



OPERATING PROCEDURE No. 16

VHF RADIO OPERATION

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PURPOSE

This procedure provides guidance on how the fixed marine VHF radios on ARC, Support 1, Support 2, Support 3, Safety, and NAB) and the handheld mobile marine VHF radios are to be used.

All volunteer skippers, crew and shore party should be able to competently use the radios provided.

PROCEDURE

OPERATING CHANNEL

DSG routine radio communication will be on channel M2 (aka P2). DSG may use channel M1/37/P1 if there are problems with M2 or when communicating with Dittisham SC. The OOD will advise if M1 is to be used.

DSG radios should be set on dual watch in case of Emergency calls on Channel 16

Members may only use radios on channels M1 and M2 unless they personally have a SRC licence (or are supervised by a licence holder) or in an emergency

OPERATING THE RADIO

All radios have the same functionality but have slightly different configurations

- An ON/OFF switch, this is sometimes achieved by depressing the volume knob, sometimes holding it depressed for three seconds.
- A Volume control, either a rotary dial or “up” and “down” buttons. This determines how loudly the radio speaks to you.
- A Channel Selection mechanism. Either a rotary dial, or “up” and “down” buttons, or a menu option to select channels using “up” and “down” buttons. Use this mechanism to set the channel

- A “Squelch” control. This will be either a rotary dial, “up” and “down” buttons, or a menu option to select “Squelch” which is then controlled by the volume rotary dial or “up” and “down” buttons until deselected or the selection times out. To set the squelch level turn the volume up, then turn the squelch control up until you get a static hiss “white noise”. Turn the squelch down gradually until the hiss disappears. The radio is now optimised.
- A “Push to Talk” button on either the microphone (fixed radio) or on the side of a handheld radio. This needs to be depressed to transmit. Beware of the button becoming jammed or wedged down as this will effectively block all other radios from transmitting on your working channel.
- A Dual Watch button or Menu selection option. When dual watch is selected both the working channel and Channel 16 (Emergency Channel) will be monitored by the radio and you will hear conversations on both channels.
- A “Hi/Lo” button or menu item. In general, use “Lo” power, this will cause less nuisance to other radio users. However, if you are having problems establishing radio communications, or are making an emergency call, then use “Hi”. Fixed radios have higher power than hand helds.
- A “Channel 16” button, usually labelled “16”. Pressing this button will take the radio out of dual watch mode and make channel 16 the working channel. Press this button before trying to make an emergency call!
- A “Lock” button. Use this to stop accidentally changing channel or other settings. that it may also lock the channel 16 button functionality, so you may need to “Unlock” the radio in an emergency before selecting channel 16 with the “16” button. Locking and unlocking usually requires the Lock button to be depressed for 3 seconds.
- A “Distress” button underneath and protected by a sprung plastic shield. For use in emergencies (See below)

NORMAL RADIO USE

Check Radio on collection or before going afloat.

- Familiarise yourself with controls
- Make sure hand held is fully charged
- Make test call to a colleague

Speak clearly in a normal tone of voice so you avoid any distortion.

Hold the radio microphone one inch from your mouth, speak slowly

Only use radio when necessary

Be Polite

Don't use Bad Language

When first calling

- repeat the name of the boat/person you are calling three times.

- repeat the name of your boat three times as well
 - conclude with “over”.
- Eg: “ARC, ARC, ARC, this is SAFETY, SAFETY, SAFETY, Over.”

When responding

- state their name,
 - state your name.
 - conclude with “over”.
- Eg. “Safety this is ARC, Over

Ensure each transmission ends with 'Over' if a response is expected and 'Out' if it's not.

General

Use the NATO phonetic alphabet (Annex A) when you are having to communicate single letters,

Read numbers as single digits instead of longer more complex numbers. Eg. “one-six” to refer to channel sixteen,

EMERGENCY USE

See Operating Procedure 19 Incident Management

Mayday

If there is grave and imminent danger to a vessel or persons, such as fire, sinking, man overboard at sea etc a May Day call should be made on Channel 16

“MAYDAY MAYDAY MAYDAY

This is Dart Sailability Support One, Dart Sailability Support One, Dart Sailability Support One

MMSI Call Sign (both found on boat console)

MAYDAY Dart Sailability Support One

MMSI Call Sign (both found on boat console)

My position is (location eg on river Dart 100m upriver from Dittisham)

Nature of distress (e.g. Sinking, Fire, serious illness)

I require immediate assistance

Number of persons on board, other useful information”

Stop transmitting and wait for an answer and follow instructions.

If no answer repeat distress call.

Pan-Pan

A Pan-Pan call can be used to address incidents such as: being broken down and left floating aimlessly; or having suffered significant structural damage to your boat that means its progress has been severely impeded; or someone on board has been taken ill but their condition is not immediately life threatening.

DSC

Some fixed radios have a DSC button under a flip up shield

When you flip up the shield and press the DSC Distress button for a few seconds, the radio will broadcast an alarm and your boat information to other vessels and authorities within 4 or 5 miles of your location. If the VHF radio has a built-in GPS, or is networked to onboard GPS, your position will also appear on any receiving radio's display. After sending a DSC distress call, your radio will stand by for an acknowledgement on Channel 70 and also receive calls on Channel 16. If an acknowledgement is received, you should select Channel 16 and advise the caller of your emergency situation. Your VHF display will show the name of the ship responding. If no acknowledgement is received, the DSC alert is repeated every four minutes. In DSG our current policy is to use Channel 16 for emergency calls – do not be tempted to lift the red flap!

ANNEX A

NATO Phonetic Alphabet

The NATO phonetic alphabet is a Spelling Alphabet, a set of words used instead of letters in oral communication. Each word ("code word") stands for its initial letter (alphabetical "symbol"). The 26 code words in the NATO phonetic alphabet are assigned to the 26 letters of the English alphabet in alphabetical order as follows:

Symbol	Code Word	Phonic (pronunciation)
A	Alfa/Alpha	AL FAH
B	Bravo	BRAH VOH
C	Charlie	CHAR LEE
D	Delta	DELL TAH
E	Echo	ECK OH
F	Foxtrot	FOKS TROT
G	Golf	GOLF
H	Hotel	HOH TELL
I	India	IN DEE AH
J	Juliett	JEW LEE ETT
K	Kilo	KEY LOH
L	Lima	LEE MAH
M	Mike	MIKE
N	November	NO VEMBER
O	Oscar	OSS CAH
P	Papa	PAH PAH
Q	Quebec	KEH BECK
R	Romeo	ROW ME OH
S	Sierra	SEE AIRRAH
T	Tango	TANG OH
U	Uniform	YOU NEE FORM
V	Victor	VIK TAH
W	Whiskey	WISS KEY

Symbol	Code Word	Phonic (pronunciation)
X	X-ray	ECKS RAY
Y	Yankee	YANG KEY
Z	Zulu	ZOO LOO

VHF Radio Prowords

The International Language of Radio Communications specifies certain words and phrases that have specific meanings when used on a radio. They are called Procedure Words or VHF Radio Prowords for short. Learn to use them appropriately.

All After / All Before – Used when you need to have part of a message repeated.

Correct / Wrong – Correct is used when somebody has read back a message and it is all correct. We say wrong if it isn't as 'incorrect' may get confused with 'correct'.

Correction – Used if you make a mistake in your message and have to put it right.

In Figures – Used to distinguish between letters and numbers.

I Say Again – I'm going to repeat.

I Spell – I'm going to spell phonetically.

Out – I have finished speaking and the conversation is finished.

Over – I have finished speaking and expect a reply.

Radio Check – Used when asking another station if you are clear and readable.

Read Back – Please read my message back to me.

Received – I have received your message.

Roger - Message received and understood

Say Again – Please repeat your message.

Station Calling – Used instead of the call sign or vessel name of the person calling you as you did not catch it or understand it.

Text – Used when you are reading a message verbatim which you expect to be written down.

Traffic – General term meaning radio communications.

This Is – Said when identifying yourself at the start of a call.

Wait – Means please wait for me as I'm not ready. Let them know how long!

Word After / Word Before – Used when asking for a single word to be repeated or spelled.