

# Gairloch Boat Club Radio Training

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GBC have 6 hand-held VHF radios and a fixed set in the Clubhouse kitchen. One RIB has a fixed set but it is not yet in operation. This training session is designed to equip members with the knowledge and skills required to safely (and legally) operate and care for the handheld radios.

## Purpose

The purpose of the radios is to enable efficient communication between safety boats, clubhouse, individuals and most importantly, if required, other vessels and HM Coastguard in an emergency.

Why are radios used when most people have mobile phones?

Mobile phones only alert one person at a time. Radios can alert vessels in the vicinity and HM Coastguard. Radios have a better chance of getting a reliable signal.

## Hand held VHF radios

There are three different types of hand held radio in use at GBC:

three ICOM IC M25, two Plastimo SX 400 and one ICOM IC M71

Gairloch Coastal Rowing Club also have an ICOM IC M25

All have the ability to use different channels and monitor more than one channel. All are water resistant and can float except for the ICOM IC M71 which does not float should only be used ashore.

## Channels

Channel 16 (The Calling and Emergency Channel) should be monitored in an emergency and as much as possible the channel should be kept clear for emergency responses and co-ordination. It should ONLY be used to initiate a conversation, then switch to a different channel. One of the switches on the radio automatically puts it on Channel 16 without the need to manually change the channel.

Pan Pan call: use channel 16

used to alert the Coastguard and nearby vessels of a serious situation which is not life-threatening, but may require assistance to deal with it (eg running out of fuel).

Mayday call: use channel 16

A distress call is the most serious level of emergency. It applies to any situation where a person is threatened by grave and imminent danger and requires immediate assistance. (see example below)

Other channels are used for ship to ship and ship to shore calls. The Coastguard broadcast weather information every three hours on channels 10, 62, 63 and 64. In our area (the Minch), these are at 07.10, 10.10, 13.10, etc. They broadcast a warning call on channel 16, using different transmitters in turn. To listen to the forecast, wait until you get the best reception of the warning call on channel 16 (eg channel 64 from the transmitter at Melvaig) then tune to that channel.

The Harbourmaster at Gairloch uses channel 12

Our licence allows us to transmit on channels M, M1 and M2. We are also allowed to use Channel 16 in an emergency.

Confusingly, some radios have the channel M marked as channel 80, M1 marked as channel 37A and M2 marked as channel P4

*From experience, our radios do not work on channel M (80). It is therefore advised to use channel M1 (37A), although the decision on which channel will be used is down to the Race Officer or Safety Boat helm.*

## **Licence (see also below – Radio Licence Requirements)**

In general, people using marine radio channels require to have a Certificate of Competence. (Short Range Certificate) Exceptions are when an emergency arises, and also if the organisation using the radios has a specific licence called a Coastal Station Radio (Marina) licence.

GBC's radio licence permits members to use hand held radios without them having a Certificate of Competence , but it restricts us to use the channels listed previously.

**Range:** in general, our radios work on line-of-sight. The higher the radio the further you can transmit. The further from each other, the worse the reception. It's possible to change the power output on some radios too. About 2/3 of the way across the loch seems to be ok for our radios working on low power.

## **Controls**

### **On/off**

Press the on/off switch for 2 seconds to switch on, 1 second to switch off (Rotate knob on ICOM IC M71)

### **Key lock**

press for one second to turn on or off

### **Volume**

Rotating knob ( ICOM IC M71 ) or press [VOL/SQL] once, then up/down arrows

### **Squelch**

Press [VOL/SQL] twice then up/down arrows

### **Channel 16 switch [16/C]**

Press to go immediately to channel 16

**PTT (press to talk) switch.** Release to receive.

## Indicators

Battery indicator  
Channel number readout  
Hi/Low power  
Squelch level indicator  
Lock indicator  
Volume indicator

## Use

See Gairloch Boat Club Radio Procedure Tips on the website

<https://www.gairlochboatclub.org.uk/policy-documents>

ALWAYS have the radio fastened by its lanyard to you or your lifejacket. Check the battery is fully charged. Make a test call before going afloat.

**Switch on** by rotating on/off knob (or press and hold on/off switch)

Check volume is set fairly high. Adjust if necessary by pressing [VOL/SQL] once, then up/down arrows. If you don't press the up/down arrows within 5 seconds the radio returns to normal operation.

If you're confident adjusting the **Squelch**, Press [VOL/SQL] twice, then up/down arrows. Zero squelch allows weak signals and noise, high squelch blocks weak signals and noise. If you don't press the up/down arrows within 5 seconds the radio returns to normal operation.

**Select desired channel:** Use the up/down arrows. For club use, we usually specify the channel to be used, so make all calls on that channel. (see **Channels**, above) For general use, call on channel 16, then when you get a reply, tell the other party to change to one of the channels listed above.

**Lock keys** with Keylock switch to avoid changing channels inadvertently.

**IMPORTANT:** To maximize the readability of your transmitted signal, pause a few seconds after pushing [PTT], hold the microphone 5 to 10 cm (2 to 4 inches) from your mouth and speak at a normal voice level.

It helps if you say 'over' after you finish speaking if you expect a reply, and 'out' if you don't expect a reply.

### Charging

Our radios will last for several hours when fully charged. One of our members monitors the charging of our hand held radios.

Make sure the correct charger is used.

## Care

If the radio has been immersed in salt water, rinse it in fresh water for a few seconds and leave to dry.

Do not remove the battery pack or aerial if water is likely to enter the body of the radio. Do not transmit without the aerial in place.

## Radio Licence requirements

Failure to hold a valid radio licence is a **criminal offence** and Ofcom's enforcement team can impose on-the-spot fines. The maximum penalty on conviction is a **£5,000 fine** and/or a **six month prison sentence**. Those convicted may also be ordered to forfeit any radio apparatus used illegally.

### Coastal Station Radio (Marina) licence

This licence is available to those who operate sailing or yacht clubs, marinas and similar organisations and covers communication concerning the movement and berthing of pleasure crafts and the control of races.

UK Marina Channels and their Frequencies are : M1=37A (157.850 MHz), M2=P4 (161.425 MHz), M=80 (TX 157.025 MHz, RX 161.625 MHz.)

Penalties for improper use (such as calling a mayday when there isn't one) for example: In 2015, Highlands man Alasdair Munro was jailed for four months after lying about a yacht being lost in the Highlands. He called the coastguard several times, claiming the boat was lost in Loch Hourn.

Hoax callers face up to six months in jail, and fines of up to £5,000.

### Example Mayday call:

Mayday, Mayday, Mayday

This is Gairloch Boat Club Safety boat, Gairloch Safety boat, Gairloch Safety boat

Mayday Gairloch Safety boat

"My position is (eg) Loch Gairloch off Flowerdale Harbour entrance

" Several sailing Dinghies capsized, multiple persons in the water and unable to recover them

"I have two persons on board and five in the water. Urgent assistance required

## Further Reading

You can access handbooks for the radios online. There are also copies in the clubhouse.

[https://icomuk.co.uk/files/icom/PDF/productManual/IC-M25\\_EURO\\_ENG\\_IM\\_1.pdf](https://icomuk.co.uk/files/icom/PDF/productManual/IC-M25_EURO_ENG_IM_1.pdf)

<https://www.manualslib.com/manual/2112068/Plastimo-Sx-400.html#manual>

[https://icomuk.co.uk/files/icom/PDF/productManual/IC-M71\\_0.qxd.pdf](https://icomuk.co.uk/files/icom/PDF/productManual/IC-M71_0.qxd.pdf)