

# Tassie's BoatWISE Buddy



MAST's guide to practical boating

Trip Planning

Safety Equipment

Safe Navigation

Tides, Times and Charts

Emergencies and Incidents

Buoyancy and Anchoring

Useful Information

Marine Radio and Weather

**MAST**

**MARINE and SAFETY TASMANIA**  
*making boating better*

# Trip Planning

## Are you ready to go?

- Check weather forecast and tides at [www.bom.gov.au](http://www.bom.gov.au)
- Tell someone your destination and ETA back at ramp, mooring or marina
- Fuel – 1/3 for trip out; 1/3 trip back; 1/3 for emergency
- Tick off required safety gear
- Charts – seek knowledge of area you are going boating
- Check MAST website for cruising page and ramp guide
- Is your boat up to the trip?
- Check rigging and deck gear
- Is all gear stowed above and below deck securely?
- **Be consistent with preparation on each trip**

## During the trip

- Monitor weather forecast and conditions
- Poor weather? Do you have a **Plan B**?
- Monitor engine and instruments
- Avoid lee shores – sea room is essential
- Make sure VHF is on Ch16 for navigation warnings

**YOU'RE THE SKIPPER  
YOU'RE RESPONSIBLE!**

## Essential daily engine check

### Outboards

- Is the tell-tale pumping water?
- Fuel pump and fuel filter
- Monitor oil levels in 4 strokes
- Temperature gauge and other gauges
- Trim hydraulics

### Diesels

- Check engine and gear box oil levels with dip stick
- Check filters and batteries
- Keep cooling levels topped up
- Check bilge for oil leaks
- Check coupling points on shafts and stern gland seals



MAST website

**Service engine on a regular basis.**

# Safety Equipment

## Required safety gear on board

Stow safety gear so it is accessible and brief all crew on use. Consider a diagram of your vessel on bulkhead showing location of all gear.

### Smooth water



Lifejacket  
Level 150,  
100 or 50



Bailer, bucket  
or bilge pump



Auxiliary propulsion  
(paddles, oars  
or outboard)



Anchor, chain  
and rope



Fire  
extinguisher



### Sheltered waters (PLUS Smooth water equipment)



Lifejacket  
Level 150  
or 100



Flares  
- 2 Red Hand Flares  
- 2 Orange Smoke  
Flares



Heaving line  
(Required on boats over  
6 metres in sheltered  
waters)



Lifebuoy  
(Required on boats  
over 6 metres)



### Coastal waters (PLUS Sheltered waters & Smooth water equipment)



2 red  
parachute  
flares



Radar  
reflector



Marine  
radio



EPIRB  
(406 MHz)



First aid  
kit



Water

Smooth water is of an enclosed nature, and includes inland waters (lakes and rivers). Sheltered waters are all waters not exceeding 2 nautical miles to seaward of land on the north and east coasts, unless specified in the MAST "Operational Areas" by-laws. Coastal waters are those beyond sheltered waters as well as waters on the west and south coasts between Cape Grim and South East Cape.

## Important Safety Tips

- Read instructions for flares
- Have a torch or light with life jackets
- Keep a torch in the cockpit at night
- Put safety gear in a grab bag
- Keep EPIRB accessible in companion way
- Check life lines periodically
- Do a MOB drill periodically
- Have a fire blanket in galley
- Check bilge pumps
- Service fire extinguishers
- Tap fire extinguisher to loosen powder
- Use crotch straps, especially with children
- Have a thermal blanket on board



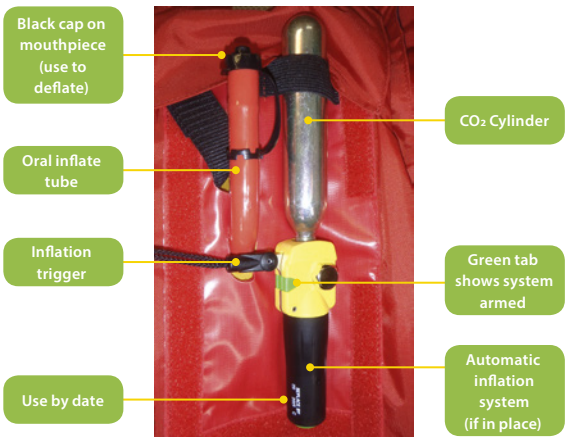
Smooth /  
Sheltered  
Waters

Life jackets perform better with crotch straps.

# Safety Equipment

## Care and Maintenance of Inflatable Life Jackets

|        |  |
|--------|--|
| STEP 1 | Before setting off always check for signs of wear and damage and check again before you stow your gear.  |
| STEP 2 | Inflate bladder using the oral tube and leave overnight in constant temperature. If it loses pressure, take jacket to an accredited service agent. Do not attempt to repair jacket yourself. |
| STEP 3 | To deflate bladder, invert black cap and press down on valve at the top of the oral tube. Fully deflate jacket.  |
| STEP 4 | Remove CO <sub>2</sub> cylinder. Weigh to ensure weight corresponds to within two grams of the minimum gross weight as engraved on cylinder.   |
| STEP 5 | Replace existing cylinder if corroded, pierced or not the correct weight. (Replacements available at dealers).   |
| STEP 6 | On auto inflation jackets also ensure components are armed and in date. If no auto system, your jacket is a manual inflation jacket.   |
| STEP 7 | Refit cylinder to inflation system, tighten by hand until firm. Repack jacket. Ensure manual inflation toggle is accessible.   |



Life jackets need to be serviced regularly.

# Safe Navigation



**PORT** Keep red "can" shape on left when going upstream, right downstream. Flashing RED light (if lit).



**STARBOARD** Keep green "cone" shape on right when going upstream, left downstream. Flashing GREEN light (if lit).



**SPECIAL MARK YELLOW** can or pole used to mark marine farm leases, spoil ground and speed restriction areas. YELLOW light (if lit).



**SAFE WATER MARK** Indicates deep water. WHITE light.



**ISOLATED DANGER MARK** Pass any side but keep well clear. WHITE light flashing groups of 2 (if lit).



**NORTH CARDINAL MARK** Pass on north side. WHITE light flashing continuously quickly.



**SOUTH CARDINAL MARK** Pass on south side. WHITE light 6 quick flashes and one long flash.



**EAST CARDINAL MARK** Pass on east side. WHITE light in groups of 3 quick flashes.



**WEST CARDINAL MARK** Pass on west side. WHITE light in groups of 9 quick flashes.



**BOAT RAMP OR JETTY** BLUE light.

# Safe Navigation

## Some common rules from the Collision Regulations

*The Collision Regulations can be found on the MAST website.*



Col Regs

**Rule 5** – Every vessel shall maintain a proper look out

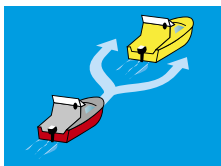
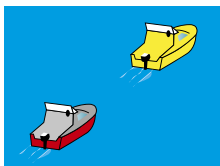
**Rule 6** – Every vessel shall proceed at a safe speed

**Rule 7** – Every vessel shall use available means to avoid a collision

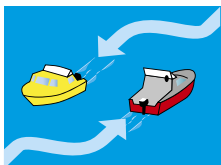
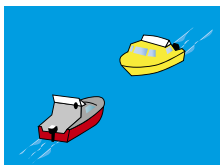
**Rule 8** – Action to avoid a collision shall be positive and made in ample time and made so that it is apparent to another vessel. Action to avoid a collision shall be such that vessels pass at a safe distance

**Rule 9** – Vessels travelling in narrow channels must keep to starboard; avoid anchoring in a narrow channel

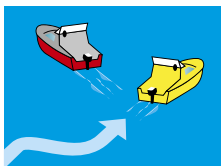
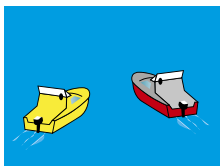
**Rule 13** – Overtaking vessel keeps clear



**Rule 14** – Head on situation - each vessel steer to starboard



**Rule 15** – Crossing situation - Give way to your right



In a collision, all masters involved can be held responsible even if the give-way vessel does not give way, because all masters are required to exercise caution and take avoiding action if the other vessel does not.

**Never assume right of way!**

# Safe Navigation

## Rule 18

### Responsibilities between vessels

**A vessel under power shall give way to:**

- A vessel not under command
- A vessel unable to manoeuvre
- A vessel engaged in fishing
- A sailing vessel

**A sailing vessel must keep clear of:**

- A vessel not under command
- A vessel engaged in fishing
- A vessel restricted in manoeuvring

### Big ships little boats

- When sailing keep a look out to leeward under the headsail and main
- Larger ships at sea travel quickly - give yourself room; make yourself known with the VHF
- If you can't see the bridge of a ship, the Master can't see you
- AIS is a handy tool when cruising
- If a ship is flying code flag H (right) it signifies it is under pilotage control and you must keep clear at all times



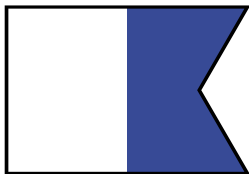
Photo courtesy of Walter Pless

**Large vessels cannot manoeuvre easily  
– give yourself and them sea room.**

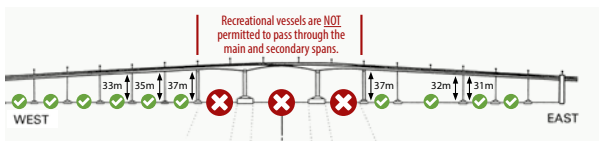
# Safe Navigation

## Some Tasmanian boating rules

- You must not exceed 5 knots within 60m of another boat, river bank or mooring
- You must not exceed 5 knots within 120m of a person swimming, diving or wading in the water
- A 5 knot zone exists between Sorell Creek and the New Norfolk Bridge unless towing a skier
- A 5 knot zone exists on the South Esk River between Hadspen and Lake Trevallyn unless towing a skier
- Observer must be 10 years or over when towing
- Life jacket must be worn on boats 6m and under
- Code flag A (right) - a diver is in the water – keep clear.  
Do not exceed 5 knots within 120m. Flag to be visible at 360 degrees



## Important Tasman Bridge Information



- Recreational vessels shall not pass under the main or secondary spans of the Tasman Bridge
- A restricted area of 120m is in place either side of the Bridge—any recreational craft must navigate at right angles to the longitudinal centre line of the bridge (not east west across River)

## Bridge Transits and Denison Canal

- Denison Canal transit between 0800 and 1700 hours
- Telephone: (03) 6253 5113
- VHF Ch16 Call Sign "Denison Canal"
- Bridgewater Bridge - (03) 6263 7235  
Transit between 0915 and 1600 hours



Bridge Transits

**Keep clear of ship transits.**



# Safe Navigation

## 5 knot areas in popular boating locations

- 1 Waters of the Prosser River that are to seaward of the Prosser River Bridge.
- 2 Waters of Coles Bay to northward of a line drawn from the navigation light on the outer end of the main Coles Bay jetty to the beacon located at the mouth of Ranger Creek.
- 3 Waters inside of a line drawn between Blinking Billy Point and Prossers at Long Beach, Sandy Bay.
- 4 Waters from the New Norfolk Bridge downstream approximately 900 metres to an imaginary line drawn from the western side of the boat launching ramp on the southern shore to a point on the northern shore marked by a rectangular warning sign.
- 5 Waters on the South Esk River bounded on the south by the weir situated on the northern side of the Perth Bridge and on the north by the Perth Water Supply Pumping Station.
- 6 Lake Barrington - within 60 metres of the southern extremity of the launching ramp at Kentish Park.
- 7 West Arm - between one line drawn northwards from the Riviera Hotel, through West Arm beacon, to the southernmost part of Anchor Point, and another line from the shore south of Stingray Bay, via the north eastern and south western buoys southwards to the shore.
- 8 Bridport - Great Forester River: in the mouth of the Great Forester River from the northern end of the breakwater to the green and yellow pile with blue notice off Main Beach and Croquet Lawn Bay.
- 9 An area on the Mersey River north of an imaginary line drawn due west from the launching ramp of the Navy League to the opposite shore, and south of an imaginary line drawn due east from the Victoria Parade boat ramp.
10. An area within 200 metres of the waterline at Ulverstone sea beaches, Mersey Bluff Beach; Coles Beach East Devonport Beach (each and west side of breakwater). All Hawley and Port Sorell Beaches; Squeaking Point; Panatana Rivulet; Forth River; Turners Beach.



5 knot zones

**Don't exceed 5 knots within 120 m of person in the water.**

# Safe Navigation

## Navigation light identification

**7m and under and less than 7 knots** including canoes, kayaks, rowing shells - lights visible at 360 degrees.

MAST accepts white strobes on kayaks



STERN



STARBOARD



BOW

**Less than 12m underway** – may have only an all-round white light and port and starboard lights



STERN



STARBOARD



BOW

**Less than 50m underway** – stern light; side and masthead - use of a second masthead light is optional for power vessels < 50m - Rule 23(a)(ii)



STERN



STARBOARD



BOW

**Over 50m underway** – second masthead and higher



STERN



STARBOARD



BOW

**Sailing Boats – no motor running** if < 20m she may have combined lights at masthead – but will require steaming light forward when motoring



STERN



STARBOARD



BOW

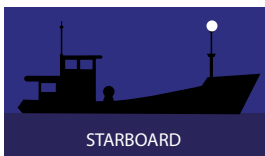
*A yacht when sailing and a motor running (motor sailing) must show lights as per a powered craft*

# Safe Navigation

**Lights at anchor – Under 50m** – visible at 360 degrees



STERN



STARBOARD



BOW

**Lights at anchor – Over 50m** – lower aft all-round white



STERN



STARBOARD

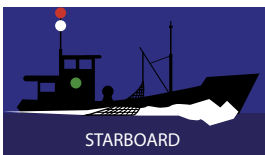


BOW

**Lights for fishing boats** – underway. Fishing at night is red over white



STERN



STARBOARD



BOW

**Lights for trawlers** – underway. Trawling at night is green over white



STERN



STARBOARD

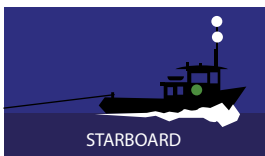


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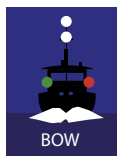
**Vessels Towing** – Towing Vessel < 50m (tow < 200m)



STERN



STARBOARD

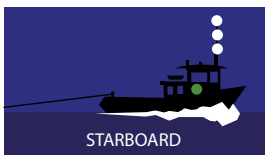


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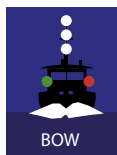
**Vessels Towing** – Towing Vessel < 50m (tow > 200m)



STERN



STARBOARD

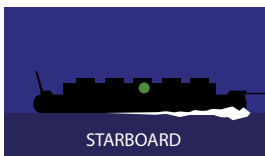


BOW

**Any vessel being towed**



STERN



STARBOARD



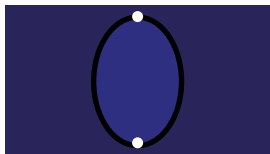
BOW

# Safe Navigation

**Inconspicuous, partly submerged vessel or object:**  
eg – fish pens

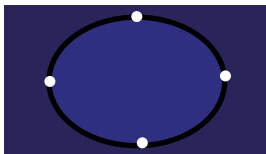
**<25m breadth**

2 x all-round white



**>25m breadth**

4 x all-round white



*If object >100m in length intermediate lights between those above should be displayed*

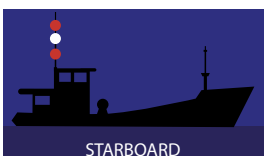
**Vessels restricted in ability to manoeuvre making way**

*NB <50m only requires one masthead all-round white*

**Vessels restricted, not making way through the water**



STERN



STARBOARD



BOW

**Vessels restricted in ability to manoeuvre, making way through the water**



STERN

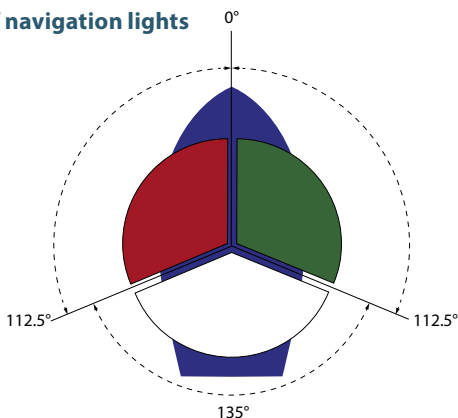


STARBOARD



BOW

**Arc of navigation lights**



**Check that your nav lights work.**

# Safe Navigation

## Various day shapes

**Vessel engaged in fishing**



**Towing >200m**



**Restricted in ability to manoeuvre**



**Not under command**



**Anchored**





GPS validation marks

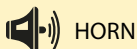
**Check your GPS is in correct datum.**

# Safe Navigation
































## Universal Sound Signals

 Short horn blast  
(1 second)

 Long horn blast  
(4-6 seconds)


























## Signalling

-   turning to starboard
-    turning to port
-     going astern
-       unsure of your intentions
-     overtaking starboard side
-      overtaking port side
-      agree to be overtaken
-   approaching bend or obstruction

## Fog or restricted visibility



























*In reduced visibility and fog, horn should be sounded every 2 minutes*

-   power-driven vessel making way
-    power-driven: not making way
-     other vessels
-      towed vessel (manned)
-     at anchor, restricted visibility, warning of collision
-      pilot vessel

**In reduced visibility, always check your speed and keep a proper look-out at all times.**

# Safe Navigation

## International Code Flags

|   |          |  |   |          |   |
|---|----------|--|---|----------|---|
|    | <b>A</b> | <b>ALPHA</b><br>Diver Down<br>Keep Clear       |    | <b>N</b> | <b>NOVEMBER</b><br>No                           |
|    | <b>B</b> | <b>BRAVO</b><br>Dangerous<br>Cargo             |    | <b>O</b> | <b>OSCAR</b><br>Man<br>Overboard                |
|    | <b>C</b> | <b>CHARLIE</b><br>Yes                          |    | <b>P</b> | <b>PAPA</b><br>About to Sail                    |
|    | <b>D</b> | <b>DELTA</b><br>Keep Clear                     |    | <b>Q</b> | <b>QUEBEC</b><br>Request<br>Pratique            |
|    | <b>E</b> | <b>ECHO</b><br>Altering Course<br>to Starboard |    | <b>R</b> | <b>ROMEO</b>                                    |
|    | <b>F</b> | <b>FOXTROT</b><br>Disabled                     |    | <b>S</b> | <b>SIERRA</b><br>Engines Going<br>Astern        |
|    | <b>G</b> | <b>GOLF</b><br>Want a Pilot                    |    | <b>T</b> | <b>TANGO</b><br>Keep Clear                      |
|  | <b>H</b> | <b>HOTEL</b><br>Pilot on Board                 |  | <b>U</b> | <b>UNIFORM</b><br>Standing into<br>Danger       |
|  | <b>I</b> | <b>INDIA</b><br>Altering Course<br>to Port     |  | <b>V</b> | <b>VICTOR</b><br>Require<br>Assistance          |
|  | <b>J</b> | <b>JULIET</b><br>On Fire<br>Keep Clear         |  | <b>W</b> | <b>WHISKEY</b><br>Require Medical<br>Assistance |
|  | <b>K</b> | <b>KILO</b><br>Desire to<br>Communicate        |  | <b>X</b> | <b>XRAY</b><br>Stop Your<br>Intention           |
|  | <b>L</b> | <b>LIMA</b><br>Stop<br>Instantly               |  | <b>Y</b> | <b>YANKEE</b><br>Am Dragging<br>Anchor          |
|  | <b>M</b> | <b>MIKE</b><br>I am Stopped                    |  | <b>Z</b> | <b>ZULU</b><br>Require<br>A Tug                 |

0



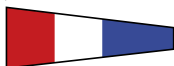
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2



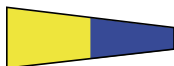
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4



5



6



7



8

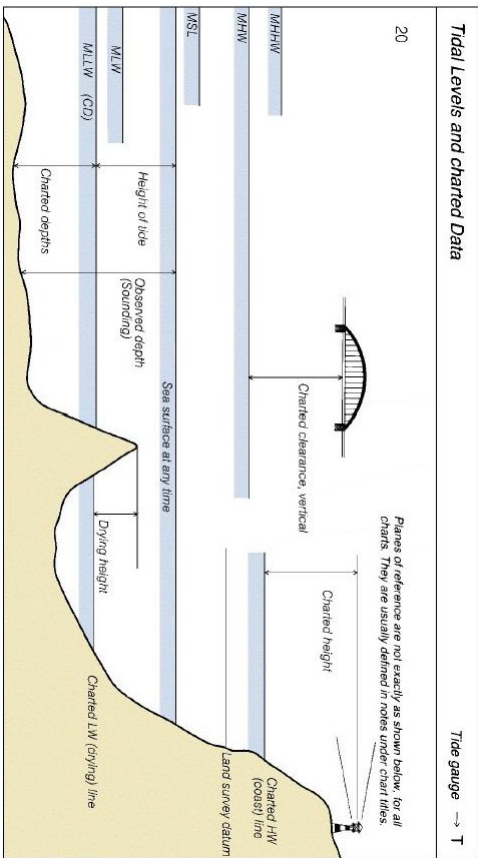


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# Tides, Times and Charts

## Tidal information



| Hour | Twelfths<br>(rise or fall of tide<br>during the hour.) | Eg:Tide<br>height in<br>metres | Flow of tide |
|------|--|--------------------------------|--------------|
| 1    | 1 Twelfth  | 1.7                            | Weak         |
| 2    | 2 Twelfths   | 1.5                            | Medium       |
| 3    | 3 Twelfths   | 1.2                            | Strong       |
| 4    | 3 Twelfths   | 0.9                            | Strong       |
| 5    | 2 Twelfths   | 0.7                            | Medium       |
| 6    | 1 Twelfth  | 0.6                            | Weak         |

### The rule of twelve:

gives approximation of the strength of the tide assuming there is about 6 hours between high and low tide



Tassie Tide Tables

Always check the tide before  
going boating.



# Tides, Times and Charts

## Time and distance tables

| From Low Head                          | nm    | @ 6 kn     | @ 20 kn    |
|--|-------|------------|------------|
| Devonport                              | 21.5  | 3 hr:40 m  | 1 hr:5 m   |
| Waterhouse Island                      | 43.4  | 7 hr:15 m  | 2 hr:10 m  |
| Swan Island                            | 65.9  | 11 hr      | 3 hr:20 m  |
| Stanley                                | 69.7  | 11 hr:40m  | 3 hr:30 m  |
| Lady Barron                            | 89.5  | 14 hr:55 m | 4 hr:30 m  |
| Port Phillip Heads                     | 193   | 32 hr:10 m | 9 hr:40 m  |
| Eden                                   | 295   | 49 hr:10 m | 14 hr:45 m |
| From Hobart to Piersons Point: 10.4 nm |       |            |            |
| From Pierson Point                     | nm    | @ 6 kn     | @ 20 kn    |
| Kettering                              | 6.2   | 1 hr       | 20 m       |
| Roberts Pt                             | 6.3   | 1 hr:5 m   | 20 m       |
| Variety Bay                            | 9.8   | 1 hr:40 m  | 30 m       |
| Missionary Bay                         | 10.8  | 1 hr:50 m  | 35 m       |
| Middleton Light                        | 11.8  | 2 hr       | 35 m       |
| Huon Island                            | 18.6  | 3 hr:10 m  | 1 hr       |
| Ventenat Pt                            | 19.3  | 3 hr:15 m  | 1 hr       |
| Adventure Bay                          | 20.3  | 3 hr:25 m  | 1 hr       |
| Partridge Island                       | 23.7  | 4 hr       | 1 hr:10 m  |
| Dover                                  | 25.3  | 4 hr:15 m  | 1 hr:20 m  |
| The Friars                             | 30.4  | 5 hr:5 m   | 1 hr:30 m  |
| Southport                              | 30.7  | 5 hr:10 m  | 1 hr:30 m  |
| From Hobart to Iron Pot: 11.2 nm       |       |            |            |
| From Iron Pot                          | nm    | @ 6 kn     | @ 20 kn    |
| Sloping                                | 12.6  | 2 hr:10 m  | 40 m       |
| Nubeena                                | 14.7  | 2 hr:30 m  | 50 m       |
| Lime Bay                               | 15.9  | 2 hr:40 m  | 50 m       |
| Cape Raoul                             | 20.0  | 3 hr:20 m  | 1 hr       |
| Dunalley                               | 20.3  | 3 hr:20 m  | 1 hr       |
| Murdunna                               | 22.1  | 3 hr:40 m  | 1 hr:10 m  |
| Port Arthur                            | 28.5  | 4 hr:50 m  | 1 hr:25m   |
| Tasman Island                          | 29.1  | 4 hr:55 m  | 1 hr:30 m  |
| Fortescue                              | 38.5  | 6 hr:25 m  | 1 hr:55 m  |
| Pirates Bay                            | 44.0  | 7 hr:20 m  | 2 hr:15 m  |
| From Point Home Lookout (Triabunna)    | nm    | @ 6 kn     | @ 20 kn    |
| Darlington                             | 5.1   | 50 m       | 15 m       |
| Chinamans                              | 9.3   | 1 hr:35 m  | 30 m       |
| Reidle                                 | 17.6  | 2 hr:55 m  | 50 m       |
| Bryans Corner                          | 23.0  | 3 hr:50 m  | 1 hr:10 m  |
| Coles Bay                              | 30.1  | 5 hr       | 1 hr:30 m  |
| Wineglass Bay                          | 33.5  | 5 hr:35 m  | 1 hr:40 m  |
| Lady Barron                            | 159.7 | 26 hr:40 m | 8 hr       |
| Eden (NSW)                             | 352.9 | 58 hr:50 m | 17 hr:40 m |

Adjust voyage time to allow for sea state.

# Tides, Times and Charts

## Time and distance calculation

**1 nautical mile** = 1.852km; **10 nm** = 18.52km

**1 Knot** = 1.151mph; **1 degree of latitude** = 60 nm

To travel 20nm at 20 knots will take 1 hour; at 6 knots it will take 3 hrs 20mins (assume good weather, calm sea).

**Formulas - speed in knots: distance in nm : time in mins**

**Time** = Distance x 60 divided by Speed

**Distance** = Speed x Time divided by 60

## Berthing Authorisation

### Call Tasports for:

King Island – (03) 6461 1155 & Flinders (03) 6359 3502

Stanley – (03) 6222 6061

Hobart: Cons Dock or Kings Pier – 1300 366 742

Port Tower (03) 6222 6061 | VHF Ch16

### Call MAST for:

Sullivans Cove Public Marina and MAST owned jetties – 0418 145 439

## MAST Cruising Moorings

| Location            | Latitude  | Longitude  |
|---------------------|-----------|------------|
| Coles Bay           | 42 07.734 | 148 17.642 |
| East Shelly         | 42 33.960 | 147 53.603 |
| East Shelly         | 42 33.928 | 147 53.645 |
| Coles Bay           | 42 07.708 | 148 17.629 |
| Taranna             | 43 02.955 | 147 51.703 |
| Nubeena             | 43 06.126 | 147 44.396 |
| Port Arthur         | 43 09.026 | 147 51.208 |
| Dunalley            | 43 53.199 | 147 49.231 |
| Maria Island        | 42 34.718 | 148 3.828  |
| Maria Island        | 42 34.738 | 148 3.826  |
| Maria Island        | 42 34.747 | 148 3.785  |
| Lady Barron         | 40 12.792 | 148 14.994 |
| Lady Barron         | 40 12.750 | 148 15.060 |
| Port Davies (Emita) | 40 00.585 | 147 52.588 |
| Prime Seal Island   | 40 04.137 | 147 45.717 |
| Trousers Point      | 40 13.726 | 148 02.085 |



Public Moorings



Cruising Tasmania

**MAST would like your feedback on public moorings.**

## Reading Navigation Charts

**FL(2) =** Character of light – the above example is a group flashing light, repeating a group of 2 flashes

G = light colour    G = green    R = red    Y = Yellow  
otherwise white

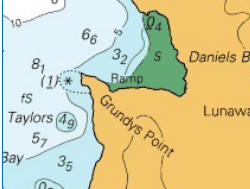

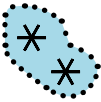
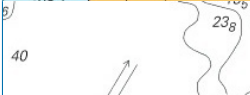
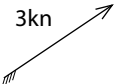

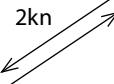
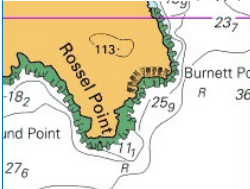




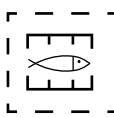
**15s =** Period of light in seconds, time taken  
2 flashes plus darkness every 15 secs

126m = Height of light above MHWS in metres

26M = Luminous range in miles on clear night

NOT TO BE USED FOR NAVIGATION

# Tides, Times and Charts

|  |  |                                       |
|--|--|---------------------------------------|
|    | <br> | Rock that covers and uncovers         |
|    |   | Direction and speed of flood tide     |
|    |   | Direction and speed of ebb tide       |
|    |   | Rocky area, which covers and uncovers |
|   |   | Obstruction - known depth             |
|  |   | Marine Farm Zone                      |

NOT TO BE USED FOR NAVIGATION

**Chart Datum:** is the level to which soundings and drying heights on a chart are referred. In practice, it is the lowest level to which the tide is ever expected to fall.

**Charted Depth:** The sounding shown on a chart, being the depth of the seabed below chart datum and the least depth expected to occur in that place under normal conditions.

**Actual Depth:** At any time is the charted depth plus the height of the tide, as obtained from the Tide Tables.

**Range:** The difference in the height of the tide between successive high and low tides.

# Emergencies and Incidents

## Resuscitation Chart



TASMANIA

**D**



### Danger

Check for **Danger** to Yourself, the Patient and Bystanders.

**R**



### Response

Check for **Response** by talk and touch.

**S**



### Send

If unresponsive, **Send** for help by calling **Triple Zero (000)**.

**A**



### Airway

Open **Airway** and ensure it is clear.  
If not, roll patient onto their side and clear the airway.

**B**



### Breathing

Check **Breathing**. If patient is not breathing or breathing is not normal, commence CPR .

**C**



### CPR (30:2)

**Start CPR**. Give 30 Chest Compressions followed by 2 rescue breaths. If unwilling or unable to perform rescue breaths continue chest compressions.

**D**



### Defibrillation

Attach Automated External Defibrillator (**AED**) as soon as it is available and follow its prompts .

#### Continue CPR until:

- The patient responds or begins breathing normally
- It is impossible to continue (e.g. exhaustion)
- A health care professional arrives and takes over CPR
- A health care professional directs that CPR be ceased

## STINGS

Stings from fish and other marine life may cause an allergic reaction. Some of the signs and symptoms are:

- Intense pain at the site, swelling, bleeding

## TREATMENT

Hot water immersion of the site - as hot as the patient can tolerate without scalding

## HYPOTHERMIA

Signs and symptoms: Pale cold skin, slow pulse, absence of shivering, low shallow breathing, blurred or double vision

## TREATMENT

Call 000. Call on VHF 16 and request assistance.

Remove wet clothing if possible and warm patient with blankets and warm drinks (not hot)

**Check First Aid Kit regularly and replace when necessary.**

# Emergencies and Incidents

## Quick Engine Trouble Shooting

**If the outboard won't start, check these:**

- Does the tank have fuel and is the air vent clear?
- Is the fuel line connected?
- Has fuel bulb been primed?
- Does the choke fully close?
- Look at carburettor air intake and check
- Check battery connections
- Wait 5 minutes and try again - motor may be flooded.
- Is the starter cord broken? If so, start motor with a rope around the flywheel
- Perhaps clean or change spark plugs and try again

## DIESEL ENGINE MAINTENANCE

Diesel engines are reliable, but proper maintenance is important. While most work should be carried out by a mechanic there are a few items that owners should be aware of.

## FUEL AND LUBRICATING OIL SYSTEM

- Ensure fuel breathers are clear and protected from ingress of water and spray
- Ensure you know how to bleed the fuel system. (Ask your service agent if you are unsure)
- Keep lubricating oil up to the required level and ensure quality is good. Thin, light coloured oil indicates contamination
- Consider an additive when filling up to avoid algae and bacteria in tank and fuel lines

## COOLING SYSTEM

- Keep cooling levels topped up
- Use an appropriate coolant that provides antifreeze and corrosion protection
- Check hoses and connections for leaks, splits and deterioration
- Ensure anodes are replaced before they deteriorate

## GEARBOXES

- Check gearbox oil levels regularly
- Change gearbox oil and filters in line with manufacturer's recommendations
- Routinely check that coupling bolts on shafts have not loosened and check stern gland seals. There should be very slight leakage through seal when operating

**Use your kill switch!**

# Emergencies and Incidents

## Cold Water Immersion (CWI)

CWI increases the chances of a fatality if you end up in the water with a temperature of 15°C or below.

### Three phases of Cold Water Immersion:

#### 1:10:1 Principle

##### 1 Minute: Cold Shock Response

The body's response to cold water is to increase breathing to a rapid rate which can cause you to inhale water

##### 10 Minutes: Cold Incapacitation

After 10 minutes, cold water can cause swim failure which is due to blood vessels in your arms and legs constricting

##### 1 Hour: Hypothermia

When the body drops below 35° C hypothermia occurs, which results in uncontrolled shivering and mental confusion

### THE FACTS

- In Tasmania, sea temperatures range from 8°C in winter to 19–21°C in summer
- Inland waters range from 0°C to 17°C
- The risk of drowning increases nearly five times if the water temperature is below 15°C
- Up to 60% of fatalities due to CWI occur in the first 15 minutes before the body core temperature cools to hypothermic levels
- Cold water carries heat away from the body 25 times quicker than air with the same temperature

**Survival time depends on type of clothing and sea conditions. Survival is prolonged if wearing a life jacket with crotch straps.**

| Water temp celcius | Exhaustion or unconsciousness | Survival time |
|--------------------|-------------------------------|---------------|
| 0                  | <15 mins                      | 15 – 45 mins  |
| 1 – 4              | 15 – 30 mins                  | 30 – 90 mins  |
| 5 – 10             | 30 – 60 mins                  | 1 – 3 hrs     |
| 11 – 15            | 1 – 2 hrs                     | 1 – 6 hrs     |
| 16 – 21            | 2 – 7 hrs                     | 2 – 36 hrs    |



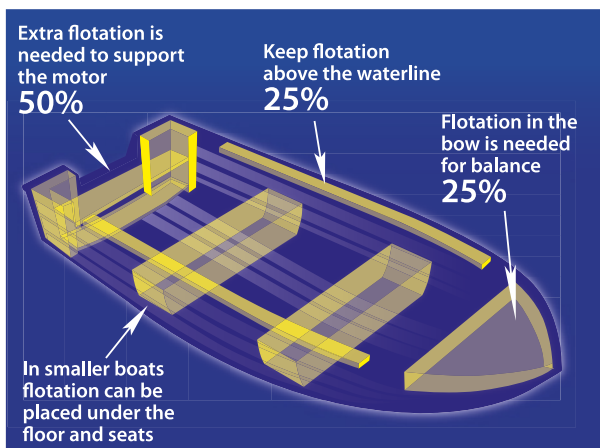
Cold Water Immersion

**Always wear a life jacket and dress appropriately for the conditions.**

# Buoyancy

## Why do vessels require buoyancy?

The chances of survival are greatly increased if the boat floats level as the boat is a greater search target.



Adding additional foam to an existing boat is an inexpensive and relatively easy job. All boat owners should do the calculation to determine how much buoyancy they need.

The following quick check list will aid your planning:

- ☐ **Do I need extra buoyancy?**  
Calculate the existing amount in the boat.
- ☐ **Why do I need it?**  
To ensure the boat will float level if swamped.
- ☐ **Where will I put it?**  
Under the gunwales and in the stern.
- ☐ **What type will I use?**  
Polyethylene or polyurethane sheet or pouring foam.
- ☐ **How will I fasten it?**  
Compress it into place or bond it with Sikaflex.
- ☐ **What tools will I need?**  
Jigsaw, panel saw, hacksaw blade, tape measure, felt-tipped pen, sealant.
- ☐ **How much will it cost?**  
Around \$200-\$300 for the average trailer boat.



Buoyancy

**Life saving equipment is more accessible  
if your boat floats level.**








# Anchoring and Anchor Types

## A few tips

- Mark chain or rope (rode) every 5m or 10m so you are aware how much has been paid out
- Be aware of tidal status when anchoring
- Use swing alarm on GPS or take a bearing
- Use 100% chain on larger boats
- Use no less than 5m of chain on a 7m runabout then rope
- Check swing if close to other boats

### Recommended scope ratio per metre of depth

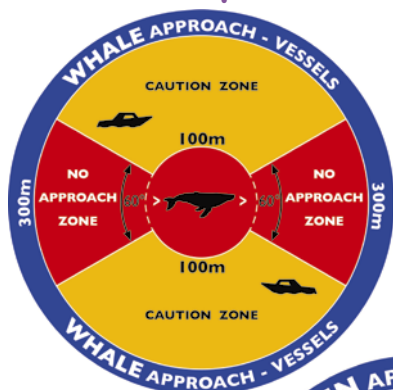
|           |      |            |
|-----------|------|------------|
| For chain | 3:1  | Minimum    |
|           | 5:1  | Better     |
|           | 7:1  | When windy |
| Rope      | 7:1  | Minimum    |
|           | 12:1 | When windy |

|   |   |
|---|---|
|  | <b>Danforth</b> A general purpose anchor. This anchor needs a high scope ratio and will lose holding at short stays. May lift out in change of swing direction and different strain.                        |
|  | <b>CQR</b> Good holding in sand, mud and clay but will have difficulty in penetrating into weed cover. Will reset into new swing direction and strain.  |
|  | <b>Spade anchor</b> A newer generation design. The spade uses weight distribution for optimum holding power on sand, clay, mud and weed. Penetrates quickly with little force and has a high holding power. |
|  | <b>Admiralty anchor</b> Older styled anchor and can be dislodged as boat swings and chain gets caught on the flukes.  |
|  | <b>Bruce</b> Good holding in sand and mud and you can get away with little scope as opposed to a Danforth.  |

If it's blowing, it's no good in the locker!  
But, check swing to shore and boats.

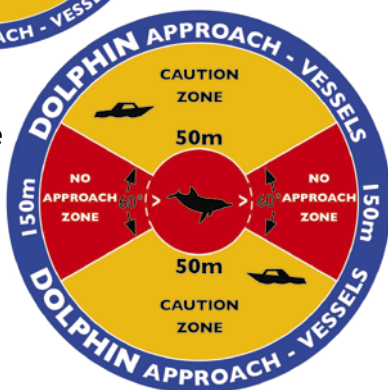
# Useful Information

## Whale & Dolphin Viewing Guidelines



For information  
ring the hotline  
0427 942 537

Maintain course  
and speed



## Fish Sizes\* (as at April 2016)

| Species                | Length                 | Bag limit              |
|------------------------|------------------------|------------------------|
| Abalone                | Depends on area & type |                        |
| Flathead, Sand & Tiger | 32cm                   | 20                     |
| Flounder               | 25cm                   | 15                     |
| Garfish                | 25cm                   | 15                     |
| Kingfish, Yellowtail   | 45cm                   | 5                      |
| Morwong, Banded        | 36cm – 46cm            | 2                      |
| Rock Lobster (Cray)    | F 105cm;<br>M 110cm    | 2 east<br>5 west       |
| Scallops – Com & Queen | 100mm                  | 50 combined<br>species |
| Scallops - Doughboy    | 80mm                   |                        |
| Snapper                | 30cm                   | 5                      |
| Trumpeter, Bastard     | 38cm                   | 5                      |
| Trumpeter, Striped     | 55cm                   | 4                      |

\* Check [www.dpipwe.tas.gov.au](http://www.dpipwe.tas.gov.au)

Go easy on the drink ... .05

# Useful Information

## Boating knots

### Reef knot

Used for tying joining knots.



### Bowline

Used for securing sheets to sails; mooring lines. Perhaps most commonly used knot.



*Bowline*



*Running Bowline*

*Bowline Bend*



### Rolling hitch

Good knot for putting a line on an anchor chain to take the snatch.



### Round Turn and Two half hitches.



### Figure of 8

For preventing a line running back through a block.



### Sheet bend

Sheet bend used for joining ropes of different size and diameter.

*Sheet Bend*



*Double Sheet Bend*

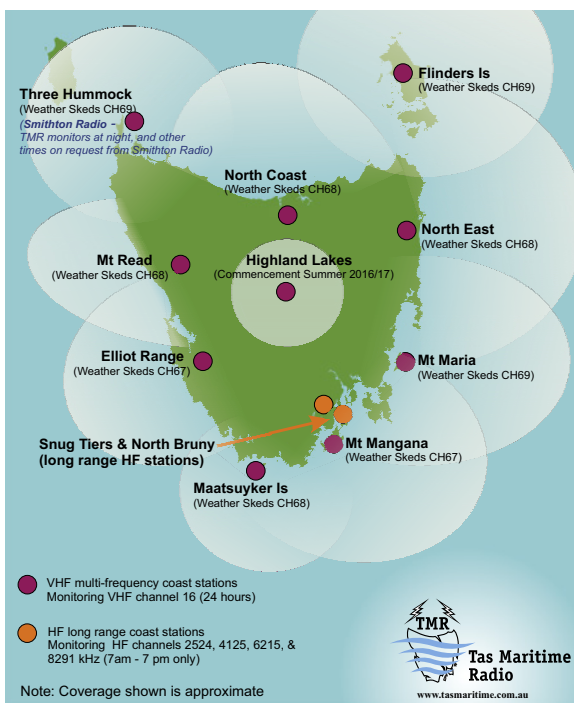


## Fuel mixture ratios

| Ratio | ml per lt | ml per 5lt | ml per 20lt |
|-------|-----------|------------|-------------|
| 25:1  | 40        | 200        | 800         |
| 50:1  | 20        | 100        | 400         |
| 100:1 | 10        | 50         | 200         |

**Carbon Monoxide fumes are deadly!**  
**Check exhausts.**

# Marine Radio and EPIRBS



## Radio tips

- ✓ Always have your VHF radio on distress & calling **Ch 16**
- ✓ When calling a shore station or other boat call their name or call sign first, then identify yourself
- ✓ Don't use **Ch 16** as a "chatter" channel. Move to **CH77**
- ✓ TMR skeds times are **0745, 1345 and 1733 hrs**  
Pre-announced on **CH16**
- ✓ Sked channels: **67, 68, 69**. Try each for best signal in your area
- ✓ **SE weather** on the hour and ½ hour **24/7 Ch1**
- ✓ HF distress and calling freqs **4125, 6215 & 8291 kHz**

## EPIRBS

- All 406 EPIRBS must be registered with AMSA
- Register <http://beacons.amsa.gov.au/>
- Ensure EPIRB is accessible and test periodically
- Use a GPS fitted EPIRB for reliability

Why not join Tas Maritime Radio -  
[www.tasmaritime.com.au/](http://www.tasmaritime.com.au/)

# Marine Radio and Weather

## Useful weather information

For comprehensive weather information go to  
[www.bom.gov.au/australia/meteye/](http://www.bom.gov.au/australia/meteye/)



BOM

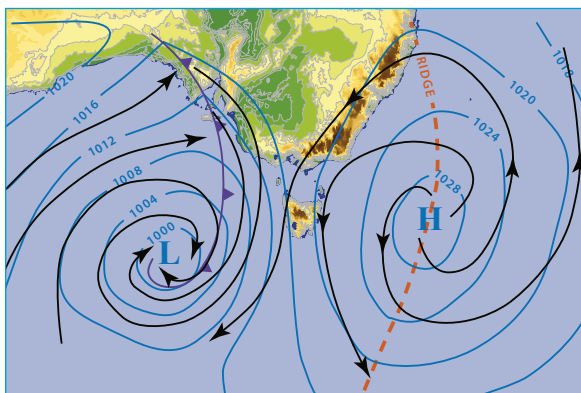
MAST phone weather:

|            |           |
|------------|-----------|
| North      | 6323 2555 |
| East       | 6376 0555 |
| North West | 6498 7755 |
| South      | 6233 9955 |

VHF 16 at 0745, 1345 and 1733 hours for weather  
courtesy of Tas Maritime Radio.

## Beaufort wind scale

| Force | Knots | Wind        | Sea state         |
|-------|-------|-------------|-------------------|
| 1     | 1-3   | Light       | Calm              |
| 2     | 4-6   | Light       | Smooth            |
| 3     | 7-10  | Gentle      | Few white horses  |
| 4     | 11-16 | Mod         | Small waves       |
| 5     | 17-21 | Fresh       | Larger waves      |
| 6     | 22-27 | Strong      | Rough             |
| 7     | 28-33 | Near gale   | Very rough        |
| 8     | 34-40 | Gale        | High seas         |
| 9     | 41-47 | Strong gale | Severe seas       |
| 10    | 48-55 | Storm       | Severe conditions |



Winds follow isobars in a high pressure system in  
an anti-clockwise direction and clockwise in a low  
pressure system.

**If in doubt, don't go out!**

# Marine Radio

## Distress Procedures

**Mayday Call** – This is the call used only when a person or a vessel is in grave and imminent danger

**Step by Step call procedure:**

**'MAYDAY, MAYDAY, MAYDAY'**

1. This is <name of boat in distress> (spoken 3 times) followed immediately by 'MAYDAY' (said once)
2. This is <name and radio call sign of boat> (once)
3. My position is <lat and long or bearing or range from known point>
4. Nature of distress <eg, sinking>
5. Assistance required
6. Other information <number of people on board, vessel description and intentions>

**Over**

**Pan Pan** – This is used when help may be needed but you are not in grave and imminent danger.

**Step by Step call procedure:**

**Pan Pan , Pan Pan , Pan Pan**

then... hello all stations, hello all stations, hello all stations

1. This is <name of boat> (spoken 3 times)
2. My position is <lat and long or bearing or range from known point>
3. Nature of emergency
4. Assistance required

**Over**

| VHF channel        | Use  |
|--------------------|--|
| 16                 | Distress; safety calling   |
| 67, 68, 69         | Skeds-weather, warnings, position reports. Try each for best reception |
| 78 & 73            | Tas Maritime Radio working   |
| 21, 22, 80, 81, 82 | Talk through repeaters   |
| 72, 73, 77         | Recreational ship to ship & ship to shore working                      |
| 71, 72, 77         | Pro-Fish ship to ship  |
| 8 & 12             | Port Operations  |
| 77                 | Pref ship to ship working  |
| 6                  | Search & rescue only   |

**Always listen on CH 16.**