



Session 1

Program & participant introduction

Boat & crew preparation/safety gear

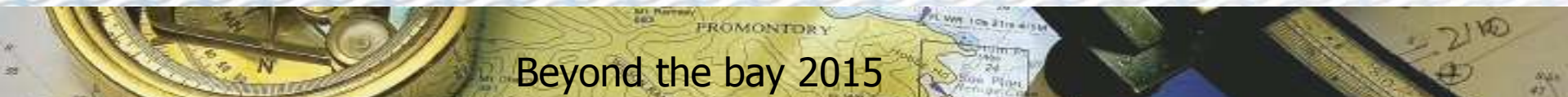


Introductions - ORCV



Presenters background

Other ORCV key people



Beyond the bay 2015

Introductions - Participants



Questionnaire – did everyone return it ?

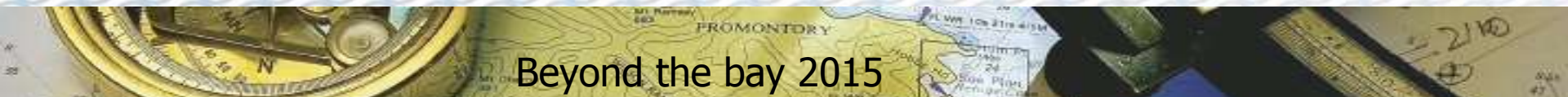
Confirm our understanding of the participant's background, expectations and future plans

Did people all go to roadshows ?

Beyond the bay objectives



- Provide the knowledge, support and opportunity for cruisers and bay sailors to venture “beyond the bay”
- In doing so, the ORCV hope to
 - “Give back” to the sailing community
 - Build partnerships with local yacht clubs
 - Build awareness and profile of the ORCV
 - Hopefully lift participation in future ORCV races



Program of events



- Five evening/afternoon training sessions
 - 11/5 Program introduction, boat & crew preparation/safety gear
 - 22/6 Crew management, Watch systems, Night sailing, procedures & training
 - 19/7 (Sunday) Practical radio operations including on shore tracking, and AIS (Note there is an option to extend and include MROCP)
 - 10/8 Weather intro, provisioning, O/N challenge Topyacht entry, preparing for safety audit
 - 14/9 More Weather plus Tides and basic navigation
- Two weekend participation events
 - 24-25/10 Overnight bay navigator's challenge (culminating in BBQ/debrief)
 - 21/11 Latitude challenge – starting Queenscliff, outside the Heads and return to Blairgowrie YC for dinner and “graduation”

ORCV Mentors



ORCV mentors will be available

Pre event

During events

- On board if you wish, its up to you and your mentor

Post event

For Skippers mainly but they also mentor the crew, especially if on board



ORCV's safety focus



- We will place a strong emphasis on safety, you may even consider it “over the top”. Our established protocols and procedures ensure the highest safety standards are maintained in all our events.
 - Safety audit and compliance requirements
 - Race management policies and procedures
 - Incident management teams and associated procedures
 - Direct connections to AMSA, Water Police, VMC operators Kordia.
 - Mobile radio communications van with VHF, HF, internet connectivity
 - Interactive tracker units for longer events

Graduation and awards



- In order to “graduate”, and hence earn the right to wear your “Beyond the bay” shirt, you must:
 - Participate in at least five events including the Latitude challenge
 - Honors will be awarded to those who complete all seven events
- Each challenge event will have one or more trophies awarded



Beyond the Bay 2014



- Last year's 120 participants loved the program, we got great feedback and people had lots of fun



Beyond the bay 2015

Part 2

Boat and safety equipment requirements
(Reference - Yachting Australia “Blue Book”)



Safety gear

Some things you just need to buy (and maintain)

Some things you can hire

Some you can borrow

But make sure it works

And that you know how to use it

Make sure they are in service (date)

Some need formal registration (eg PLBs)



The rules we adopt



Minimum standards in the 2013-2016 YA Special Regulations (Blue book)

- Different depending on race category

Our focus is Category 3

- Defined as “Offshore passage across open water which is close to the shoreline”



<http://www.yachting.org.au/wp-content/uploads/2013/10/130828-2013-16-special-regulations-part-1-keelboats.pdf>

Interpreting the Blue book

The number on the right hand side represents the category, eg Cat3 Off shore requirement is shown below for flares

4.22.1 Pyrotechnic signals conforming to AS 2092 or higher (e.g. SOLAS LSA Code Chapter III Visual Signals) stored in waterproof container(s) shall be provided. The age of all pyrotechnics shall not exceed the manufacturer's expiry date.

				1 2 3 4 5
Red parachute flares	Red hand flares	White hand flares *	Orange smoke	
6	4	2	4	1
4	4	2	4	2 3
	2	2	2	4
	2		2	5

Section 3.1 Structure & Stability



- Centreboard/daggerboards not open to the interior
- Stability – Simplest method for Category 3 & 4 is Screening Value (SV) ≤ 10 .

$$SV = 2.83 \times LOA / \text{Displacement}$$

eg. For a Compass 28

$$SV = 2.83 \times 8.5 / 3.3 = 7.3 \text{ which is } < 10 \text{ so}$$

PASS

LOA
8.5

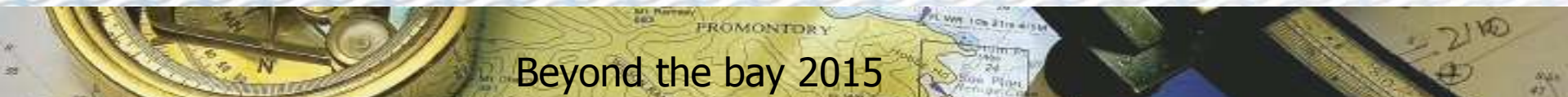
Displacement
3.3

SV
7.29

Section 3.2 Fixed Equipment



- Two exits, one forward of the mast.
- Self draining cockpits, with volume restrictions.
 - Cruisers should not have a problem.
 - Race boats can consult ORCV if in doubt.



Section 3.2 Fixed Equipment



- Companionway -
 - Can be blocked off level with sheerline
 - Washboards/hatch secured in place, operable from above or below and attached with lanyard(s)
 - Permit exit when inverted.
 - Operate independent of blocking devices.(Cat 3).



Section 3.2 Fixed Equipment

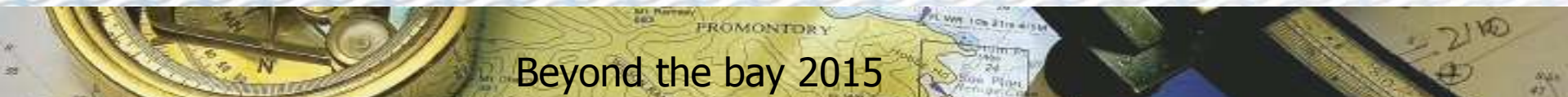
- KEEL stepped Mast must be secured to the Step.



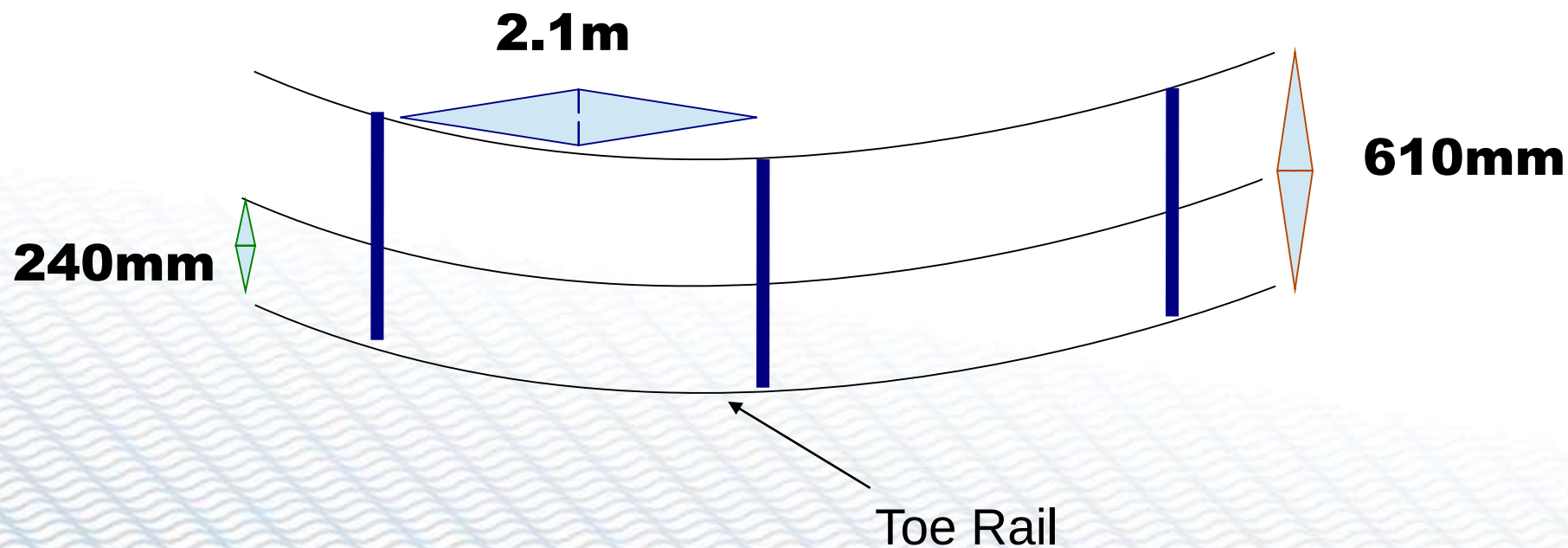
Section 3.2 Fixed Equipment



- Lifelines required.
 - Continuous and tight ($< 50\text{mm}$ deflection).
 - Stanchions/supports $< 2.2\text{m}$ apart
 - Min height 600mm (450mm where $\text{LOA} < 8.5\text{m}$)
 - Vertical openings $< 380\text{mm}$
 - Lower lifeline $> 230\text{mm}$ above deck
 - Stainless steel, uncoated
- Toe rail. $> 25\text{mm}$ forward of the mast.
(20mm if pre-1981)



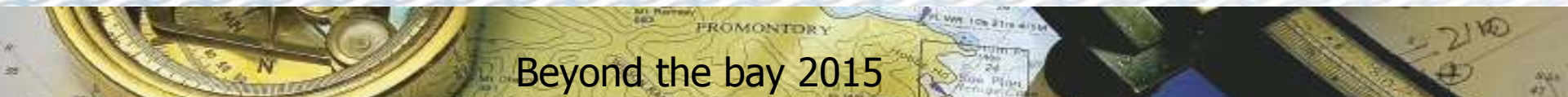
Does this comply?



Section 3.2 Fixed Equipment



- Head or “fitted bucket”
- Bunks for half the crew.
- Galley
 - With gimballed stove (safely operated in a seaway).
- 2.5 litres/crew fresh water (+ 9 litres emergency)
 - Separated tank for Cat2 which is a good idea
- One bilge pump (operable with seats, hatches companionway closed – cat 3).



Section 3.2 Fixed Equipment

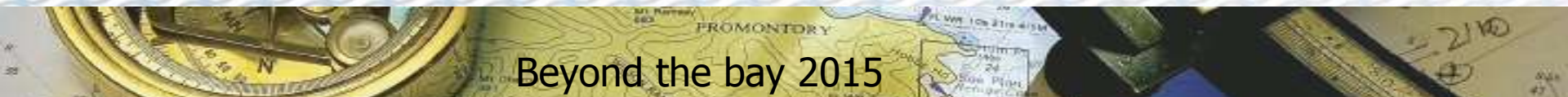
Independent, magnetic steering compass



Section 3.2 Fixed Equipment



- Nav lights – IRPCAS compliant above toe rail , with spare bulbs for non multi-LED (Cat 3)
- Permanently mounted engine, dedicated start battery, fuel shut off and adequate fuel
- Permanently installed VHF radio (with DSC) with mast head antenna and spare antenna.
- Sealed batteries



Reserve Nav lights, separately powered



Waterproof, Hand Held VHF?

(Cat 3)



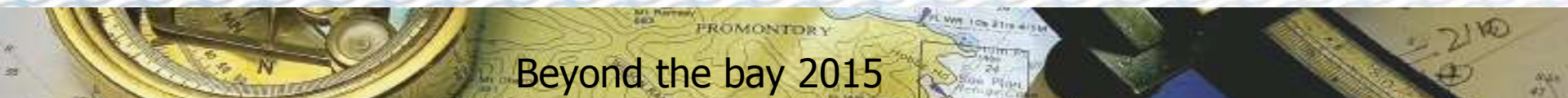
Separate, heavy duty cloth with
sail number.



Jack stays and clip on points



- Focus on safe transit from below deck to on deck (incl extra stop)



Section 4 Equipment



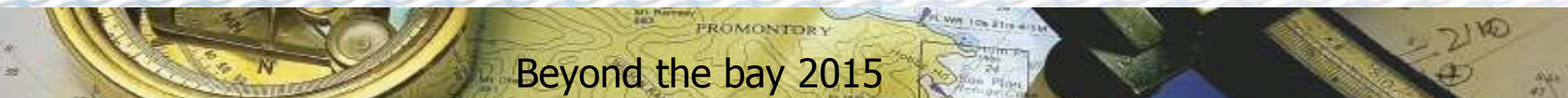
- 2 fire extinguishers (min 10BE)
- Second anchor & tackle and Primary anchor shackled to the ground tackle
 - Note Blue Book requirements on anchoring we think are inadequate – take more chain in particular
- Two waterproof flashlights with spare bulbs and batteries.
 - On deck at night torch should be ready in the cockpit
 - Crew should also carry personal torch/headlamp



Section 4 Equipment



- International Regulations for the Prevention of Collisions at Sea
- Charts (and cruising guides), Light lists
- First aid guide
- “Permanently installed” GPS, depth sounder & log
 - Recommend you should take a spare GPS
- Bosuns chair
 - Off shore its safer to use a climbing harness
- GPS capable EPIRB, registered



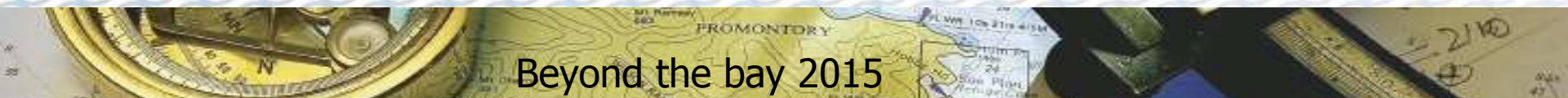
Lifebouy with light and drogue



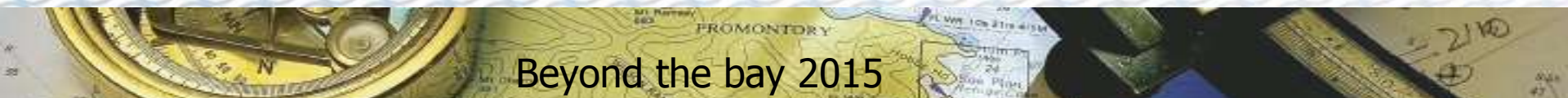
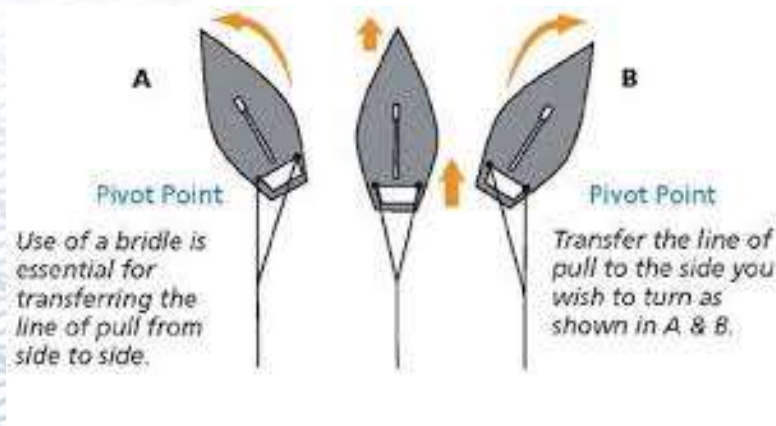
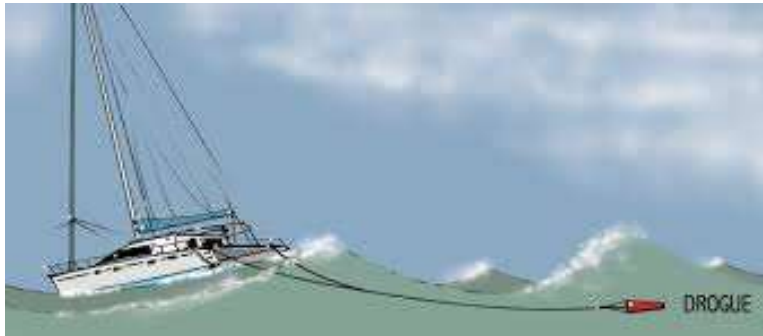
Emergency steering



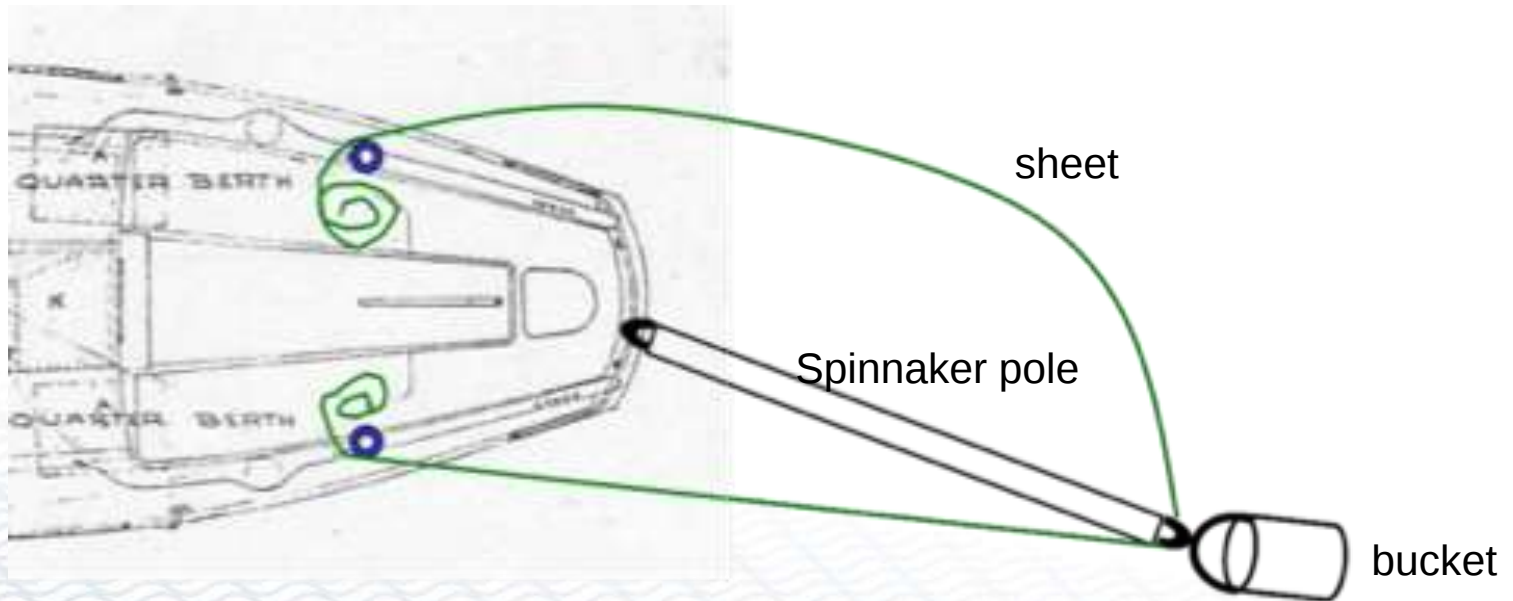
Emergency tiller plus proven method for steering in case of total rudder loss



Simple emergency steering



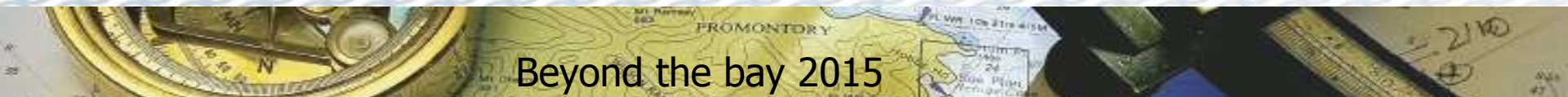
Emergency steering using pole



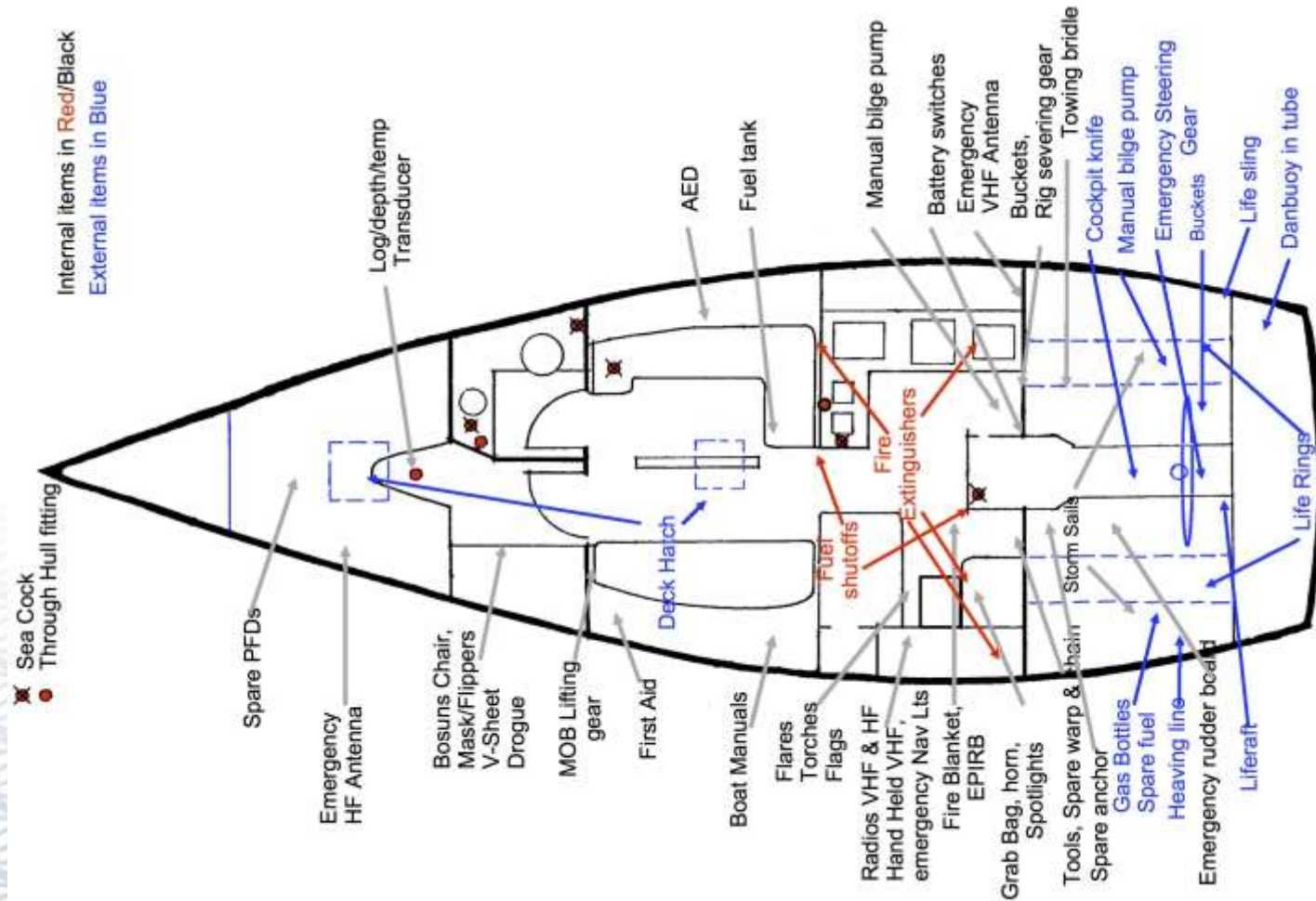
Section 4 - Equipment



- Flares (more than the inshore kit) Cat3
 - Parachute 4 red
 - Handheld 2 red, 2 Orange smoke, 2 white
- Stowage chart
- Grab bag & heaving line
- A Lifteraft is not a requirement (unless Cat2)
 - It is a Vic Gov requirement for >12m and we think is highly recommended



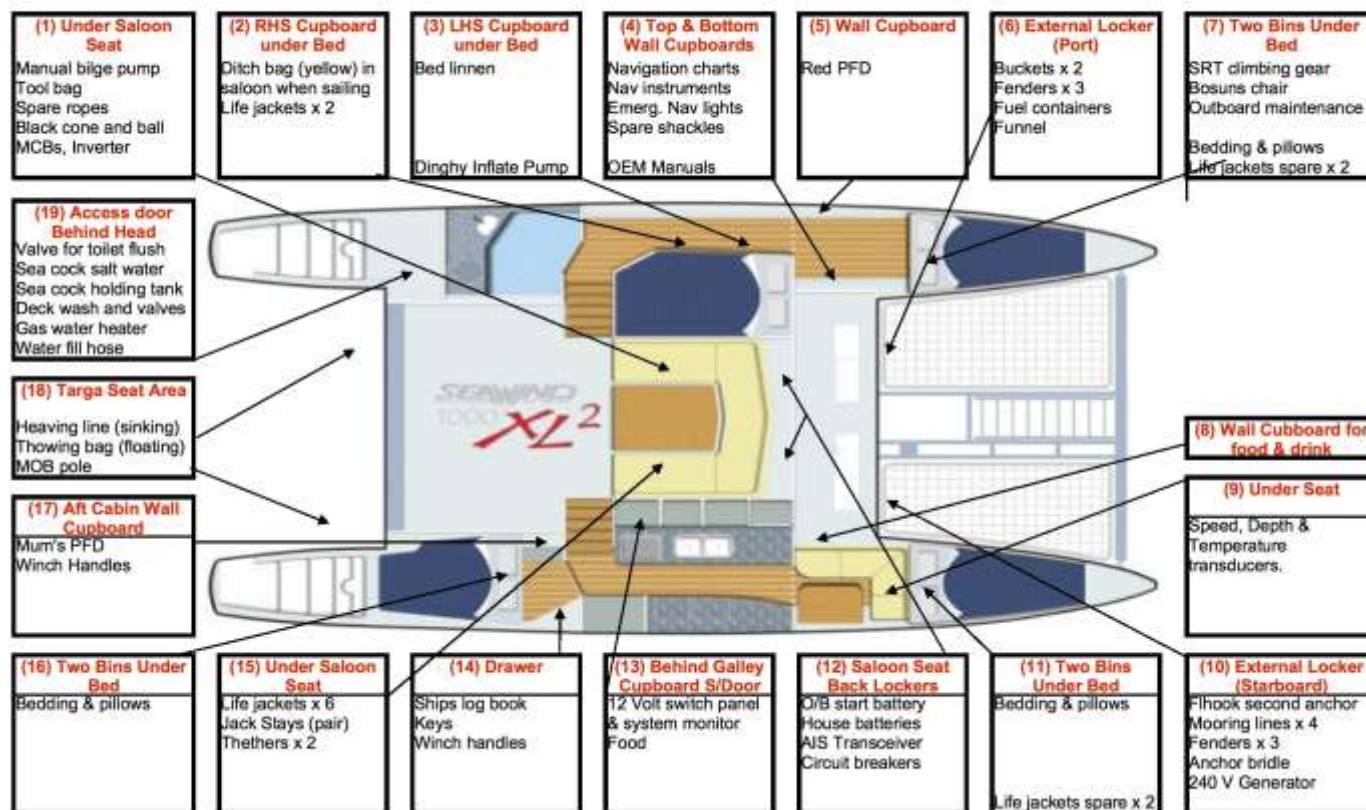
Example Stowage chart



Multi-Hull stowage chart

Where is Everything on Sundowner

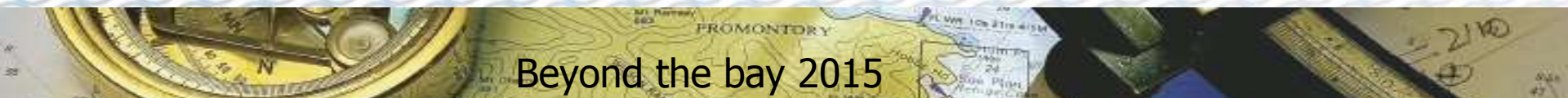
Read the more complete alphabetical listing in the orange coloured manual to find virtually everything on-board.



Section 4 - Equipment



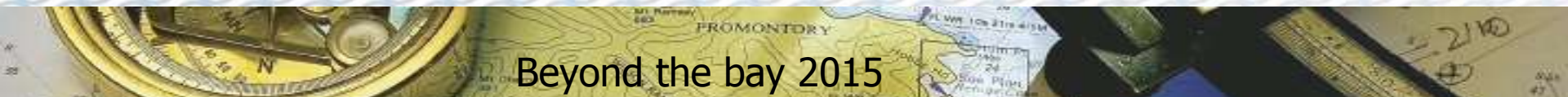
- 40% reefing main
 - or Storm Trysail
- Heavy weather jib (size restriction)
 - Or Storm jib
- Distress sheet
- MOB retrieval method
- Named equipment, reflective tape
- Cockpit knife, tools & spares



Section 4 - Medical



- No restricted items up to Cat 3.
- **Cat 3** Extra items over Cat 6
 - Paracetamol Plain - 40, with 8mg codiene – 20
 - Butterfly/steristrip closures – 5
 - Triangular bandage – 1
 - Antiseptic i) solution (Betadine) and ii) cream with lignocaine (Medicreme)
 - Extra normal saline - 250ml
 - Seasickness tablets - 10

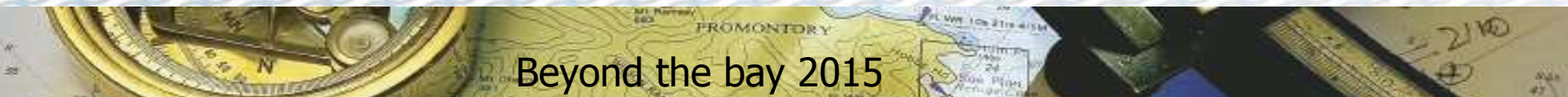


Interactive session



Show & tell during break – walk around to look and discuss equipment

- ORCV presents and mentors answer questions





Break and “show & tell”





Part 3

Boat preparation (The actual boat)



Do you trust your boat ?



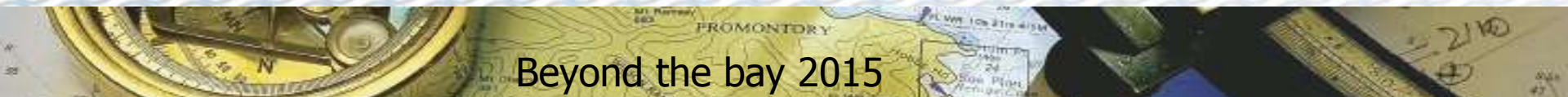
At night

In a storm

When you need it

Do you really ?

- People service their car before a big trip, so why not their boat ?



Fit for purpose ?

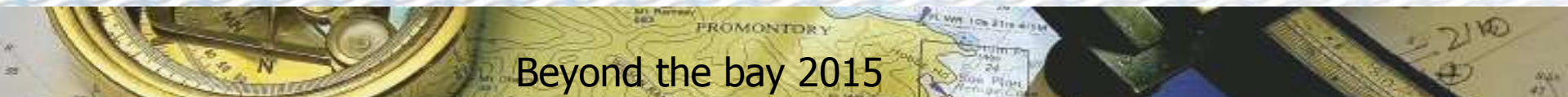


All very well having it but does it work ?

- Without wiggling that plug or changing wiring
- Without banging it on the side
- Without turning it on/off a couple of times

Do people know ?

- Where and what it is ?
- How to use it (without referring to the manual) ?
- Who should use it and when ?



The boat's hull



Under water maintenance – antifoul, osmosis, rudder bearing seals, anodes, propeller, water intake, stop cocks

Structural strength incl keel bolts, rigging chain plates, internal structural frames

Do the Hatches seal – any leaks in hatches etc ?

Hull plugs and pump system
– do you have, do they work



The boat's deck gear



Check and tighten every bolt and shackle. Tighten (careful of water seal integrity), replace bent pins and clips. Split pins in rigging.

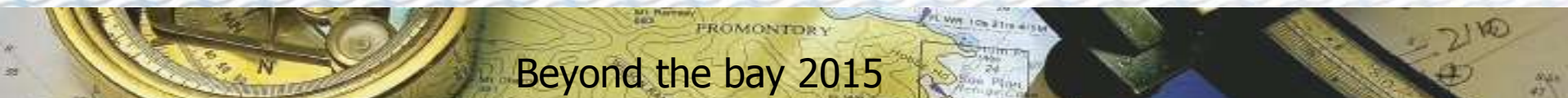
Consider servicing winches and jammers, certainly know how they are assembled

Check all ropes, particularly single point of failure (eg chafe point main halyard)

Check life lines (you need to trust them)

Review your spares and tools

- Palls & springs



The boat's rig and sails



Climb and check rig before each trip, check:

- Spreader bolts, rigging ends, exit blocks, halyard chafing, masthead fittings (areal, wind gear etc)
- Look for rust and loose strands (how old is rig ?)

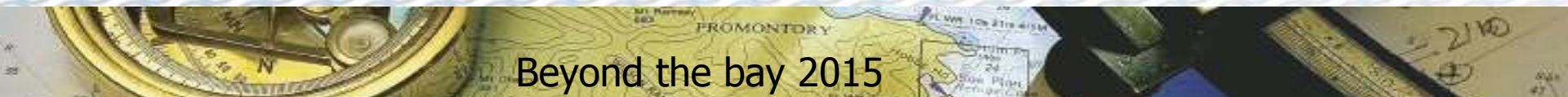
Can you safely climb the rig at sea if need be ?

Do you have storm sails – are they small enough ?

- Have you practiced deploying them ?

Are sails worn – can you flatten them ?

Can you secure sails sufficiently (furler)



Internal fixtures and fittings



Cruising boats generally have lots of storage

- Too much? – De-clutter before you go, lighten and simplify

Ensure cupboards are secure, don't spring open

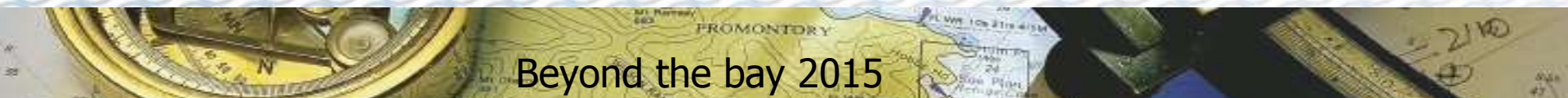
- How would your boat look upside down ?
- Would it be safe in a rollover ?

Do you have somewhere to sleep safely – lee cloths ?

Do you have hand rails and grab rails ?

Do you have life's necessities:

- eg wee bottle, bucket, wet wipes etc ?



Electrical system



If it is going to play up,
you can guarantee it will when you are off shore.

- Check batteries & charging before you go, test everything
- Starter battery separation, is house battery big enough ?

Knowledge is needed

- Label everything (before you go)
- If you can, DIY (so you understand it)

Spares & tools needed too

- Wire, terminals (incl sealed ones), fuses
- Crimpers, multimeter / voltage tester
- Spare nav lights & batteries



Plumbing system



Similarly if it is going to play up (or block up), you can guarantee it will when you are off shore

Check sea cocks work

Redundancy and care is needed

- Separated tanks, backup foot pumps etc
- Spare bottled water
- Power off pumps when unused
- Crew training if pump toilet

Spares & tools needed too

- Hose clamps, maybe hose too, Bucket !!!



Mechanical



Ideally get engine serviced before you go

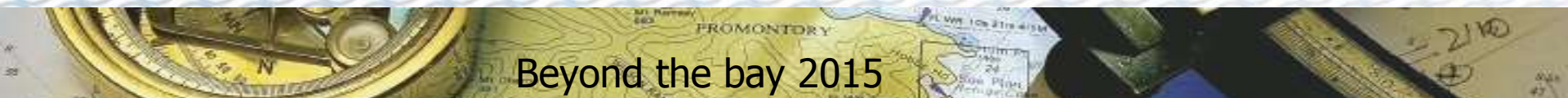
- Check oil levels, hoses, filters, belts, coolant, strainer

If you aren't good with engines, take a book

Learn how to bleed/prime your engine

Take tools & spares

- Spanners, sockets (try a changing fan belt)
- Spare belts, pump impellor, gaskets/goo
- Oil and coolant
- (Extreme trip) spare starter & alternator
- Lots of fuel (and at least one jerry)

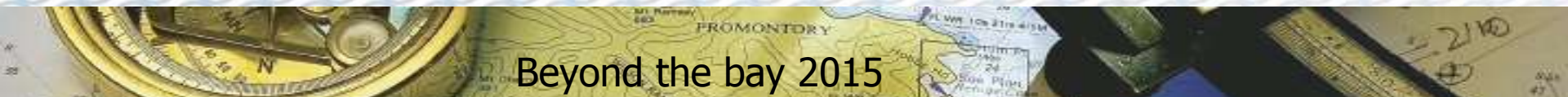


Interactive session



What should be in our tool kit

- (Whiteboard)





Part 4

Crew preparation & Management

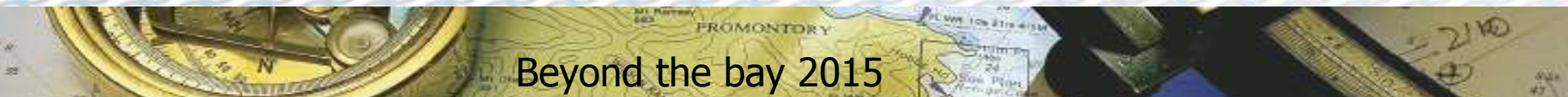


Crew Training



Minimum all crew would need:

- Boat familiarisation (so get them to help pack the boat)
- Hands on training (reefing etc)
- Sail policies (wind strengths and sail types)
- MOB
- Nav and radio operations
- Engine and other mechanicals
- Toilets, plumbing etc



Personal clothing



Three layer system

Outer jacket, overalls, boots

Mid layer, ideally polar fleece

Base layer thermals

Plus beanie & gloves

Did you know breathable outer layers are not warm?

Good stuff costs \$\$\$

Remember Blankets & sea rugs



Personal safety gear

PFD1/Harness with whistle

- Cat3 must wear at night
- In service

Tether (ideally 3 point)

Strobe

PLB (Cat 2+ but we recommend)

Plus extra stuff we think:

Torch (waterproof, maybe a head torch)

Pocket knife



Double check gear

Especially before an audit

26/03/02 PERSONAL SAFETY GEAR AUDIT PRE RACE										
CREW	PFD	HARNESS	TETHERS 2M & 1M	CROTCH STRAP	FITTED	STROBE	TORCH	GREEN DYE	KNIFE	
Bill Rawson	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Simon Dryden	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Neville Rose	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Brian Butler	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Noel May	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Matt Burton	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Dani Carey	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Katherine Pieczonka	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Paul Wilson	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Dennis Hammon	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Laurie Ford	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Dean McPhee	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mary Manos	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Tony Bell	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Di Burns	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Ron Burns	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Be a neat freak



Take a small boat, add 7 untidy people

Add movement, dark, damp, cramped

Add a couple of days of broken sleep

It becomes frustrating & dangerous

It takes practice and discipline to keep tidy

Preparation !! (eg numbered hooks)



The unwritten rules



Don't use other people's gear without asking

Hang it up, be tidy

No stinky shoes, socks, jocks lying around

Don't sleep in/on other peoples bedding

Never go to bed wet

Wake up 10mins before due on deck

Think of others, put on the kettle

Ask for help, silence means yes



Yacht roles



Chain of command:

- Skipper, 2nd in command, Watch lead
Owner ?????

Hands on roles:

- Helm, Main, Trimmers, Pit, Mast, Bow

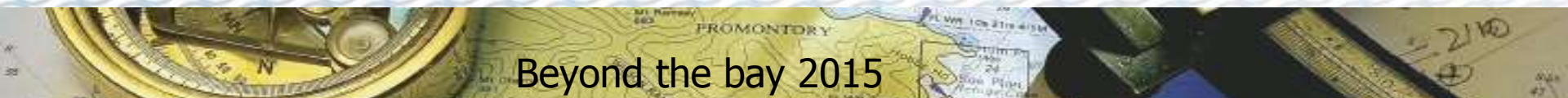
Support roles:

- Cook, Navigator/Radio, 1st aid
- (Who gets least seasick)



Cover off in crew briefing before race/event

Skipper must be the leader



Crew risks to consider



Inadequate clothing and/or clothing not worn

Tiredness/fatigue (especially night)

Seasickness

Fitness (or lack of) & agility

Dynamics/relationships

Man overboard

Illness & injury (eg dodgy food, undeclared conditions, trauma)



Crew Briefing



Safety

Look out, speak up, everyone is responsible

Any safety issues or concerns from boat prep ?

Everyone know location of safety gear ?

PFD & tether policy

Bail out policy (eg agree weather thresholds beforehand)

Dangers

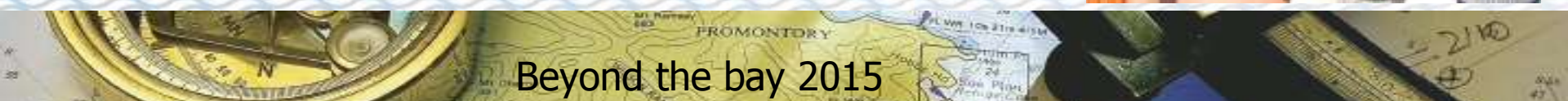
Jammers, winches, Triangles of death, Forward of the mast

Getting wet, cold and/or seasick

Training & SOPs

MOB revisit

Muster and buddies



Crew Briefing cont.



Navigation & Radio

Course, timing and general plans

Weather and sea conditions

Radio and skeds

Watch system

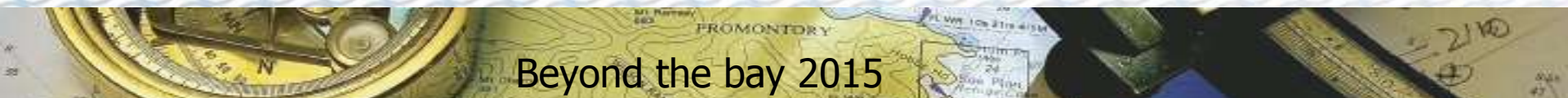
Discuss timing and buddies if relevant

Catering

Food location, cooks etc

Staying healthy

Hygiene, health issues



Beyond the bay 2015

Seasickness



- Avoidance (eg food to avoid, on deck, steering, looking at horizon etc)
- Medication strategies (discuss options, eg Stugeron and patches)
- Herbal remedies (discuss options, eg ginger)
- Other options (eg pressure bands)
- If all else fails, the downstairs bucket – never on deck without pfd to throw up
- Emesis bags or doggy do bags which are bio-degradable





The wrap



Upcoming events



Date	Event
16&17 May	Melbourne to Apollo bay ocean race (not part of Beyond the Bay)
30&31 May	SSSC course (not part of Beyond the Bay)
Mon 22 June	BTB Session 2 – Crew management, Watch systems, Night sailing, procedures & training
16 August	Possible Weather course (not part of Beyond the Bay)
18 October	Possible Rip tour (not part of Beyond the Bay)

Keep an eye on our website www.orcv.org.au for more details, especially the Beyond the Bay page. There is also an ORCV Facebook page which is worth watching.

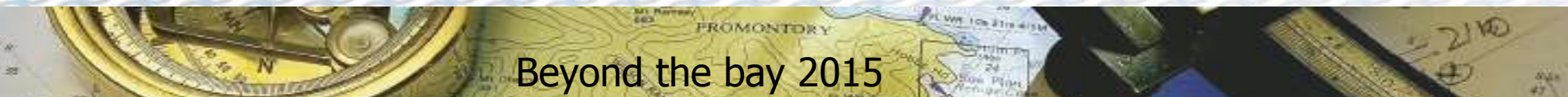
Homework



See handout sheet.

Reflecting on content, what do you need to do to prepare your boat (or the one you sail on) ?

Bring with you to discuss with mentors at next session



Thank you



ORCV office staff and the volunteer BTB Team members who helped prepare this course

Yacht Club Supporters: RMYS, HBYC, RBYC, RGYC, MYC, RYCV, SYC



BELLS HOTEL

Questions ?



Live the dream, just do it !!



Tonga 2010 cruising



Beyond the bay 2015

