
3	18
4	19
5	20
6	21
7	22
8	23
9	24
10	25
11	26
12	27
13	28
14	29
15	30



- Battery 100% charged
- Battery 60% charged
- Battery Low
- DTMF Mode on
- Monitor Mode on
- Scroll
- Handset Mode on
- Call Timer
- 16-way Selector
- On/Off and Volume
- LED
- Speaker
- Normal Microphone
- Menu scroll keys: Backwards Forwards
- Display
- Clear, Cancel or Back in Menu
- Menu, Select, Toggle (A/B) or Send (make call)
- Alphanumeric Keypad
- Send (make call)
- Manual Dialling
- Handset Microphone

Menu

- MENU** Long press for Menu or exit Menu. When in Menu, short press to Select or to Toggle a function e.g. on / off. Menu scroll keys: Forwards and Backwards.
- SELECT PRESET** Select from list: who to call, status call, radio setting, radio mode. Example: GROUP 1 RADIO 56... Presets display alphabetically.
- DATA ENTRY** SELECT STATUS → Select status from list of status labels: LUNCH BACKIN15 AT SITE1...
- USER SETTINGS**
 - HANDSET → Handset mode: on/off
 - LOW PWR → Transmit at low power: on/off
 - KEYLOCK → Keypad lock: on/off. Long press to unlock
 - SQUELCH → Squelch: city/country
 - DTMF → Dual Tone Multifrequency (DTMF) mode: on/off
 - QUEUE → Queue incoming calls: on/off. Maximum 20 calls
 - QUIET → Quiet. Do not disturb: on/off
 - DYN PWR → Dynamic power control: on/off (MPT1327)
 - PTTLOCK → PTT Lock. PTT is locked.
- ALERT SETTINGS**
 - TONES → Tones. Beeps: on/off
 - LEVEL → Level. Beep volume: high/low
 - KEYTONE → Keytone. Keypress beeps: on/off
- DISPLAY SETTINGS**
 - NIGHT → Night use mode: on/off
 - ADJUST CONTRAST → Adjust contrast of display
- ADV SETTINGS**
 - SELECT SITE → Select Site (control channel) from list: 123 156... RESUMING Resuming normal signal hunting
 - SELECT NETWORK → Select Network from list: NETWORK1...
 - VERSION INFO → Select version from list: SW VER Software MAIN DB Database HW VER Hardware CAL DB Calibration

Modes

Dynamic Power Control MPT1327 Automatically reduces the transmit power in high signal strength areas.

Conventional Mode Radio to radio

Backlighting When you press a key, the backlighting is turned on. Turns off after 1 to 10 seconds of no activity.

Night Use mode If on, the keypad backlighting is turned on when there is activity on the channel or if a scan group is selected. Turns off after 1 to 10 seconds of no activity.

Groups

Group Calls Broadcast Call – Group members can listen but not respond. Conference Call – Group members can listen and respond. A user can be assigned to some groups, all groups or no groups. Trunked – Permanent groups are set by the trunking system. Persons are assigned when the radio is configured.

Temporary Groups A user can become a member of a group temporarily by selecting the group or when the dispatcher assigns the user to a group.

Group Call Limitations Sender has no indication of how many group members have received the call. No connection acknowledgment. Need the recipient to acknowledge by voice. Radios that are off, out of range, or engaged will not receive.

Group Numbering Scheme User's have an individual ID plus membership in none, some or all of the Group IDs.

Radio Configuration

Write your settings

Function	F1	F2	F3	External
Disabled				
Tones – Beep on / off				
Dynamic Power Control on / off				
Preset Call #1				
Preset Call #2				
Select Site (control channel) – 5040 only				
Clear				
Do Not Disturb (DND) on / off				
Adjust Contrast of Display				
Backlighting on / off				
Night Use Mode on / off				
Handset Mode on / off				
Transmit at Low Power on / off				
Monitor on / off				
Keypad Lock on / off				
DTMF mode on / off – 5040 radio only				
Handset Mode				Inactivity seconds =

16-way Selector

The selector uses the presets numbered 1 to 16.

1	9
2	10
3	11
4	12
5	13
6	14
7	15
8	16

Trunking Call Functions 5040 radio only

Common Trunking Functions N = Number

Dialling String	Function
*0 # #0 #	Request base despatcher to call you back Cancel
*0*NNN # #0*NNN #	Request another despatcher to call you back Cancel
*055*NN # *0PP*NNN #	Status call. SS = status 01 to 30 Status label to despatcher. PP = preset 00-99
*1*NN # *11*NN #	Conference call to group NN Broadcast call to group NN
*31*NN #	Non-prescribed data calls
*41*NN # #41 #	Divert own calls to radio NN Cancel
*41*0NN... # #41 #	Divert own calls to PSTN NN Cancel
*44*NN*MM # #44*NN #	Divert third party calls from NN to MM Cancel
*48 # #48 #	Queue incoming calls Cancel
*49 # #49 #	Quiet. Do not disturb Cancel
*700 # *701 #	Display the name of the current network Change to network 1 to 4 (701 702 703 704)
*8*NN # *8*1*9NN #	Priority call to radio NN Priority conference call to group NN
*9*NN # *9*1*9N #	Emergency call to radio NN Emergency conference call to group NN
*#NN #	Abbreviated dialling codes 1-49
#45 #	Cancel call divert from other user

PABX extension or PSTN number
Calls can be sent or received from Private Automatic Branch Exchanges (PABX) and Public Switched Telephone Networks (PSTN). Dial the code and number then # or Menu. See your fleet manager for the code. You don't need to dial the area code if in the same area code region.

DTMF
Dial Tone Multi-Frequency. International standard. Uses tones to dial direct to a landline, such as for communicating with telebanking systems. Turn on DTMF in the menu then make the call. To send A, B, C or D commands, press the PTT key whilst pressing 2, 5, 8 or 0.

Tip
Dial your own number for a test

MPT1343 Common Call Setup

Dialling String	Call To	Example
0	PSTN number	0 03 3583399 #
20 to 89	Radio in same fleet as you	23 #
200 to 899	Radio in same fleet as you	234 #
2001 to 6050	Radio in another fleet with same prefix as you	3078 23 # or 3078 234 #
200 to 327	Radio in another fleet with different prefix to you	300 3078 23 #
90 to 99	Group in same fleet as you	92 #
900 to 999	Group in same fleet as you	923 #

ANN Fleet Calls

Fleet Size	Call To	Example
Large	Radio 234 in Fleet 1 with same prefix as you	7 1 234 #
	Radio 235 in Fleet 2 with different prefix i.e. 32	7 32 2 235 #
Medium	Radio 23 in Fleet 51 with same prefix as you	7 51 23 #
	Radio 23 in Fleet 52 with different prefix i.e. 126	7 126 52 23 #
Small	Radio 23 in Fleet 80 with same prefix as you	7 (8or9) 80 23 #
	Radio 23 in Fleet 81 with different prefix to you i.e. 3	9 3 81 23 #

LMS Dialling

Call Type	Call To	Example
Own fleet	Radio 213 in Fleet 34 in same fleet as you	213 #
Interfleet	Radio 215 in Fleet 36 (another fleet)	36 215 #
Interprefix	Radio 217 in Fleet 38 (another fleet) of Prefix 202	202 38 217 #

Preset Numbers

Dialling String	To	Example
0 then 0 to 99 #	Preset strings (leading zero)	069 #

Conventional Channels

Dialling String	To	Example
101 to 110 #	Conventional channels	106 #

Performance

To maintain the optimum performance of the radio:

- ◆ Use only the supplied antenna.
- ◆ Use only the radio and accessories for their design purpose.
- ◆ Use only accessories that are approved by Tait Electronics Ltd.
- ◆ Avoid high temperatures. If the temperature exceeds 80°C (176°F) the radio will make two short high-pitched beeps and will not work. Temperatures above 90°C (194°F) cause permanent damage to the radio.

To maintain the optimum performance of the battery:

- ◆ Short condition the battery weekly.
- ◆ Long condition the battery only for the following conditions: on first use, if performance is poor, and after more than two weeks of storage.
- ◆ Turn the radio off when it is unattended for long periods.
- ◆ Avoid extreme temperatures as they damage the cell chemicals. The ideal temperature range is 15° to 25°C (59° to 77°F).
- ◆ Clean electrical contacts of the battery and charger weekly, using a clean dry Q-tip™ / cotton bud.
- ◆ Use only Tait Orca 5000 series battery chargers with software version 2.07+.

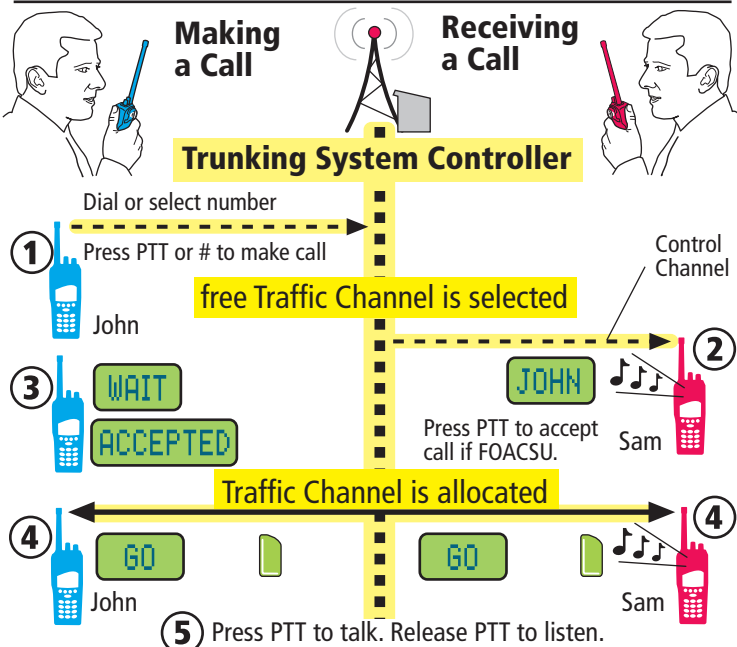
Recycle

Recycle batteries that are of no use. Contact your authorised Tait dealer for advice.

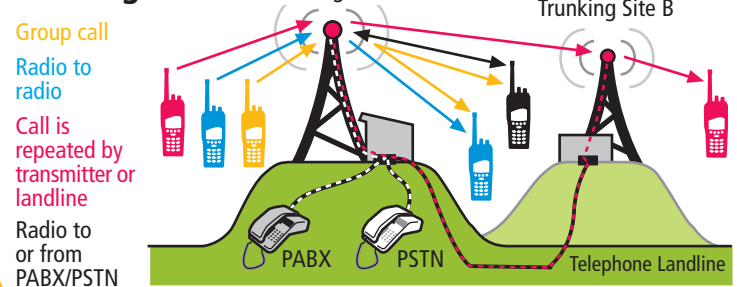


Trunking System

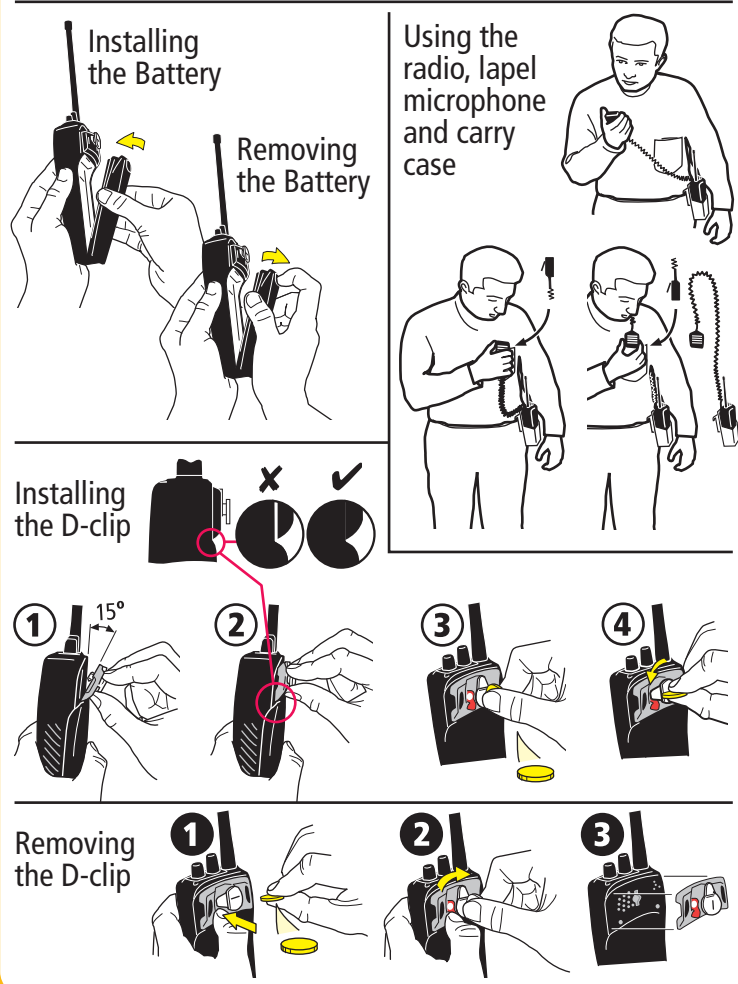
OACSU – on air-call setup
FOACSU – full off air-call setup



Trunking Mode



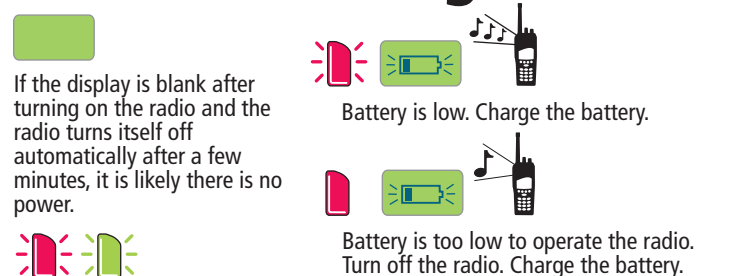
Accessory Use



Looking after your Radio

- ◆ Your radio does not require routine maintenance. However, it is a sophisticated electronic device and should be treated with care.
- ◆ Clean the radio, accessories and charger weekly using a clean dry lint-free cloth. When cleaning, do not use solvents, detergents, alcohol, aerosol sprays or petroleum-based products.
- ◆ Clean the electrical contacts on the battery and charger weekly, using a clean dry Q-tip™/cotton bud.
- ◆ Do not put the radio and accessories in fluids.
- ◆ Do not drop the radio onto hard surfaces, place it down carefully.
- ◆ Do not use if the radio, antenna or accessories are damaged.
- ◆ Repairs and modifications must only be carried out by a Tait approved dealer.

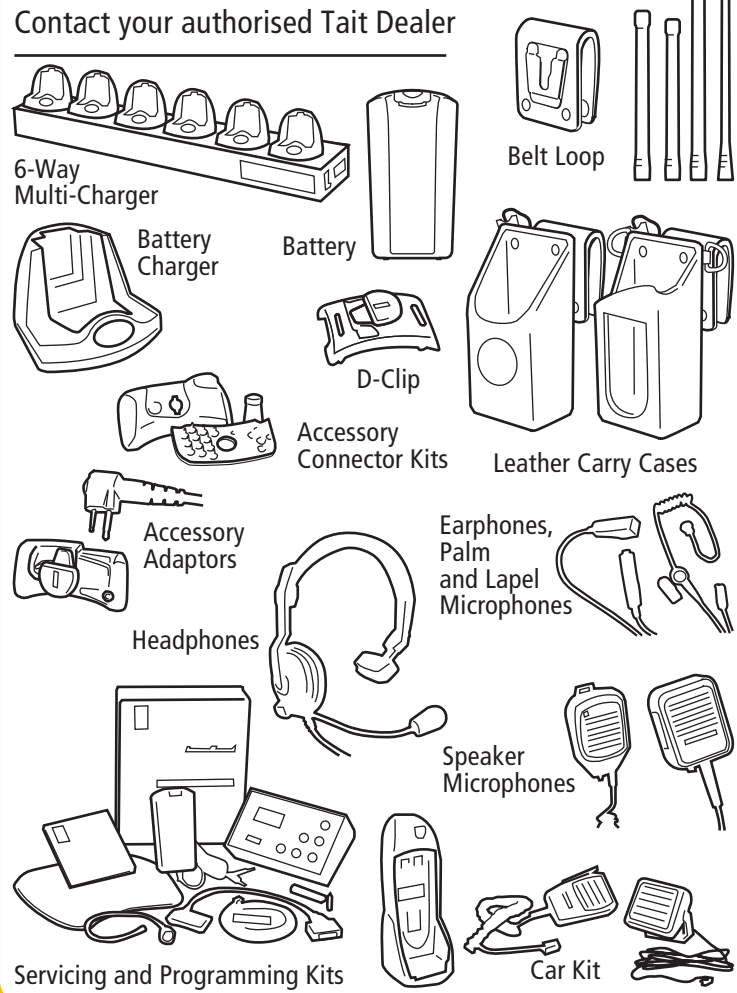
Troubleshooting



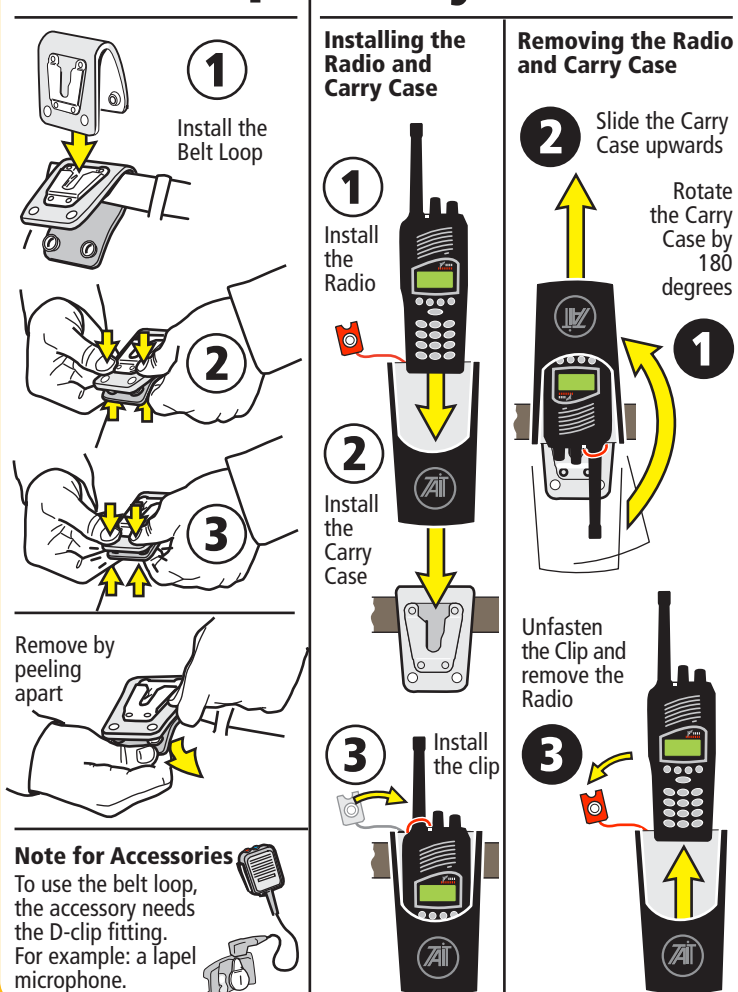
Checklist

- ◆ Is the radio turned on?
 - ◆ Is the correct channel selected?
 - ◆ Is the battery installed in the radio?
 - ◆ Is the battery charged?
 - ◆ Is the antenna damaged?
 - ◆ Is the battery charger working properly?
- ERROR XX**
Contact your authorised Tait dealer or your company administrator.

Accessories



Belt Loop Carry Case



Safety Precautions

- It is important for your safety and the safety of others to comply with the following safety precautions:**
- ◆ When transmitting, hold the radio microphone 25–50mm (1–2 inches) from your mouth.
 - ◆ When transmitting, keep the antenna at least 25mm (1 inch) from any part of your body, especially your face and eyes.
 - ◆ Turn off the radio where radio waves could interfere with electronic devices.
 - ◆ Turn off the radio at fuel/gas stations.
 - ◆ Turn off the radio in an area where detonators/explosives are being used.
 - ◆ Turn off the radio before boarding/leaving an aircraft and whilst on board an aircraft.
 - ◆ Do not use the radio whilst driving vehicles or operating machinery.
 - ◆ Do not use earphones or headsets at high volume levels.
 - ◆ Do not transmit in frequency band 406 to 406.1 MHz. This band is reserved for use by distress beacons.
 - ◆ Do not put the radio, battery or accessories in liquids as they will be damaged.
 - ◆ Do not allow children to play with the radio; it is not a toy.
- Hazardous Atmospheres**
- ◆ A hazardous atmosphere has the potential for fire or explosion from dusts, gases, liquids and solids.
 - ◆ Turn off the radio in hazardous atmospheres as an explosion or fire could occur, unless the radio is qualified for use in such environments.
 - ◆ Do not replace batteries in hazardous atmospheres as an explosion or fire could occur, even if the radio is qualified for use in such environments.
 - ◆ Do not use damaged radios in hazardous atmospheres as an explosion or fire could occur. If the radio was originally qualified for use in such environments, the radio is not qualified if it has a cracked casing.
 - ◆ Do not modify the configuration of a radio that is qualified as intrinsically safe for use in hazardous atmospheres. If you do, it will not be qualified.
- Exposure to Radio Frequency Energy**
The Tait Orca 5000 series radio generates and radiates radio frequency (RF) electro-magnetic energy (EME). The Tait Orca 5000 series radio and accessories have been designed to comply with international standards and guidelines.
- Electromagnetic Interference**
Turn off your radio where radio waves could interfere with electronic devices. Some facilities use equipment that is sensitive to Electromagnetic Interference such as: hospitals, medical centres, aircraft and some industrial facilities. Do not use your radio in these areas unless the radio is qualified for use in such areas.