

MINIMUM SAFETY EQUIPMENT REQUIREMENTS

CW = COASTAL WATERS; IW = INLAND WATERS; EW = ENCLOSED WATERS

Safety equipment	Length of vessel (refer to definition of waters – page 7)									
	Rowing boats		Less than 5 m		5 m to less than 8 m		8 m to less than 12 m		12 m or more	
	CW	IW/EW	CW	IW/EW	CW	IW/EW	CW	IW/EW	CW	IW/EW
Approved life-jacket or PFD-1 for each person on board and being towed, at all times	•	•	•	•	•	•	•	•	•	•
Two paddles or two oars fitted with rowlocks	•	•	•	•						
Bailer, manual pump or other efficient bilge pumping arrangements	•	•	•	•	•	•				
Efficient bilge pumping arrangements							•	•	•	•
Bucket(s) with lanyard(s) attached							•	•	• 2	• 2
Approved fire extinguisher(s) where any fuel is carried (including cooking appliances)			•	•	•	•	• 2	• 2	• 3	• 3
Waterproof torch or lantern in working order	•	•	•	•	•	•	•	•	•	•
Anchor(s) with not less than (metres as indicated) of cable or rope	• 35 m		• 45 m		• 50 m		• 55 m		• 2 70 m	
Two hand-held red flares and two hand-held orange smoke flares of an approved type	•		•		•		•		•	
Efficient compass							•		•	
Approved lifebuoys									• 2	• 2
Dinghy or liferaft									•	
Approved EPIRB (all vessels travelling more than two nautical miles from coast, excluding embayments)	•		•		•		•		•	

The above table details the minimum safety equipment requirements for recreational vessels operating on Victoria waters. The equipment must be kept in good order and stored in easily accessible points on the vessel.

Personal Flotation Device (PFD)

Is your PFD legal?

To meet the requirements of the *Marine Act 1988*, garments must comply with the appropriate Standards Australia standard or be approved by MSV.

PFD-1s



A PFD-1 is a recognised lifejacket. A PFD-1 will provide a high level of buoyancy and keep the wearer in a safe floating position. They are made in high visibility colours with retro-reflective patches.

PFD-2s and 3s



PFD-2 is a buoyancy vest - not a lifejacket. It will provide less buoyancy than PFD-1 but sufficient to keep your head above water. Like a PFD-1 they are manufactured in high visibility colours.

PFD-3 is a buoyancy garment – not a lifejacket. They have similar buoyancy to a PFD-2 and are manufactured in a wide variety of colours.

An approved PFD-1 or approved life-jacket must be provided for every person on board your vessel, including persons being towed. Each PFD must be able to fit the person it is intended for.

PFDs must be easily accessible and all persons on board should know how to use them.

At the very least you should wear a PFD on the following occasions:

- when crossing a bar or rip
- at the first sign of bad weather
- in an emergency situation
- between sunset and sunrise or during restricted visibility
- when operating in unfamiliar waters
- when operating with a following sea
- when boating alone



It is extremely difficult (and in some circumstances impossible) to put a lifejacket on if you are in the water, so prevent yourself and your crew from being in this situation and wear your lifejacket.

An approved PFD-1, 2 or 3 must be worn by any person being towed.

For vessels with safety equipment exemptions, for example, PWC, canoes/kayaks, small yachts with enclosed hulls, all occupants must wear an approved PFD-1, 2 or 3.

PFDs on children

When choosing a PFD for a child, care must be taken to ensure that the garment fits the child and that small children do not slip out when placed in the water.

All children under the age of 10 years must wear an approved PFD-1, 2 or 3 while in a recreational vessel that is underway, unless the child is within a deckhouse, cabin, half-cabin or a secure enclosed space.

The information above is a minimum requirement and it is recommended that all children should wear an approved PFD when moving around any vessel where there is a possibility of them falling overboard.

EPIRBs

All recreational vessels venturing more than two nautical miles from the coast, excluding embayments (bays) like Port Phillip and Western Port, are required to carry an approved, current Emergency Position Indicating Radio Beacon (EPIRB).

However, it is recommended that **all** vessels venturing offshore carry an EPIRB.

Once activated, an EPIRB transmits a distress signal for at least 48 hours that can be detected by satellite and overflying aircraft. EPIRB alerts detected off Victoria are received at the Australian Maritime Safety Authority in Canberra and acted upon immediately. An EPIRB's location can generally be determined by the satellite to within a radius of 5 km for a 406 MHz beacon and 20 km for a 121.5 MHz beacon. Search aircraft can home in on the EPIRB's exact position. An EPIRB should be activated in situations where human life is in grave and imminent danger. The EPIRB should be accessible but stowed in a way to avoid accidental activation.

Check the battery and/or expiry date on your EPIRB before taking out your vessel. When testing an EPIRB, strictly follow the manufacturer's instructions.

2009 - a change is coming

From February 2009 the Cospas Sarsat satellite system will no longer process the 121.5 MegaHertz (MHz) frequency used by most distress beacons.

The distress frequency used by the satellite network will be 406 MHz.

Distress flares

Recreational vessels are required to carry two hand-held red flares, and two hand-held orange smoke flares, of an approved type when operating on coastal waters.

- Distress flares have a life of three years – you must ensure the flares are current and obtain new ones if their use-by-dates are reached.
- **Orange smoke flares**, which can be seen for up to 4 km (10 km by aircraft) should be used in daylight to pinpoint your position.
- **Red flares**, which have a visibility range of 10 km, are designed for use at night but can also be seen during the day.
- Always delay using flares until you can see an aircraft, or until people on shore or in other boats are in visual range.
- Keep flares away from fuel and combustibles.
- As the contents of flares attract moisture, make sure you store them in an accessible but dry place.
- Be prepared – ensure everyone on board your vessel knows where the flares are stored and how to use them.
- Ensure that you carefully follow the activation instructions of all flares.

Expired flares and EPIRBs

Approved flares and some EPIRBs have expiry dates clearly marked. Boat owners should dispose of their expired flares and EPIRBs at any of the following police stations:

Altona North	Inverloch	Rosebud
Apollo Bay	Lakes Entrance	Rye
Bairnsdale	Lorne	Sandringham
Brighton	Mallacoota	Sorrento
Broadmeadows	Mordialloc	Torquay
Cowes	Mornington	Warrnambool
Dandenong	Morwell	Werribee
Dromana	Nunawading	Williamstown
Foster	Paynesville	Wonthaggi
Frankston	Port Campbell	Yarram
Geelong	Portland	
Hastings	Prahran	
Heidelberg	Queenscliff	

Marine radio

Marine two-way radios provide a unique means of calling for assistance if a vessel is in distress, monitoring and/or updating rescue operations and positioning a vessel by radio direction finding. Operators are also able to check weather conditions through one of the many marine Coast Stations and Limited Coast Stations.

Two-way radio equipment

Marine radios using 27 MHz, VHF or MF/HF frequencies are available for general use on board all vessels. On recreational vessels 27 MHz or VHF are the most common.

The operator

Except for 27 MHz equipment, the operator of any MF/HF and VHF marine transceiver is required to hold the relevant A.C.A. Radio Operators Certificate of Proficiency. Further information and a copy of the *Handbook for Radiotelephone Ship Station Operators* is available from the Australian Communications Authority, telephone (03) 9963 6800.

Operating procedures

Use of standard procedures as described in the handbook avoids confusion and shortens transmitting time. Unnecessary chatter can mask a weak call for help; and one day that may be your call. Only the recommended phonetic alphabet should be used in bad conditions.

Your two-way radio is your communication lifeline so it is important to remember:

- do not transmit unnecessarily
- listen before transmitting and avoid interfering with other stations
- commence your call on the calling distress channels, 27 MHz – 27.880 (Ch. 88), VHF channel 16 or HF frequencies 4125, 6215 and 8291 kHz
- for distress messages, maintain best contact and be guided by the coast or limited coast station
- for non-distress messages, arrange to switch to a working channel once you have contacted whom you have called
- always use your call sign or the name of the vessel for identification – use of given names or surnames is not permitted
- keep messages brief and clear
- if making a distress call, it is important that you give your position, the nature of the distress, the time afloat, the type of vessel and the number of people involved
- stop transmitting when requested to do so by a coast station
- always return your radio to 27 MHz – 27.880 (Ch. 88) when you have completed your call.

Distress/Urgency procedure

- A distress signal is used **only** where there is **grave** and **imminent** danger to a vessel or person.
- An urgency message is used when help may be needed, but the danger is **not** grave and imminent.

Distress and urgency communications can be made on the following channels:

Radio type	Channel
VHF	16
27 MHz	27.88 MHz
HF	4125, 6215 and 8291 kHz

Alarm signal

The radiotelephone (2 tone)

Alarm signal (if fitted)

Distress call

'mayday mayday mayday, this is...(name of vessel and call sign)'.

Spoken three times.

Distress message

A distress message has absolute priority over all other transmissions and may only be transmitted on the authority of the skipper or the person responsible for the safety of your vessel.

A distress message is:

- (a) 'mayday mayday mayday, this is – the name or other identification of your vessel (repeated three times)
- (b) particulars of your position in the degrees and minutes of latitude and longitude or in relation to a well-known geographical feature
- (c) the nature and kind of distress and the kind of assistance desired
- (d) any other information to facilitate rescue including the number of people on board.

If no answer is received repeat the distress call and message, particularly during 'silence' periods on the other distress frequencies or any other available frequency on which help might be obtained.

Urgency call

When the distress call is not fully justified the urgency call 'pan-pan' (spoken three times) should be used to indicate that a very urgent message follows concerning the safety of a vessel or person. The call details should be the same as for a distress message with the message beginning: 'pan pan, pan pan, pan pan'.

Safety signal

Safety signals are used when a station wants to pass important information concerning safety such as navigational warnings or weather warnings and are identified by the word: SECURITE (spoken three times as SAY-CURE-E-TAY).

Anchors

An anchor is an important item of equipment. Carrying requirements of equipment are highlighted in the minimum safety equipment table. When at anchor, attention is required to ensure the safety of the craft as changes in wind and sea conditions can affect the holding power.

Anchors or ground tackle should be fitted with chain or wire of a length equal to the length of the craft to resist wear and provide an ideal curved weight necessary for efficient anchor performance. Often larger vessel owners prefer a warp entirely of chain, as it greatly increases the holding power and acts as a shock absorber.

The end of the anchor rope retained on the craft, should always be secured. Attention should be paid to the prevention of chafe to the warp at the deck lead.

ANCHOR CABLES

Vessels by length	Row boat	less than 5 m	5 m to <8 m	8 m to <12 m	12 m or more
Anchor cable length in metres	35	45	50	55	70

Anchor cable type and diameter in mm

(a) polypropylene (stabilised against actinic degeneration), or	10	10	12	20	28
(b) nylon, or	8	8	10	16	20
(c) vegetable fibre, or	diameter/strength to (b)				
(d) metal chain or wire rope	strength to (b)				



Anchor shackles and pins should be properly maintained and tied with wire or cable tie or otherwise secured to prevent them from coming undone with the motion of the riding anchor. Synthetic anchor ropes should be stowed out of direct sunlight when not in use.

It should be remembered that an anchor should be stowed and lashed securely when not in use.

If anchoring at night ensure your vessel is displaying the prescribed lighting (see page 52 Navigation Lights)

Local knowledge

In addition to complying with the appropriate Victorian boating legislation and requirements, it is important to find out if there are any special local rules when you are away from your home waters. Seek advice on local conditions and carry the appropriate chart of the area you will be navigating. There are excellent maps available showing shallow areas by figures or colours and giving accurate details of launching ramps and anchorages.

If boating interstate, you are required to adhere to the safety and operating rules and regulations imposed by that State.

Weather and conditions

Before going boating you should obtain information about the expected weather. The mass media and other organisations such as the Volunteer Coast Guard (for marine radio band) and Coast Radio Melbourne, VMF555 (for VHF radio local to Port Phillip and Western Port) broadcast the Bureau of Meteorology's forecasts and warnings regularly.

The Bureau of Meteorology broadcasts coastal weather reports and warnings regularly on HF radio:

- HF 2201, 6507, 8176 & 12365 kHz (by night)
- HF 4426, 8176, 12365 & 16546 kHz (by day).

You can also get the latest forecasts on a recorded telephone message on **1196** or weather fax on:

1900 926 109 (Melbourne and Bays)

1900 969 930 (Coastal and Bass Strait Waters)

or (www.bom.gov.au).

The Weather Bureau has a free pamphlet entitled, The Weather Map, and another entitled, Marine Weather Services, both are very useful.

Potential hazards and conditions

Weather

'If it's going to blow, don't go,' is a handy motto.

Check the weather forecasts, which are regularly updated and give warnings of strong winds and gales. Sudden squalls are not easy to predict in Victoria, so keep a sharp lookout and regularly check the horizon for telltale clouds or whitecap waves.

Head for the shore or the protected side of an island only if you are close. If possible, head into the wind and waves at a steady speed.

Squalls usually last only for a short period and commonly precede a change in wind direction, usually blowing at twice the strength of the wind that will follow. It is often best to ride them out, keeping your bow into the wind and maintaining a speed sufficient to give you steering. Don't let the vessel drift side on to the wind and waves. Your vessel may take on water or capsize.

Without power or anchor, drag a sea anchor from the bow to keep the boat pointing towards the waves. A sturdy bucket or oar on a rope may make an adequate sea anchor.

If you do capsize, it may be best to stay with the boat until help arrives because your boat will be more visible than an individual in the water. It is extremely difficult to put on a lifejacket once you are in the water so remember to **put it on at the first sign of bad weather.**



Wind

Wind blows roughly parallel to lines (isobars) on the weather map, clockwise around LOWS and anticlockwise around HIGHS. The closer together the isobars, the stronger the wind.

Hills and valleys can also funnel winds, causing stronger and gustier winds and producing localised shifts in direction. This sometimes occurs over most of Port Phillip Bay when the wind is easterly. The Latrobe Valley funnels the air, producing quite strong winds over most of the Bay, while lighter winds occur in the far northern portion. This effect often occurs on inland waterways that are surrounded by hills.

Cold fronts normally produce strong, gusty wind changes that are not always accompanied by thickening cloud and rain. During summer, in particular, southerly changes can be cloud-free but still produce dangerous squalls and sudden wind shifts. Squalls and sudden wind shifts can occur with showers and thunderstorms.