

Tidetech 2024 Van Diemen's Land Circumnavigation Cruise Cruise Safety Requirements

1. Taking Responsibility

All those taking part in the *Tidetech* 2024 Van Diemen's Land Circumnavigation (VDL-C) Cruise do so at their own risk and responsibility. The Royal Yacht Club of Tasmania takes no responsibility for the seaworthiness of a vessel whose entry is accepted, nor the sufficiency or adequacy of its equipment or the competence of its crew.

No member or members of the Royal Yacht Club of Tasmania, nor any other party involved in the organization of this event, shall accept responsibility for, or be liable for, any accident, injury, damage, or personal loss (material or otherwise) to any vessel, participant, or third party, before, during or after the 2024 VDL-C Cruise.

THE SAFETY OF ANY PARTICIPATING VESSEL AND HER ENTIRE MANAGEMENT, INCLUDING INSURANCE, IS THE SOLE RESPONSIBILITY OF THE OWNER OR SKIPPER.

Owners and skippers are urged to assess their capabilities and those of their crew and their vessel before entering, starting, or continuing to participate in the 2024 VDL-C Cruise.

2. Safety Requirements

The *Tidetech* 2024 VDL-C Cruise is governed by the safety regulations of Marine and Safety Tasmania (MAST), the International Regulations for Preventing Collisions at Sea, any safety provisions included in the *Tidetech VDL-C* 2024 Cruise Manual, and the *Tidetech VDL-C* 2024 Cruise Safety Requirements as set down by the Organizing Committee.

Before embarking on a VDL-C Cruise, each skipper is required to sign a declaration that specified safety and other equipment requirements have been met. Each time the skipper notifies the Organizing Committee of a crew change, he or she shall sign a *Tidetech VDL-C 2024 Crew and Safety Compliance Acknowledgement Form*, confirming continuing compliance with these *Cruise Safety Requirements*.

The following are minimum safety requirements for vessels participating in the *Tidetech* 2024 VDL-C Cruise. They include the MAST requirements for non-commercial vessels operating in Tasmanian waters, and additional items determined by the Organizing Committee to be appropriate for this event.

3. Seaworthiness

Vessels are unlikely to be accepted on the cruise with an overall hull length of less than 9 metres. They must be seaworthy and be designed and built to resist capsize. They should be strongly built, watertight and, particularly in regard to hulls, decks, and cabin trunks, capable of withstanding solid water on deck and knockdowns. They shall be appropriately rigged and ballasted.

4. Equipment Generally

In order that required equipment functions properly, it should be:

- Regularly checked.
- Cleaned and serviced.
- When not in use, stowed to minimise deterioration.
- Readily accessible.
- Of a type, size, and capacity suitable and adequate for the intended use and size of the vessel.

Ballast, tanks, and associated equipment should be permanently installed.

Heavy moveable items such as batteries, stoves, gas bottles, toolboxes, anchors, chain, and auxiliary motors should be securely fastened.

A check-list useful in cruise preparation is attached below as:

Appendix 1: Tidetech VDL-C 2024 Safety Requirements Check-List

5. Fixed Equipment

5.01 Hatches and Companionways

Each hatch or port shall be capable of being firmly shut by a permanently attached lid or cover.

Washboards and storm-boards (where necessary) shall be secured to the vessel when in use in such a way to prevent them being lost overboard.

5.02 Through-hull openings

Seacocks shall be installed on all through-hull openings below the waterline, except for integral deck scuppers, logs, and depth sounders. A means of closing all below-waterline through-hull openings, such as tapered soft wooden or rubber plugs, shall be available for immediate use adjacent to each opening.

5.03 Lifelines

A vessel shall be equipped with a system of taut lifelines and/or guardrails designed to form an effective continuous barrier with a minimum height of 600 mm around the working deck with the aim of minimising the risk of falling overboard.

5.04 Bilge pumps and buckets

A vessel shall have at least 2 bilge pumps, including one manual pump operable with all cockpit seats, hatches and companionways closed. Bilge pump handles shall be secured to prevent accidental loss.

Two buckets of stout construction each with at least 8 litres capacity and with a lanyard shall be provided.

5.05 Compass

A marine magnetic compass, independent of any power supply, shall be permanently installed and correctly adjusted.

A spare hand-bearing compass is recommended.

5.06 Navigation lights

Navigation lights shall be shown as required by the International Regulations for Preventing Collisions at Sea (Part C and Technical Annex 1).

Reserve navigation lights with an independent power supply shall also be carried.

5.07 Marine radios

Both VHF and HF radios are required.

The VHF radio must be DSC-capable and linked to a GPS. The unique Maritime Mobile Service Identity (MMSI) number must be sent to the VDL-C Cruise Office at the RYCT before commencement of the cruise.

The HF radio must be able to operate on the frequencies: 2182, 2524, 4125, 4483 and 6215 kHz. Before a vessel is accepted for participation in the cruise the HF radio must be certified as performing satisfactorily on the primary operating frequency of 4483 kHz. This certification should happen no earlier than 1st October 2023 and no later than 7th February 2024 and can be arranged by contacting one of the specified shore-based marine radio stations on the Tasmanian coast. The VDL-C Cruise Organizing Committee has determined that the safest way to communicate efficiently with a fleet of up to 45 vessels, sometimes spread over 100M and in extremely remote locations, is by HF radio.

A vessel shall have at least one crew member with a *Marine Radio Operator's Certificate of Proficiency* or equivalent. It is illegal to operate an HF radio on marine frequencies in Australia without an ACMAissued call-sign.

5.08 Barometer

A barometer is required.

5.09 Automatic Identification System (AIS)

A class B AIS transponder (that transmits and receives) is required and must be switched on to transmit and receive at all times when under way.

The MMSI number must be lodged with the RYCT Office before the commencement of the cruise.

5.10 Satellite phone

A satellite phone is recommended but is not a requirement. If one (or more) is (are) on board, please notify the RYCT Office of the phone number(s) before the commencement of the cruise.

6. Portable Equipment

6.01 Jackstays

Jackstays should be fitted to appropriate strong points so that crew can be tethered when in rough conditions or poor visibility, or during overnight passage-making.

6.02 Fire extinguishers

The minimum requirements by Marine and Safety Tasmania (MAST) are:

Vessel length	Minimum number and capacity	Minimum equivalent rating
8-12 metres	Two 0.9 kg	5BE
Over 12 metres	(a) Three 0.9 kg or (b) One 0.9 kg and one 1.5 kg	5BE/10BE

Note that after 1 July 2021, Australian Sailing requires all fire extinguishers to have a minimum rating of 1A:10B(E).

A fire blanket should be close to any open flame cooking device.

6.03 Anchors

A primary anchor with a high holding power suitable for the size of the vessel shall be carried with a minimum of 10 metres of chain and 50 metres of rope. Ideally the primary anchor warp should be all chain.

A second anchor with a minimum of 2 metres of chain and 40 metres of rope shall also be carried.

6.04 Spotlights and flashlights

A powerful spotlight suitable for searching for a person overboard or for collision avoidance is required together with at least 2 buoyant flashlights with spare batteries and globes.

6.05 Medical kit

A medical kit shall be carried that reflects the extended duration of the cruise, remote locations visited, number of crew, specific needs of individuals, first aid expertise of those aboard, and the possibility that external assistance may not be immediately available. A guide as to what is appropriate in such a medical kit is given below as *Appendix 2: First Aid Kit – Suggested Contents*.

In addition to the recommended items, cough and sore throat medications are advisable, as well as a good supply of face masks and Rapid Antigen Tests in case of COVID exposure.

6.06 Foghorn

A foghorn is required.

6.07 Charts and piloting equipment

Navigational charts as specified and plotting equipment shall be provided.

Back-up charts, either paper or electronic are required. If both chart sources are electronic, they should have independent power supplies.

The Tasmanian Anchorage Guide shall be carried. The latest version will be supplied to all participants.

The Australian Pilot Vol 2 is recommended as this has much information including passage making, tidal levels, tidal streams, local magnetic anomalies, prohibited areas, and Tasman Bridge regulations.

6.08 GPS

A vessel shall be equipped with a GPS capable of recording a man overboard position (MOB).

A second GPS which is handheld is recommended.

6.09 Depth Sounder

A depth sounder shall be carried.

A lead line is highly recommended; it can be very useful if and when a vessel takes the ground.

6.10 Log

A distance measuring instrument (other than a GPS) shall be provided.

6.11 Emergency steering

An emergency tiller capable of being quickly fitted to the rudder stock where the normal method of steering is other than by a strong tiller fitted directly to the rudder stock shall be provided.

In the event of the loss of the rudder there shall be an alternative method of steering.

6.12 Tools and spares

Tools suitable to effect routine maintenance and emergency repairs at sea shall be carried. This includes tools capable of disconnecting or severing standing rigging. A bosun's chair shall be aboard. A sharp knife capable of cutting high modulus fibre rope should be in or near the cockpit.

Engine spares should include fuel filters, O-rings, copper washers, engine belts, hoses, water pump impellers, coolant and lubricants.

6.13 EPIRB

A GPS capable 406 Emergency Position Indicating Radio Beacon (EPIRB) registered in the vessel's name shall be carried in a readily accessible position near the companionway.

6 14 Liferaft

A liferaft capable of carrying the entire crew shall be carried and stowed so that it can be moved to the lifelines within 15 seconds. It shall not be stowed below deck. The liferaft shall have a current service certificate.

6.15 Grab-bag

The contents of a grab-bag will depend on what is included in the liferaft and the ease of taking items stored elsewhere in readily accessible containers. Items should include a daylight signalling mirror, waterproof torch, strobe light, handheld VHF radio, GPS.

6.16 Lifebuoys

A lifebuoy with a drogue, marine grade retroflective tape, whistle and a self-igniting light shall be carried within easy reach of the helm and be ready for instant use.

6.17 Pyrotechnics (flares)

The following flares approved to AS2092 and within their expiry date and stored in a waterproof container shall be carried. As a minimum there should be:

- 2 x parachute rocket flares
- 2 x red hand flares
- 2 x orange smoke flares

Note the red hand and orange smoke flares can be replaced by an approved Electronic Visual Distress Signal (EVDS) device.

Note also this is the requirement of MAST. *Australian Sailing* requires more flares for vessels racing in Categories 1–3.

6.18 Heaving line

A heaving line consisting of at least 15 metres of floating line and a buoyant object at one end shall be readily accessible in the cockpit.

6.19 Distress sheet

A standard orange sheet shall be carried that is $1.8 \text{ m} \times 1.2 \text{ m}$ with a black 'V' or black square above a black circle and with lanyards.

6.20 Radar reflector

A radar reflector is required by MAST. However, it does not need to be displayed permanently, only when there is reduced visibility.

(From 1/7/2015 Australian Sailing no longer required radar reflectors because of the use of AIS.)

6.21 Mooring gear

Vessels should carry at least one fender board complete with tethering lines. Dimensions should be approximately 2 m long x 120 mm wide x 40 mm thick. Wood with some spring in it such as oregon pine is best for this purpose.

Vessels shall carry mooring lines and at least 4 fenders adequate for use in tidal ranges of up to 4m.

7 Crew equipment

7.01 Lifejackets

Lifejackets complying with Australian Standard AS4758.1 shall be provided for each person on board. In Tasmania it is illegal to wear on a boat a lifejacket only complying with the old Australian Standards numbers 1512, 1499 and 2260. Certain lifejackets have been accepted by MAST as approved to

AS4758.1 even though not stamped as such. This list can be found on the MAST webpage: https://mast.tas.gov.au/wp-content/uploads/2021/03/Updated-FAQ-life-jackets-March-2021.pdf.

It is compulsory for everyone to wear a lifejacket in a recreational motor boat or motor-propelled tender under 6 metres long. For children under 12 years, it is compulsory in a vessel of any length while under power. A lifejacket does not need to be worn within a deckhouse, cabin, or secure enclosed space.

A spare lifejacket, cylinders, and activation head (if appropriate) should be carried.

A life jacket shall be worn by each crew member when on deck between the hours of sunset and sunrise.

It is strongly recommended that a lifejacket be worn by each crew member at times such as, but not limited to: when alone on deck, in strong wind conditions, when seas are high, or visibility is poor.

All inflatable lifejackets should be serviced in accordance with their manufacturer's recommendation.

7.02 Safety harnesses and safety lines (tethers)

Safety harnesses and tethers should be worn and used while on deck during overnight passages and in rough sea conditions.

7.03 Personal lights

A personal strobe light should be attached to clothing worn on deck at night.

7.04 Personal clothing

Cold fronts often cross Tasmania in summer, bringing gale-force conditions offshore, and snow on highland peaks. Sea-water temperatures at or below 16°C are the norm. All crew members must be equipped with appropriate wet weather gear and thermal clothing.

7.05 Personal Locator Beacons (PLB)

It is highly recommended that a registered GPS capable 406 MHz PLB is carried by each crew member when on deck at night.

It is recommended that an AIS personal crew overboard beacon capable of communicating their position to the vessel is carried by each crew member when on deck at night.

8 Crew experience

8.01 Opportunity

The *Tidetech* 2024 VDL-C Cruise represents an opportunity for cruising yachts-people with limited offshore experience to gain experience while travelling in company during relatively short coastal passages. However, there will be at least one overnight passage.

Because it is a coastal cruise conducted in company with other vessels, the requirements for offshore experience among participating crew are less than would be needed for more extended coastal passages, a blue-water passage, or a passage completed without accompanying vessels.

The cruise has been scheduled to take advantage of Tasmania's relatively mild summer and early autumn weather; however, all Tasmanian waters can and do experience gales at any time of the year. Ports and bays on at least the north-east, west, and far south coasts of Tasmania provide quite limited shelter in some prevailing conditions. For example, a vessel that encounters strong north to north-westerly weather while travelling south from the Hunter Group may be unable to enter Macquarie Harbour, and will not reach sheltered waters until Port Davey, some 220M south of the Hunter Group. Locations such as Banks Strait, the Hunter Passage, and Hell's Gate at the entrance to Macquarie Harbour can be quite hazardous, as well as being navigationally challenging.

8.02 General requirements

At all times during the *Tidetech* 2024 VDL-C Cruise, each vessel shall have aboard at least two adult crew members who are capable of completing an overnight passage, and of independently navigating and helming their vessel through coastal waters dotted with islands, reefs, and shoals and subject to strong tidal currents, in gales and in rough water.

A declaration of crew experience shall be lodged with, and accepted by, the Organizing Committee before an entry is finally accepted for participation on the 2024 VDL-C Cruise.

The Organizing Committee recognizes that there will be crew changes – both planned and unexpected. A mandatory condition for continuing participation in the cruise is that the specific requirements given below continue to be met at all times the vessel is at sea, and that additional crew experience declarations reflecting the true state of the vessel's complement have been lodged with an Organizing

Committee representative before the vessel departs the port at which the crew change takes place.

8.03 Specific requirements

Within the crew, at least two adults shall:

- Have completed an overnight passage of at least 100M and be capable of helming and operating their vessel in all conditions. Although not mandatory, an offshore skipper's certificate is *prima facie* evidence of this.
- Be proficient in coastal navigation. Although not mandatory, a certificate of proficiency in coastal navigation is *prima facie* evidence of this.
- Be proficient in the use of both the vessel's VHF radio and HF radio. At least one crew member shall have a *Restricted Operator's Certificate of Proficiency* or equivalent.
- Be proficient in first aid. Although not mandatory, a current first aid certificate is *prima facie* evidence of this.
- Know where to locate and be able to use all safety equipment.

9 Miscellaneous

9.01 Water

At least 2.5 litres of potable water per crew member per 100M of passage shall be carried.

Emergency drinking water of at least 1 litre per crew member in addition to the above shall be carried in a dedicated container or containers.

9.02 Fuel

A fixed fuel tank shall have a shut off valve fitted to the tank outlet if it is possible for fuel to escape or syphon from the tank if the fuel line fractures.

Refuelling options can be scarce so vessels must carry fuel on board at least sufficient to reach the next port with re-fuelling facilities.

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Appendix 1: Safety Requirements Check-List

This list is also available as an *Excel* spreadsheet on the VDL-C 2024 website: https://ryct.org.au/vdl-c-cruise-2024/

SR #.	ITEM (√ if requirement fulfilled or not applicable)	ОК	N/A	Pending / Comment
5.	FIXED EQUIPMENT			
5.01	Washboard(s) can be secured			
5.02	SEACOCKS INSTALLED			
	Plugs nearby			
5.03	Lifelines, guardrails, pulpits compliant			
5.04	No. of electric bilge pumps:			
	No. of manual bilge pumps:			
	No. of buckets + lanyards:			
5.05	Marine magnetic compass compliant			
	Spare hand-held bearing compass	•		
5.06	Navigation lights compliant			
	Reserve navigation lights			
5.07	VHF DSC-capable linked to GPS			
	HF radio certified			
	Marine Radio Operator's Certificate or equivalent			
5.08	Barometer			
5.09	AIS transponder with MMSI + vessel name			
	MMSI NO. TO RYCT OFFICE			
5.10	SATELLITE PHONE NO. TO RYCT OFFICE			
6.	PORTABLE EQUIPMENT			
6.01	Jackstays with appropriate attachment points			
6.02	No. of compliant fire extinguishers:			
	EXPIRY DATES:			
	INSPECTION: CHECK OF CONTENTS GAUGE			
	Recent shaking to prevent powder compaction			
	Fire blanket near each open flame cooking device			
6.03	Primary anchor			
	SECONDARY ANCHOR			
6.04	Spotlight + spare batteries			
	2 floating flashlights			
	Spare batteries			
6.05	Medical kit up-to-date (see Appendix 2)			
	FACE MASKS			
	Rapid Antigen Tests			
6.06	FOGHORN			
6.07	Navigational charts			
	BACK-UP PAPER / ELECTRONIC CHARTS			
	Tasmanian Anchorage Guide (in cruise satchel)			
	The Australian Pilot Vol 2			
6.08	GPS capable of recording MOB			
	2nd Hand-held GPS			
6.09	Depth sounder			
	Lead line			

SR #.	ITEM (√ if requirement fulfilled or not applicable)	ОК	N/A	Pending / Comment
6.10	Log			
6.11	EMERGENCY TILLER			
-	EMERGENCY STEERING FACILITY			
6.12	Tools and spares			
-	Tool to sever standing rigging			
	Bosun's chair			
-	Cockpit knife			
	Engine spares			
6.13	GPS-CAPABLE 406 EPIRB			
	EPIRB BATTERY EXPIRY DATE:			
	AMSA REGISTRATION RENEWAL DATE:			
6.14	Liferaft			
***************************************	Capacity:			
	NEXT SERVICE DUE:			
***************************************	Stowage compliant			
6.15	Grab bag			
6.16	Lifebuoy(s) compliant			
6.17	Pyrotechnics (flares) + expiry dates:			
***************************************	Parachutes expire:			
***************************************	Red handhelds expire:			
***************************************	Orange smokes expire:			
***************************************	OTHERS EXPIRE:			
6.18	HEAVING LINE			
6.19	V-DISTRESS SHEET			
6.20	Radar reflector			
6.21	FENDER BOARD			
	Mooring lines			
	Fenders - No.:			
7.	CREW EQUIPMENT			
7.01	Lifejackets AS4758.1 compliant			
	NEXT SERVICE DATE(S):			
	Spare lifejacket, cylinders, activation heads			
7.02	SAFETY HARNESSES + TETHERS			
7.03	Personal strobe lights			
7.04	WET WEATHER CLOTHING			
	THERMAL CLOTHING			
7.05	GPS-capable Personal Locator Beacon (PLB)			_
	PLB BATTERY EXPIRY DATE:			
	AMSA REGISTRATION RENEWAL DATE:			
	AIS Personal Overboard Beacons			
9.	MISCELLANEOUS			
9.01	POTABLE WATER 2.5 LITRES PER CREW PER 100M			
	EMERGENCY DRINKING WATER			
9.02	Fuel tank shut-off valve			
	SUFFICIENT FUEL CAPACITY: (LITRES)			

Appendix 2: First Aid Kit – Suggested Contents

This list has been extracted from Australian Sailing 2021-2024 Special Regulations at www.sailingresources. org.au/safety/specialregs. Download Special Regulations Part 1 (Keelboats). This 97 page document has a wealth of information. The table below is from the medical kit required for a Category 1 ocean race.

Item	Qty	
MILD PAIN		
Paracetamol 500mg (<i>Panadol</i>) or Ibuprofen 200mg (<i>Nurofen</i>)		
Moderate to Severe Pain		
*Codeine 30mg + Paracetamol 500mg (<i>Panadeine Forte</i>)		
VERY SEVERE PAIN		
*Oxycodone 5mg (<i>Endone</i>) OR	20	
*Oxycodone suppositories (per rectum) 30mg (<i>Proladone</i>)	10	
CARDIAC EMERGENCIES:		
Soluble Aspirin (<i>Disprin</i>)	20	
Nitrolingual Spray (Anginine)	1	
Wounds & Limbs:		
Butterfly or Steristrips	10	
Disposable gloves	20	
Crepe bandages 75mm x 1.5m	2	
Crepe bandages 100mm x 1.5m	2	
Triangular bandage	2	
High Absorbency non-adherent dressing (Exu- Dry)	10	
Low Absorbency non-adherent dressing, plain gauze (<i>Melolin</i>)	10	
Bandaids or equivalent roll of bandaid		
Sports/Strapping tape 50mm x 2.5m (<i>Leukoplast</i>)		
Antiseptic skin solution 15ml (Betadine)	1	
Antiseptic cream with Lignocaine HCL (Medicreme)	1	
EYES:		
Normal saline (for washing) 250ml	1	
*Chloramphenicol eye ointment 1% 4mg	1	
Sterile eye patches	5	
ANTIBIOTIC FOR INFECTION:		
*Cephalexin 500mg tabs (Keflex)	20	
FUNGAL SKIN INFECTION:		
Clotrimazole cream (Lamisil, Daktarin)		
SUNSCREEN:		
30+ SPF 250ml		

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Item	Qty	
Burns:		
Superficial - Hydrogel wound dressing 100g (<i>Solosite, Duoderm Gel, Purilon</i>)		
Severe – Cool, then cover with a non-adherent dressing and obtain hospital treatment as soon as possible.	1	
*Silver sulphadiazine cream 100g (Flamazine)	I	
DIARRHROEA / GASTRIC PROBLEMS:		
Anti-diarrhoea treatment (pkt) (Imodium, Lomotil)	1	
Antacid tablets (pkt) or liquid (bottle) (Mylanta, Gaviscon)	1	
DEHYDRATION:		
Electrolyte replacement 4.9g sachet – pkt of 10 (Gastrolyte)	1	
SEA SICKNESS:		
Crews should consider carrying some form of seasickness remedy. It should be noted that all types of seasickness remedy available may produce drowsiness and/or disorientation.		
Travel/seasickness tablets (Avomine, Travacalm)	10	
ALLERGY:		
Known allergy sufferers should carry their own auto-injector (e.g. Epipen, Anapen) or similar and advise crew of its location and method of administration.		
*Antihistamine 25mg tablet (<i>Phenergan</i>)	25	
*Adrenaline ampoules 1:1000 (if included, appropriate syringes are required)	5	
Instruments:		
Scissors, stainless steel	1	
Thermometer, clinical	1	
Forceps, splinter, stainless steel	1	
Alcohol swabs for injection preparation	10	
EMERGENCY MEDICAL EQUIPMENT:		
Malleable or fixed splints appropriate for arms and legs (inflatable, SAM, Flex-All)		
CPR mask (or face shields)	1 (6)	

The names in parentheses and italics are specific examples of the generic item.

Notes:

There are many other items that could be added to the medical kit. What is included will depend on the medical, paramedical, nursing, or first aid competence of crew, as well as the specific needs of individual members of the crew. Here are some suggestions:

Over-the-counter items: Salbutamol (Ventolin or Asmol), urinary alkalinizer (Ural), tubular finger bandage, throat lozenges (Strepsils), dental probe, binocular loupe or magnifying glass, neck collar, face masks for minimising respiratory infection spread, cold pack (kept in fridge/freezer), Rapid Antigen Tests.

Prescription items: Morphine and Naloxone (and appropriate syringes), Moxiclav Duo, Prednisone tablets, steroid cream.

Expiry dates on all medications should be checked at regular intervals and before their use. Ultimately it remains the owner/skipper's decision as to how extensive is the on-board medical kit.

^{*} indicates a prescription is required for this item.